



Item 02 – GRI Sector Standards Project for Agriculture, Aquaculture, and Fishing – Final draft

For GSSB approval

Date	2 May 2022
Meeting	19 May 2022
Project	Sector Standards Project for Agriculture, Aquaculture, and Fishing
Description	<p>This document presents the final draft of <i>GRI 13: Agriculture, Aquaculture, and Fishing Sectors 2022</i>, for GSSB approval.</p> <p>A summary of the changes in the Standard compared to the exposure draft is presented in the explanatory note at the beginning of the document. This document reflects the final outcome and consensus of the Working Group deliberations.</p> <p>The final draft Standard is complemented by the draft GSSB Basis for Conclusions (Item 03) which summarizes the significant issues raised during the public comment period and the GSSB responses to these, as well as a report summarizing the input relevant to GRI Topic Standards collected during the development of <i>GRI 13: Agriculture, Aquaculture, and Fishing Sectors 2022</i> (Item 04). Item 03 and item 04 are provided for your information and input but do not require approval.</p> <p>Effective date</p> <p>As part of this approval, the GSSB is also asked to consider the proposed effective date of 1 January 2024 (see line 106). This effective date allows for a transition period of a full year regardless of when an organization's reporting cycle commences, ensuring sufficient time for organizations to incorporate <i>GRI 13</i> into their materiality considerations and start collecting data for any topics and/or disclosures they may not be reporting on yet.</p>

Summary of key changes compared to the exposure draft

This section summarizes the key changes in *GRI 13: Agriculture, Aquaculture, and Fishing Sectors 2022*, compared to the exposure draft. These changes were performed based on the advice of the Working Group in response to significant issues raised during the public comment period or by Working Group members themselves. Additional changes have been undertaken as a result of alignment with the revisions to the Universal Standards 2021 and preceding Sector Standards.

Sector activities and business relationships

- Animal and fish feed suppliers, suppliers of agricultural inputs were added to the business relationships.

Topic 13.1 Emissions

- The description of impacts related to the CO₂ emissions released into the ocean as a result of bottom trawling was removed.

Topic 13.3 Biodiversity

- An additional sector recommendation to report on fish escapes from aquaculture operations was added.
- An additional sector disclosure to report on the impacts of use of juvenile seeds stocks in aquaculture operations was added.
- An additional sector disclosure to report on fishing products used in fish feed in aquaculture was added.
- Reporting on sustainability stock status was added to the additional sector disclosures for organizations in the fishing sector on aquatic organisms caught, and to the additional sector disclosures for the aquaculture sector on juvenile seed stocks and the use of fishing products in aquaculture feed.

Topic 13.5 Soil health

- The additional sector recommendation on a soil management plan was revised to set out the minimum elements of the plan that should be described, including identified threats to soil health and the approach to crop inputs optimization.
- The reference to fertilizers in the additional sector recommendation was expanded to recommend reporting on the approach to the optimization of all crop inputs and not only fertilizers.

Topic 13.6 Pesticide use

- The topic description now focuses on the impacts of pesticides use in the agriculture sector. A description of impacts related to the use of chemical substances in aquaculture is covered in *topic 13.11 Animal health and welfare*.
- Positive impacts of pesticides on production yields are now recognized more prominently. This includes a decrease of diseases and pests, increase of production yields, and potentially limiting the need to convert more land.
- The additional sector disclosure on volume and intensity of pesticides used was modified to disaggregate the information by hazard levels.
- Two additional sector recommendations were added to respond to the expectations set out by relevant guidance from the Food and Agriculture Organization (FAO) and the World Health Organization (WHO) to progressively reduce of the use of extremely and highly hazardous pesticides when possible.

41 **Topic 13.8 Waste and food loss**

- 42 • The topic name was updated to *topic 13.8 Waste*. Food loss impacts and the additional sector
43 disclosure on food loss were moved to *topic 13.9 Food security*.

44 **Topic 13.9 Food security**

- 45 • The additional sector disclosure on food loss, previously found in the reporting sub-section of
46 *topic 13.8 Waste and food loss* (now *topic 13.8 Waste*), was moved to this topic.
47 • This additional sector disclosure now requests information to be disaggregated by 'main products
48 or product category' instead of 'by product'.

49 **Topic 13.11 Animal health and welfare**

- 50 • The additional sector disclosure on the total volume of anesthetic, antibiotic, anti-inflammatory,
51 hormone, and growth-promotion treatments administered to animals was removed and replaced
52 by an additional sector recommendation on the organization's commitments to responsible and
53 prudent use of antimicrobial agents.
54 • An additional sector disclosure for the aquaculture sector on the survival of farmed aquatic
55 animals was added.

56 **Topic 13.15 Non-discrimination and equal opportunity**

- 57 • An additional sector disclosure on the equal treatment of migrant workers was added. This
58 disclosure also includes the approach to compensation based on nationality.

59 **Topic 13.19 Occupational health and safety**

- 60 • An additional sector recommendation on the maximum working hours and minimum hours of rest
61 for workers aboard fishing vessels was added, recognizing excessive working hours as one of
62 the key risk factors for worker safety and health in the fishing sector.
63 • An additional sector disclosure on occupational health services' functions that specifically
64 address the occupational health and safety risks for workers aboard fishing vessels was added.

65 **Topic 13.20 Employment practices**

- 66 • The additional sector recommendation on ethical recruitment was expanded to include the
67 elements outlined in the International Labour Organization (ILO) and International Organization
68 on Migration (IOM) instruments in regard to ethical recruitment of migrant workers.
69 • The additional sector recommendation on compensation was moved from *topic 13.21 Living
70 income and living wage* to this topic.

71 **Topic 13.21 Living income and living wage**

- 72 • The topic name was updated to *topic 13.21 Living income and living wage*.
73 • The topic statement and the description of impacts were updated to reflect the delineation
74 between living wage and living income.

75 **GRI 13: Agriculture, Aquaculture, and** 76 **Fishing Sectors 2022**

77 **SECTOR STANDARD**

78 **Effective date**

79 This Standard is effective for reports or other materials published on or after 1 January 2024. Earlier
80 adoption is encouraged.

81 **Responsibility**

82 This Standard is issued by the Global Sustainability Standards Board (GSSB). Any feedback on the
83 GRI Standards can be submitted to gssbsecretariat@globalreporting.org for the consideration of the
84 GSSB.

85 **Due process**

86 This Standard was developed in the public interest and in accordance with the requirements of the
87 GSSB Due Process Protocol. It has been developed using multi-stakeholder expertise, and with
88 regard to authoritative intergovernmental instruments and widely held expectations of organizations
89 relating to social, environmental, and economic responsibilities.

90 **Legal liability**

91 This document, designed to promote sustainability reporting, has been developed by the Global
92 Sustainability Standards Board (GSSB) through a unique multi-stakeholder consultative process
93 involving representatives from organizations and report information users from around the world.
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113 Introduction

114 *GRI 13: Agriculture, Aquaculture, and Fishing Sectors 2022* provides information for organizations in
115 the agriculture, aquaculture, and fishing sectors about their likely material topics. These topics are
116 likely to be material for organizations in the sectors on the basis of the sectors' most significant
117 impacts on the economy, environment, and people, including on their human rights.

118 *GRI 13* also contains a list of disclosures for organizations in the agriculture, aquaculture, and fishing
119 sectors to report in relation to each likely material topic. This includes disclosures from the GRI Topic
120 Standards and other sources.

121 This Standard is structured as follows:

- 122 • [Section 1](#) provides a high-level overview of the agriculture, aquaculture, and fishing sectors,
123 including their activities, business relationships, context, and the connections between the United
124 Nations Sustainable Development Goals (SDGs) and the likely material topics for the sectors.
- 125 • [Section 2](#) outlines the topics that are likely to be material for organizations in the agriculture,
126 aquaculture, and fishing sectors and, therefore potentially merit reporting. For each likely material
127 topic, the sectors' most significant impacts are described and disclosures to report information
128 about the organization's impacts in relation to the topic are listed.
- 129 • The [Glossary](#) contains defined terms with specific meaning when used in the GRI Standards. The
130 terms are underlined in the text and linked to the definitions.
- 131 • The [Bibliography](#) lists the authoritative intergovernmental instruments and additional references
132 used in developing this Standard, listed by topic. It also lists further resources the organization
133 can consult.

134 The rest of the Introduction section provides an overview of the sectors this Standard applies to, an
135 overview of the system of GRI Standards, and further information on using this Standard.

136 Sectors this Standard applies to

137 *GRI 13* applies to organizations undertaking any of the following:

- 138 • Crop production
- 139 • Animal production
- 140 • Aquaculture
- 141 • Fishing

142 This Standard can be used by any organization in the agriculture, aquaculture, and fishing sectors,
143 regardless of size, type, geographic location, or reporting experience.

144 The organization must use all applicable Sector Standards for the sectors in which it has substantial
145 activities.

146 Sector classifications

147 Table1 lists industry groupings relevant to the agriculture, aquaculture, and fishing sectors in the
148 Global Industry Classification System (GICS®) [4], Industry Classification Benchmark (ICB) [3],
149 International Standard Industrial Classification of All Economic Activities (ISIC) [6], and Sustainable

150 Industry Classification System (SICS®) [5].¹ The table is intended to assist an organization in
151 identifying whether *GRI 13* applies to it and is for reference only.

152 **Table 1. Industry groupings relevant to the agriculture, aquaculture, and fishing sectors in**
153 **other classification systems**

Classification system	Classification number	Classification name
GICS®	30202010	Agricultural Products
ICB	45102010	Farming, Fishing and Plantations
ISIC	A1	Crop and animal production (excluding hunting)
	A3	Fishing and aquaculture
SICS®	FB-AG	Agricultural Products
	FB-MP	Meat, Poultry and Dairy

154

¹ The relevant industry groupings in the Statistical Classification of Economic Activities in the European Community (NACE) [1] and the North American Industry Classification System (NAICS) [2] can also be established through available concordances with the International Standard Industrial Classification (ISIC).

155 System of GRI Standards

156 This Standard is part of the GRI Sustainability Reporting Standards (GRI Standards). The GRI
157 Standards enable an organization to report information about its most significant impacts on the
158 economy, environment, and people, including impacts on their human rights, and how it manages
159 these impacts.

160 The GRI Standards are structured as a system of interrelated standards that are organized into three
161 series: GRI Universal Standards, GRI Sector Standards, and GRI Topic Standards (see [Figure 1](#) in
162 this Standard).

163 Universal Standards: GRI 1, GRI 2 and GRI 3

164 [GRI 1: Foundation 2021](#) specifies the requirements that the organization must comply with to report in
165 accordance with the GRI Standards. The organization begins using the GRI Standards by consulting
166 [GRI 1](#).

167 [GRI 2: General Disclosures 2021](#) contains disclosures that the organization uses to provide
168 information about its reporting practices and other organizational details, such as its activities,
169 governance, and policies.

170 [GRI 3: Material Topics 2021](#) provides guidance on how to determine material topics. It also contains
171 disclosures that the organization uses to report information about its process of determining material
172 topics, its list of material topics, and how it manages each topic.

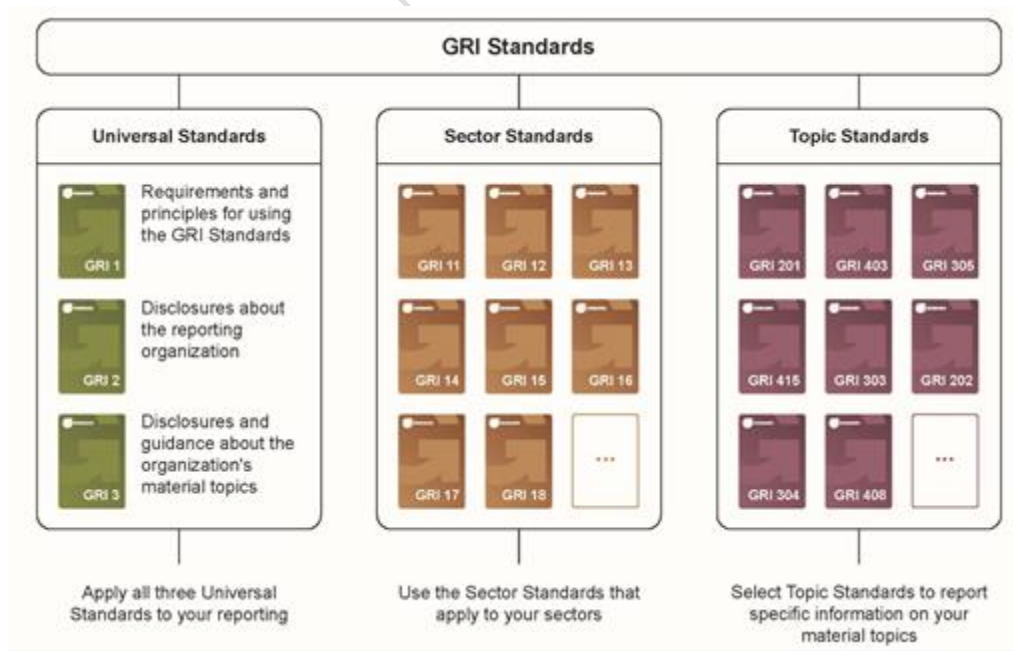
173 Sector Standards

174 The Sector Standards provide information for organizations about their likely material topics. The
175 organization uses the Sector Standards that apply to its sectors when determining its material topics
176 and when determining what to report for each material topic.

177 Topic Standards

178 The Topic Standards contain disclosures that the organization uses to report information about its
179 impacts in relation to particular topics. The organization uses the Topic Standards according to the list
180 of material topics it has determined using [GRI 3](#).

181 **Figure 1. GRI Standards: Universal, Sector, and Topic Standards**



182 Using this Standard

183 An organization in the agriculture, aquaculture, and fishing sectors reporting in accordance with the
184 GRI Standards is required to use this Standard when determining its material topics and when
185 determining what information to report for the material topics.

186 Determining material topics

187 Material topics represent an organization's most significant impacts on the economy, environment,
188 and people, including their human rights.

189 [Section 1](#) of this Standard provides contextual information that can help the organization in identifying
190 and assessing its impacts.

191 [Section 2](#) outlines the topics that are likely to be material for organizations in the agriculture,
192 aquaculture, and fishing sectors. The organization is required to review each topic described and
193 determine whether it is a material topic for it.

194 The organization needs to use this Standard when determining its material topics. However,
195 circumstances for each organization vary, and the organization needs to determine its material topics
196 according to its specific circumstances, such as its business model; geographic, cultural, and legal
197 operating context; ownership structure; and the nature of its impacts. Because of this, not all topics
198 listed in this Standard may be material for all organizations in the agriculture, aquaculture, and fishing
199 sectors. See [GRI 3: Material Topics 2021](#) for step-by-step guidance on how to determine material
200 topics.

201 If the organization has determined any of the topics included in this Standard as not material, then the
202 organization is required to list them in the GRI content index and explain why they are not material.

203 See [Requirement 3 in GRI 1 Foundation 2021](#) and [Box 5 in GRI 3](#) for more information on using
204 Sector Standards to determine material topics.

205 Determining what to report

206 For each material topic, an organization reports information about its impacts and how it manages
207 these impacts.

208 Once an organization has determined a topic included in this Standard to be material, the Standard
209 also helps the organization identify disclosures to report information about its impacts relating to that
210 topic.

211 For each topic in [section 2](#) of this Standard, a reporting sub-section is included. These sub-sections
212 list disclosures from the GRI Topic Standards that are relevant to the topic. They may also list
213 additional sector disclosures and recommendations for the organization to report. This is done in
214 cases where the Topic Standards do not provide disclosures, or where the disclosures from the Topic
215 Standards do not provide sufficient information about the organization's impacts in relation to a topic.
216 These additional sector disclosures and recommendations may be based on other sources. [Figure 2](#)
217 illustrates how the reporting included in each topic is structured.

218 The organization is required to report the disclosures from the Topic Standards listed for those topics
219 it has determined to be material. If any of the Topic Standards disclosures listed are not relevant to
220 the organization's impacts, the organization is not required to report them. However, the organization
221 is required to list these disclosures in the GRI content index and provide 'not applicable' as the reason
222 for omission for not reporting the disclosures. See [Requirement 6 in GRI 1: Foundation 2021](#) for more
223 information on reasons for omission.

224 The additional sector disclosures and recommendations outline further information which has been
225 identified as relevant for organizations in the agriculture, aquaculture, and fishing sectors to report in
226 relation to a topic. The organization should provide sufficient information about its impacts in relation
227 to each material topic, so that information users can make informed assessments and decisions about
228 the organization. For this reason, reporting these additional sector disclosures and recommendations
229 is encouraged, however it is not a requirement.

230 When the organization reports additional sector disclosures, it is required to list them in the GRI
231 content index (see [Requirement 7 in GRI 1](#)).

232 If the organization reports information that applies to more than one material topic, it does not need to
233 repeat it for each topic. The organization can report this information once, with a clear explanation of
234 all the topics it covers.

235 If the organization intends to publish a standalone sustainability report, it does not need to repeat
236 information that it has already reported publicly elsewhere, such as on web pages or in its annual
237 report. In such a case, the organization can report on a required disclosure by providing a reference in
238 the GRI content index as to where this information can be found (e.g., by providing a link to the web
239 page or citing the page in the annual report where the information has been published).

240 See [Requirement 5 in GRI 1](#) for more information on using Sector Standards to report disclosures.

241 **GRI Sector Standard reference numbers**

242 GRI Sector Standard reference numbers are included for all disclosures listed in this Standard, both
243 those from GRI Standards and additional sector disclosures. When listing the disclosures from this
244 Standard in the GRI content index, the organization is required to include the associated GRI Sector
245 Standard reference numbers (see [Requirement 7 in GRI 1: Foundation 2021](#)). This identifier helps
246 information users assess which of the disclosures listed in the applicable Sector Standards are
247 included in the organization's reporting.

248 **Defined terms**

249 Defined terms are underlined in the text of the GRI Standards and linked to their definitions in the
250 [Glossary](#). The organization is required to apply the definitions in the Glossary.

251 **References and resources**

252 The authoritative intergovernmental instruments and additional references used in developing this
253 Standard, as well as further resources that may help report on likely material topics and can be
254 consulted by the organization are listed in the Bibliography. These complement the references and
255 resources listed in [GRI 3: Material Topics 2021](#) and in the GRI Topic Standards.

Reporting on local communities		
If the organization has determined local community is a material topic, this section lists the disclosures that have been identified as relevant for reporting on the topic by the oil and gas sector.		
STANDARD	DISCLOSURE	5 SECTOR STANDARD REF #
1 Management of the topic		
GRI 3: Material Topics	<p>Disclosure 3-3 Management of material topics</p> <p>Additional sector recommendations 3</p> <ul style="list-style-type: none"> Describe the means for identifying stakeholders and engaging with local communities. List the vulnerable groups that the organization has identified. List any collective or individual rights that the organization has determined to be of particular concern to the local communities.* Describe the approach of the organization to engaging with vulnerable groups, including: <ul style="list-style-type: none"> How it seeks to ensure engagement is meaningful, and How it seeks to ensure safe and equitable gender participation. 	11.15.1
2 Topic Standards disclosures		
GRI 413: Local Communities 2016	<p>Disclosure 413-1 Operations with local community engagement, impact assessments, and development programs</p> <p>Disclosure 413-2 Operations with significant actual and potential negative impacts on local communities</p> <p>Additional sector recommendations</p> <ul style="list-style-type: none"> Describe impacts on the health of local communities as a result of exposure to pollution caused by the organization's operations or use of hazardous substances. 	11.15.2 11.15.3
4 Additional sector disclosures		
	<p>Report the number and type of grievances filed by local communities, including:</p> <ul style="list-style-type: none"> the percentage of these grievances that were addressed and resolved; the percentage of grievances that were resolved through remediation. 	11.15.4

1 Management of the topic

The organization is required to report how it manages each material topic using [Disclosure 3-3 in GRI 3: Material Topics 2021](#).

2 Topic Standards disclosures

Disclosures from the GRI Topic Standards that have been identified as relevant for organizations in the sector(s) are listed here. When the topic is determined by the organization as material, it is required to report those disclosures or explain why they are not applicable in the GRI context index. See the Topic Standard for the content of the disclosure, including requirements, recommendations, and guidance.

3 Additional sector recommendations

Additional sector recommendations may be listed. These complement Topic Standards disclosures and are recommended for an organization in the sector(s).

4 Additional sector disclosures

Additional sector disclosures may be listed. Reporting these, together with any Topic Standards disclosures, ensures the organization reports sufficient information about its impacts in relation to the topic.

5 Sector Standard reference numbers

GRI Sector Standard reference numbers are required to be included in the GRI Content Index. This helps information users assess which of the disclosures listed in the Sector Standards are included in the organization's reporting.

This document doc

258 1. Sector profile

259 The agriculture, aquaculture, and fishing sectors produce essential food and non-food, such as fibers,
260 fuels and rubber, products. They play a major role in global development as a provider of food for
261 human consumption and supplier of materials to other economic sectors, such as textiles,
262 construction materials, pharmaceuticals, and the production of biofuels.

263 Production levels and value created by the sectors have increased in almost all countries across the
264 globe in the past 20 years. However, their contribution to global gross domestic product (GDP) across
265 this time period has stayed consistent at about 4%². Despite this relatively limited global economic
266 contribution, the sector has an outsized impact in developing countries and on those in rural areas. In
267 some developing countries, accounting for more than a quarter of GDP [20].

268 Demand for the products of the sectors is projected to grow into the future, driven by a growing
269 population and changes in income levels. Future production will also be influenced by demographic,
270 socio-cultural, and lifestyle changes, as well as consumer awareness of health and sustainability
271 issues [30].

272 Agriculture, aquaculture, and fishing operations can be formally or informally organized as large-scale
273 or small-scale business enterprises. Operations can also include households, cooperatives, and
274 government institutions. These organizations can own or operate farms, fishing vessels, mills, and
275 hatcheries. Vertically integrated organizations can directly own or manage production, storage,
276 processing, and distribution.

277 Sector activities and business relationships

278 Through their activities and business relationships, organizations can have an effect on the economy,
279 environment, and people, and in turn make negative or positive contributions to sustainable
280 development. When determining its material topics, the organization should consider the impacts of
281 both its activities and its business relationships.

282 Activities

283 The impacts of an organization vary according to the types of activities it undertakes. The following list
284 outlines some of the key activities of the agriculture, aquaculture, and fishing sectors, as defined in
285 this Standard. This list is not exhaustive.

286 Crop production

287 **Production:** growing and harvesting seeds, trees for rubber and latex, and all crops, such as cereals,
288 vegetables, fruits, fibers, and other types; gathering berries, nuts, mushrooms, and sap.

289 **Primary processing:** cleaning, grading, hulling, pounding, and milling grains; soaking, heating, and
290 drying leaves; extracting and filtering oils.

291 **Aggregation:** aggregating crop produce from multiple sources at farm level for sale to downstream
292 markets, which can involve transaction by intermediary organizations or single actors.

² This figure is based on the agriculture, forestry and fishing sector as defined in the International Standard Industrial Classification of All Economic Activities (ISIC) which includes crop and animal production, hunting and related service activities, forestry and logging, and fishing and aquaculture [20].

293 **Storage:** keeping crops in a way that preserves their quality and keeps them safe from, for example,
294 molds, yeasts, and rodents.

295 **Transportation:** using traditional or mechanized transportation to move crops.

296 **Trading:** buying and selling crops.

297 **Animal production**

298 **Production:** breeding and rearing livestock and poultry; collecting live animal products, such as meat,
299 milk, eggs, honey, and wool; farming insects; raising animals in captivity; feeding animals; operating
300 animal farms.

301 **Primary processing:** cleaning and washing animal products; processing milk; candling eggs;
302 slaughtering animals for meat; deboning, cutting, smoking, and freezing meat; separating fur, skins,
303 feathers, and down.

304 **Aggregation:** aggregating animal products from multiple farms for sale to downstream markets,
305 which can involve transaction by intermediary organizations or single actors.

306 **Storage:** keeping animal products in a way that preserves their quality and keeps them safe from, for
307 example, harmful bacteria.

308 **Transportation:** using traditional or mechanized transportation to move live animals and animal
309 products.

310 **Trading:** buying and selling live animals and animal products.

311 **Aquaculture**

312 **Production:** growing of algae and other seaweeds; culturing or farming of aquatic organisms, such
313 as fish, mollusks, and crustaceans, in captive conditions that involve regular stocking, feeding, and
314 protecting against predators; this includes both capture-based aquaculture (CBA) and hatchery-based
315 aquaculture (HBA) systems.

316 **Primary processing:** slaughtering and deshelling produced aquatic organisms; undertaking service
317 activities incidental to the operation of fish hatcheries and fish farms.

318 **Aggregation:** aggregating fish, mollusks, and crustaceans from multiple sources for sale to
319 downstream markets, which can involve transaction by intermediary organizations or single actors.

320 **Storage:** keeping aquaculture products in a way that preserves their quality and keeps them safe
321 from, for example, harmful bacteria.

322 **Transportation:** using traditional or mechanized transportation to move aquaculture products.

323 **Trading:** buying and selling aquaculture products.

324 **Fishing**

325 **Fishing:** capturing wild aquatic organisms, such as fish, mollusks, and crustaceans, via shore-based
326 netting or commercial fishing vessels in inshore, coastal, or offshore waters.

327 **Primary processing:** onboard handling of live wild aquatic organisms after capture and through to
328 the point of landing.

329 **Aggregation:** aggregating fish, mollusks, and crustaceans from multiple sources to downstream
330 markets, which can involve transaction by intermediary organizations or single actors.

331 **Storage:** keeping fishing products³ in a way that preserves their quality and keeps them safe from, for
332 example, harmful bacteria.

333 **Transportation:** using traditional or mechanized transportation to move fishing products.

334 **Trading:** buying and selling fishing products.

335 **Business relationships**

336 An organization's business relationships include relationships that it has with business partners, with
337 entities in its value chain, including those beyond the first tier, and with any other entities directly
338 linked to its operations, products, or services. The following types of business relationships are
339 prevalent in the agriculture, aquaculture, and fishing sectors and are relevant when identifying the
340 impacts of organizations in the sectors.

341 **Aggregators:** intermediary organizations or single actors who bring products from multiple sources at
342 farm, fishery, hatchery, or mill level for sale to downstream markets.

343 **Animal or fish feed suppliers:** organizations or persons that provide feed for animal production or
344 aquaculture.

345 **Primary producers:** agriculture, aquaculture, and fishing organizations can often buy their products
346 from primary producers who actively farm or fish. Primary producers can be other organizations or
347 persons, such as farmers and fishers, categorized as self-employed workers.

348 **Suppliers of agricultural inputs:** organizations that produce and sell fertilizers, pesticides and other
349 inputs, and seeds.

³ Fishing products refer to wild aquatic organisms captured, such as fish, mollusks, and crustaceans.

350 The sectors and sustainable development

351 Agriculture, aquaculture, and fishing are fundamental to feeding the world's population. The sectors
352 have a key role in meeting the growing demand for nutritious, affordable, and safe food for an
353 estimated 10 billion people by 2050 [30]. At the same time, these sectors' activities are increasingly
354 recognized as having significant impacts on sustainable development. Intensive use of natural
355 resources, the location of operations in rural areas, and large amounts of labor involved into
356 production globally are factors contributing to the scale of the sectors' impacts.

357 The agriculture, aquaculture, and fishing sectors are the second largest source of employment
358 worldwide⁴ [20]. Over 2.5 billion people living in rural areas depend on them these sectors for jobs. At
359 the same time, agriculture, aquaculture, and fishing are sectors with the highest informality rates in
360 employment contracts, commercial transactions, and land tenure, posing challenges to upholding
361 human rights. With 80% of the world's poor living in rural areas, ensuring sufficient income for rural
362 workers remains an issue [37]. Improving incomes means communities need better economic
363 opportunities, access to technology, skills training, and a more equitable distribution of value created
364 by their labor. Growth in the sectors is proportionately more effective in raising the incomes of the
365 world's poorest people in comparison to other sectors [12].

366 Agriculture, aquaculture, and fishing have a substantial environmental footprint. For example,
367 agriculture accounts for an estimated 70% of freshwater withdrawals globally and is a substantial
368 source of greenhouse gas (GHG) emissions, accounting for 22% of the total global emissions⁵ [25].
369 Similarly, fishing is responsible for at least 1.2% of global oil consumption [10].

370 Because agriculture, aquaculture, and fishing production rely on biodiversity, soils, and ecosystems,
371 implementing sustainable practices across the sectors is a fundamental condition for food security.
372 However, the agriculture sector is associated with 70% of losses in terrestrial biodiversity because of
373 land conversion, deforestation, soil erosion, and impacts of pesticides [21]. Fishing has resulted in
374 significant impacts on global ocean biodiversity, with one-third of fish stocks being overfished and
375 about 60% fished at their maximum sustainable levels [24].

376 There has been ongoing growth in the global consumption of animal and aquaculture products. With
377 approximately 340 million tons of meat, 88 million tons of dairy and 85 million tons of aquaculture
378 products being produced annually, animal health and welfare are fundamental to agriculture and
379 aquaculture activities [20]. The conditions animals live in have considerable implications for
380 preventing zoonotic disease and the risks of antimicrobial resistance. Sound animal health and
381 welfare also mean the responsibility for treating animals humanely.

382 Climate change poses challenges for the agriculture, aquaculture, and fishing sectors. It can affect
383 yields, disrupt production and supply chains, jeopardizing food security. Impacts of climate change
384 can also deepen poverty levels, displace people from their lands, and thus increase migration.
385 Agriculture, aquaculture, and fishing organizations can contribute to food security and global
386 development by building resilience to climate change, reducing food loss, and providing income and
387 livelihoods to farmers and fishers and their communities.

⁴ This figure is based on the agriculture, forestry and fishing sector as defined in the International Standard Industrial Classification of All Economic Activities (ISIC) which includes crop and animal production, hunting and related service activities, forestry and logging, fishing, and aquaculture [19].

⁵ This figure is based on the Agriculture, Forestry and Other Land Use (AFOLU) sector as defined in the International Panel for Climate Change reports (IPCC). Land use change is the largest source of AFOLU emissions, followed by ruminant livestock production, followed by crop production [25].

388 Sustainable Development Goals

389 The Sustainable Development Goals (SDGs), part of the 2030 Agenda for Sustainable Development
 390 adopted by the 193 United Nations member states, comprise the world’s comprehensive plan of
 391 action for achieving sustainable development [7].

392 Since the SDGs and the targets associated with them are integrated and indivisible, agriculture,
 393 aquaculture, and fishing organizations have the potential to contribute to all SDGs by enhancing their
 394 positive impacts or by preventing and mitigating their negative impacts on the economy, environment,
 395 and people.

396 The agriculture, aquaculture, and fishing sectors provide food for communities across the world and
 397 are best positioned to contribute to Goal 2: Zero Hunger. The sectors are also the world’s biggest
 398 employers and the largest economic sectors for many countries, directly impacting Goal 1: No Poverty
 399 and Goal 8: Decent Work and Economic Growth.

400 By managing natural resources sustainably and efficiently (Goal 12: Responsible Consumption and
 401 Production), agriculture has the potential to revitalize rural landscapes, contributing to Goal 15: Life on
 402 land. At the same time, the aquaculture and fishing sectors can contribute to healthy marine and
 403 aquatic ecosystems, which is Goal 14: Life Below Water. By implementing resilient fishing and
 404 farming practices, the agriculture, aquaculture, and fishing sectors can help increase productivity and
 405 build the adaptive capacity to respond to climate change (Goal 13: Climate Action).

406 Table 2 presents connections between the likely material topics for the agriculture, aquaculture, and
 407 fishing sectors and the SDGs. These links were identified based on an assessment of the impacts
 408 described in each likely material topic, and the targets associated with each SDG.

409 Table 2 is not a reporting tool but presents connections between the agriculture, aquaculture, and
 410 fishing sectors’ significant impacts and the 2030 Agenda for Sustainable Development at the goal
 411 level. See references [40] and [41] in the Bibliography for information on reporting progress towards
 412 the SDGs using the GRI Standards.

413 **Table 2: Linkages between the likely material topics for the agriculture, aquaculture, and fishing sectors**
 414 **and the SDGs.**

Likely material topics	Corresponding SDGs
Topic 13.1 Emissions	Goal 3: Good Health and Well-being
	Goal 7: Affordable and Clean Energy
	Goal 12: Responsible Consumption and Production
	Goal 13: Climate Action
	Goal 14: Life Below Water
	Goal 15: Life on Land
Topic 13.2 Climate adaptation and resilience	Goal 1: No poverty
	Goal 2: Zero Hunger
	Goal 13: Climate Action
Topic 13.3 Biodiversity	Goal 2: Zero Hunger
	Goal 6: Clean Water and Sanitation
	Goal 12: Responsible Consumption and Production
	Goal 14: Life Below Water
	Goal 15: Life on Land
	Goal 13: Climate Action

Topic 13.4 Natural ecosystem conversion	Goal 15: Life on Land
	Goal 14: Life Below Water
Topic 13.5 Soil health	Goal 2: Zero Hunger
	Goal 15: Life on Land
Topic 13.6 Pesticides use	Goal 3: Good Health and Well-being
	Goal 6: Clean Water and Sanitation
	Goal 8: Decent Work and Economic Growth
	Goal 12: Responsible Consumption and Production
	Goal 15: Life on Land
Topic 13.7 Water and effluents	Goal 6: Clean Water and Sanitation
	Goal 12: Responsible Consumption and Production
	Goal 14: Life Below Water
Topic 13.8 Waste	Goal 12: Responsible Consumption and Production
Topic 13.9 Food security	Goal 2: Zero Hunger
	Goal 17: Partnerships for the Goals
Topic 13.10 Food safety	Goal 2: Zero Hunger
	Goal 3: Good Health and Well-being
Topic 13.11 Animal health and welfare	Goal 15: Life on Land
Topic 13.12 Local communities	Goal 1: No poverty
	Goal 2: Zero Hunger
	Goal 3: Good Health and Wellbeing
	Goal 5: Gender Equality
	Goal 6: Clean Water and Sanitation
	Goal 13: Climate Action
	Goal 16: Peace and Justice Strong Institutions
Topic 13.13 Land and resource rights	Goal 1: No Poverty
	Goal 2: Zero Hunger
	Goal 10: Reduced Inequalities
	Goal 12: Responsible Consumption and Production
	Goal 15: Life on Land
	Goal 16: Peace and Justice Strong Institutions
Topic 13.14 Rights of indigenous peoples	Goal 1: No Poverty
	Goal 2: Zero Hunger
	Goal 11: Sustainable Cities and Communities
	Goal 13: Climate Action
	Goal 15: Life on Land

	Goal 16: Peace and Justice Strong Institutions
Topic 13.15 Non-discrimination and equal opportunity	Goal 5: Gender Equality
	Goal 8: Decent Work and Economic Growth
	Goal 10: Reduced Inequalities
	Goal 16: Peace and Justice Strong Institutions
Topic 13.16 Forced or compulsory labor	Goal 5: Gender Equality
	Goal 8: Decent Work and Economic Growth
	Goal 16: Peace and Justice Strong Institutions
Topic 13.17 Child labor	Goal 1: No Poverty
	Goal 8: Decent Work and Economic Growth
	Goal 16: Peace, Justice and Strong Institutions
Topic 13.18 Freedom of association and collective bargaining	Goal 8: Decent Work and Economic Growth
	Goal 16: Peace and Justice Strong Institutions
Topic 13.19 Occupational health and safety	Goal 3: Good Health and Well-being
	Goal 8: Decent Work and Economic Growth
Topic 13.20 Employment practices	Goal 1: No Poverty
	Goal 8: Decent Work and Economic Growth
	Goal 10: Reduced Inequalities
Topic 13.21 Living income	Goal 1: No Poverty
	Goal 2: Zero Hunger
	Goal 8: Decent Work and Economic Growth
	Goal 10: Reduced Inequalities
Topic 13.22 Economic inclusion	Goal 1: No Poverty
	Goal 2: Zero Hunger
	Goal 8: Decent Work and Economic Growth
	Goal 5: Gender Equality
	Goal 9: Industry, Innovation and Infrastructure
	Goal 10: Reduce Inequalities
	Goal 11: Sustainable Cities and Communities
Goal 14: Life Below Water	
Topic 13.23 Supply chain traceability	Goal 12: Responsible Consumption and Production
	Goal 14: Life Below Water
	Goal 16: Peace, Justice and Strong Institutions
Topic 13.24 Public policy	Goal 2: Zero Hunger
	Goal 14: Life Below Water
	Goal 15: Life on Land

	Goal 16: Peace and Justice Strong Institutions
Topic 13.25 Anti-competitive behavior	Goal 16: Peace and Justice Strong Institutions
Topic 13.26 Anti-corruption	Goal 16: Peace and Justice Strong Institutions

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415 2. Likely material topics

416 This section comprises the likely material topics for the agriculture, aquaculture, and fishing sectors.
417 Each topic describes the sectors' most significant impacts related to the topic and lists disclosures
418 that have been identified as relevant for reporting on the topic by agriculture, aquaculture, and fishing
419 organizations. The organization is required to review each topic in this section and determine whether
420 it is a material topic for the organization, and then to determine what information to report for its
421 material topics.

422 Topic 13.1 Emissions

423 **This topic addresses emissions into the air, including greenhouse gas (GHG), ozone-depleting**
424 **substances (ODS), nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air**
425 **emissions regarded as pollutants. Emissions can have negative impacts on air quality,**
426 **ecosystems, and on human and animal health. GHG emissions are also a major contributor to**
427 **climate change.**

428 Agriculture is responsible for a large portion of greenhouse gas (GHG) emissions. From 2007 to 2016,
429 the sector accounted for approximately 13% of carbon dioxide (CO₂), 44% of methane (CH₄), and
430 82% of nitrous oxide (N₂O) emissions from human activities globally, which was 23% of the total net
431 anthropogenic emissions of GHGs over this period [46].

432 In agriculture and aquaculture, the highest share of total emissions is associated with land use
433 change, including the conversion of land from a natural ecosystem for use by the sectors [46] (see
434 also [topic 13.4 Natural ecosystem conversion](#)). Forests contribute to the reduction of CO₂ by
435 absorbing more carbon than they release, making them a carbon sink. Clearing forests or grasslands
436 results in large amounts of CO₂ being released. Soils can also absorb greenhouse gas emissions.
437 Soil and pasture management practices can contribute to the capacity of soil to store carbon or
438 adversely accelerate the release of carbon from the soil into the atmosphere (see [topic 13.5 Soil](#)
439 [health](#)). Restoring and preserving carbon sinks, such as natural ecosystems and soils, plays an
440 integral role in mitigating climate change (see also [topic 13.2 Climate adaptation and resilience](#)).

441 Land management for crop production produces GHG emissions through soil cultivation, including
442 tillage, crop residue decomposition, and burning vegetation and crop residues. This results in the
443 production of CO₂, N₂O, and particulate matter. Fertilizers, pesticides, and fuels used to power
444 machinery and vehicles also release GHG emissions.

445 Ruminant livestock produce GHG emissions during respiration and digestion. Animal manure also
446 emits gases, such as CH₄, N₂O, and CO₂. Livestock on managed pastures and rangelands was
447 estimated accounted for over half of total anthropogenic N₂O emissions from agriculture [46]. CH₄ and
448 N₂O emissions have a higher global warming potential than CO₂.

449 In animal production and aquaculture, emissions are also associated with animal and fish feed
450 sourcing. These emissions can be caused by natural ecosystem conversion and the feed's
451 production, processing, and transportation. In aquaculture land-based farms, emissions are also
452 released from the combustion of fuel to generate the energy needed to regulate water temperature
453 and circulation.

454 Fishing activities produce emissions from burning fuels, such as diesel, marine fuel oils, and
455 intermediate fuel oils. These fuels provide the power to fishing vessels to access marine stocks and
456 power onboard fish processing facilities, including freezing or refrigerating fish. Fishing vessels are
457 not necessarily optimized for fuel efficiency, further contributing to emissions. The combustion of fuels
458 also produces localized air pollution, while the use of refrigerants to store fish products can result in
459 the emission of ozone-depleting substances.

460 The goal of the Paris Agreement to limit global warming to well below 2°C requires organizations to
461 set emissions targets consistent with the cumulative carbon budgets that set a cap for the total
462 allowed CO₂ emissions [42].

463 Reducing emissions for the sectors includes measures that help mitigate the main sources of GHGs,
 464 for example, measures to reduce methane (CH₄) emitted by ruminants through better management of
 465 feed and manure, Or, in crop production, using culture-specific production practices, such as growing
 466 rice using alternate wetting and drying methods that reduce methane production.

467 **Reporting on emissions**

468 If the organization has determined emissions to be a material topic, this sub-section lists the
 469 disclosures identified as relevant for reporting on the topic by the agriculture, aquaculture, and fishing
 470 sectors.

STANDARD	DISCLOSURE	SECTOR STANDARD REF #
Management of the topic		
GRI 3: Material Topics 2021	Disclosure 3-3 Management of material topics	
Topic Standard disclosures		
GRI 305: Emissions 2016	Disclosure 305-1 Direct (Scope 1) GHG emissions <i>Additional sector recommendations</i> <ul style="list-style-type: none"> When reporting on gross <u>direct (Scope 1) GHG emissions</u> in metric tons of <u>CO₂ equivalent</u>, include land use change emissions.⁶ 	
	Disclosure 305-2 Energy indirect (Scope 2) GHG emissions	
	Disclosure 305-3 Other indirect (Scope 3) GHG emissions <i>Additional sector recommendations</i> <ul style="list-style-type: none"> When reporting on gross <u>other indirect (Scope 3) GHG emissions</u> in metric tons of CO₂ equivalent, include land use change emissions. 	
	Disclosure 305-4 GHG emissions intensity	
	Disclosure 305-5 Reduction of GHG emissions	
	Disclosure 305-6 Emissions of ozone-depleting substances (ODS)	
	Disclosure 305-7 Nitrogen oxides (NO_x), sulfur oxides (SO_x), and other significant air emissions	

⁶ Land use change occurs when land is converted from one land use category to another; for instance, when cropland is converted to grassland or when forests are converted to cropland. This includes natural ecosystem conversion [48] (see also [topic 13.4 Natural ecosystem conversion](#)).

471 **References and resources**

472 [GRI 305: Emissions 2016](#) lists authoritative intergovernmental instruments and additional references
473 relevant to reporting on this topic.

474

475 The additional references used in developing this topic, as well as resources that may be helpful for
476 reporting on emissions by the agriculture, aquaculture, and fishing sectors are listed in the
477 [Bibliography](#).

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478 **Topic 13.2 Climate adaptation and resilience**

479 **Organizations contribute to climate change and are simultaneously affected by it. Climate**
 480 **adaptation and resilience refer to how an organization adjusts to current and anticipated**
 481 **climate change-related risks, as well as how it contributes to the ability of societies and**
 482 **economies to withstand impacts from climate change.**

483 Major impacts of climate change include an increase in acute weather events and long-term shifts in
 484 climate patterns. As a consequence, crop yields and biogeographic suitability have been negatively
 485 impacted in recent decades.

486 In agriculture, crops can be damaged and harvests lost due to increased volatility, intensity, and
 487 duration of weather-related events. Warmer winters related to climate change affect fruits and
 488 vegetables that need a period of colder weather to produce viable harvests. Land degradation
 489 exacerbated by global warming can also lead to increased frequency and severity of flooding,
 490 drought, pest prevalence, diseases, heat stress, dry spells, wind, sea-level rise, wave action, and
 491 permafrost thaw.

492 Aquaculture and fishing operations are likely to be affected by water temperature increases, oxygen
 493 deficit, sea-level rise, decreased pH levels, and changes in productivity patterns. Higher ocean
 494 temperatures also means continued losses of marine habitats and species. Aquaculture and inland
 495 fishing activities are also affected by changes in precipitation and water management, increased
 496 stress on freshwater resources, and the frequency and intensity of extreme climate events. In tropical
 497 and less developed regions, small-scale fishers are particularly vulnerable to climate change-related
 498 impacts.

499 An organization's failure to adapt to climate change-related impacts can lead to disruptions in
 500 operations, increased occupational health and safety impacts, loss of livelihood, and food insecurity.
 501 These disruptions can affect an organization's workers, suppliers, customers, as well as smallholder
 502 farmers, fishers, indigenous peoples, and local communities. Disruptions in food production mean that
 503 between 34 and 600 million more people could suffer from hunger by 2080, depending on how
 504 climate change-related scenarios unfold [53] (see also [topic 13.9 Food security](#)).

505 Organizations can respond to climate change impacts by adopting practices and technologies that
 506 build resilience. For example, in agriculture, low or no-till farming can reduce soil erosion, leading to
 507 improved soil and water quality. Another important adaptation strategy for the sectors is the
 508 diversification in production through a wider genetic base with improvements in the tolerance of heat
 509 and drought. Mitigating food loss (see also [topic 13.9 Food security](#)) is another measure that
 510 contributes to less land and natural resources needed to produce the same output, thereby reducing
 511 GHG emissions.

512 Preserving indigenous and local knowledge of biodiversity can also be a contributing factor in
 513 enhancing climate resilience. Indigenous and local knowledge often focuses on preserving
 514 ecosystems and offers adaptive strategies to cope with unfavorable conditions in local areas.

515 **Reporting on climate adaptation and resilience**

516 If the organization has determined climate adaptation and resilience to be a material topic, this sub-
 517 section lists the disclosures identified as relevant for reporting on the topic by the agriculture,
 518 aquaculture, and fishing sectors.

STANDARD	DISCLOSURE	SECTOR STANDARD REF #
Management of the topic		
GRI 3: Material Topics 2021	Disclosure 3-3 Management of material topics	

Topic Standard disclosures

**GRI 201:
Economic
Performance
2016**

[Disclosure 201-2 Financial implications and other risks and opportunities due to climate change](#)

Additional sector recommendations

- Describe the climate change-related scenarios used for identifying the risks and opportunities posed by climate change.

519 **References and resources**

520 [GRI 201: Economic Performance 2016](#) lists authoritative intergovernmental instruments and
521 additional references relevant to reporting on this topic.

522 The additional references used in developing this topic, as well as resources that may be helpful for
523 reporting on climate adaptation and resilience by the agriculture, aquaculture, and fishing sectors are
524 listed in the [Bibliography](#).

525 **Topic 13.3 Biodiversity**

526 **Biodiversity is the variability among living organisms. It includes diversity within species,**
527 **between species and of ecosystems. Biodiversity not only has intrinsic value, but is also vital**
528 **to human health, food security, economic prosperity, and mitigation of climate change and**
529 **adaptation to its impacts. This topic covers impacts on biodiversity, including on plant and**
530 **animal species, genetic diversity, and natural ecosystems.**

531 Biodiversity is essential for food production and a wide range of ecosystem services. According to the
532 International Union for Conservation of Nature (IUCN), biodiversity faces five major threats: habitat
533 loss and degradation, overexploitation of biological resources, pollution, climate change, and invasive
534 species.

535 Agriculture, aquaculture, and fishing operations pose threats to biodiversity through air, soil, and
536 water contamination, deforestation, soil erosion, sedimentation of waterways, and species extraction.
537 Biodiversity generally declines as agriculture, aquaculture, or fishing activities intensify. This is largely
538 driven by natural ecosystem conversion and habitat change (see also [topic 13.4 Natural ecosystem](#)
539 [conversion](#)). Biodiversity impacts result in increased mortality rates of species, habitat fragmentation,
540 and can lead to species loss or extinction.

541 Biodiversity can be adversely impacted by monoculture. Growing the same crops or rearing the same
542 animal species year after year may increase production but it also decreases agrobiodiversity on
543 farms and plantations and can compromise biodiversity in adjacent environments. In crop production,
544 continuous monocropping can result in a buildup of pests and diseases, usually requiring higher
545 volumes of pesticides, which can be toxic to many non-target species, including pollinators. About
546 40% of invertebrate pollinator species, particularly bees and butterflies, face extinction [71].

547 Animal production can be a major source of surplus nitrogen and phosphorous pollution, leading to
548 eutrophication in adjacent lakes and rivers, rendering them uninhabitable for aquatic organisms (see
549 also [topic 13.7 Water and effluents](#)). Aquaculture activities have similar impacts due to a buildup of
550 fish excrement in waterbodies. These impacts can adversely affect the availability of fishery resources
551 and food for local communities.

552 Aquaculture can also result in impacts on local biodiversity through escapes from aquaculture farms,
553 which in turn can compete with the area's native species. Poor feeding practices can result in excess
554 or insufficient feed for fish, adding to disease outbreaks and aquatic pollution. The presence of extra
555 feed can attract wild fish and predators to the water column.

556 Fishing is one of the most significant drivers of declining ocean biodiversity. This is largely due to
557 overfishing, by-catch, and illegal, unreported, and unregulated fishing (IUU). From 1974 to 2017, the
558 proportion of the world's fish stocks classified as overfished increased to 34.2%, with only about two-
559 thirds of global fish stocks deemed as biologically sustainable [see references 65 and 68].

560 Overfishing leads to impacts on the biodiversity of marine ecosystems by altering the composition of
561 species. These alterations result in impacts on predator-prey relationships and cause shifts in trophic
562 structures. Overfishing can be harder to prevent in international waters, where efforts to manage
563 stock sustainably are further complicated when fish move across country borders.

564 Fishmeal and fish oil are rich in protein and are typically used as fish and animal feed ingredients.
565 Fishing products used for feed can be derived from forage fish or fishing by-products, including
566 trimmings and offcuts. Overfishing forage fish stocks used for feed increases pressure on the wild
567 trophic structures. In aquaculture, further pressure on fish stocks can also be driven by using juvenile
568 seeds captured in the wild.

569 Certain fishing practices, for example, bottom trawling in areas of high biodiversity value, can damage
570 the seabed's physical structure, affecting bottom plants, corals, sponges, fish, and other aquatic
571 animals. This practice can profoundly change how natural benthic ecosystems function or lead to their
572 destruction. Seabed damage can also result in carbon dioxide (CO₂) emissions.

573 A phenomenon known as 'ghost fishing' can threaten both target and non-target species, potentially
574 killing endangered and protected species and damaging underwater habitats. This phenomenon
575 occurs when fishing gear is lost or discarded and can continue to trap species indiscriminately. Lost or
576 discarded fishing gear also contributes to marine plastic pollution (see also [topic 13.8 Waste](#)).

577 About 80% of terrestrial biodiversity is found in indigenous peoples' lands and forests [76]; respecting
 578 indigenous peoples' rights to land and natural resources can also make a profound contribution to
 579 biodiversity conservation (see [topic 13.14 Rights of indigenous peoples](#) and [topic 13.13 Land and](#)
 580 [resource rights](#)).

581 **Reporting on biodiversity**

582 If the organization has determined biodiversity to be a material topic, this sub-section lists the
 583 disclosures identified as relevant for reporting on the topic by the agriculture, aquaculture, and fishing
 584 sectors.

STANDARD	DISCLOSURE	SECTOR STANDARD REF #
Management of the topic		
GRI 3: Material Topics 2021	<p data-bbox="448 674 995 707">Disclosure 3-3 Management of material topics</p> <p data-bbox="448 723 871 757"><i>Additional sector recommendations</i></p> <p data-bbox="448 772 1086 835">The following additional sector recommendation is for organizations in the aquaculture sector:</p> <ul data-bbox="448 851 1107 913" style="list-style-type: none"> • Describe the approach to preventing and managing escapes of farmed aquatic organisms. 	
Topic Standard disclosures		
GRI 304: Biodiversity 2016	<p data-bbox="448 992 1166 1088">Disclosure 304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas</p>	
	<p data-bbox="448 1104 1193 1167">Disclosure 304-2 Significant impacts of activities, products and services on biodiversity</p>	
	<p data-bbox="448 1182 1015 1216">Disclosure 304-3 Habitats protected or restored</p>	
	<p data-bbox="448 1238 1139 1330">Disclosure 304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations</p>	
Additional sector disclosures		
<p data-bbox="193 1413 1171 1476">The following additional sector disclosures are for organizations in the aquaculture sector:</p> <ul data-bbox="193 1491 1078 1843" style="list-style-type: none"> • For each species of aquatic organisms produced, report: <ul data-bbox="245 1532 572 1655" style="list-style-type: none"> - species scientific name; - volume in metric tons; - farming methods; - production site. • For juvenile seeds stocks captured in the wild that are used as input to aquaculture production, report: <ul data-bbox="245 1727 572 1843" style="list-style-type: none"> - species scientific name; - volume in metric tons; - fishing methods; - locations of origin; 		

<ul style="list-style-type: none"> - stock status, including the stock status assessments or systems used.⁷ • Report the use of fishing products in feed, including the following: <ul style="list-style-type: none"> - species scientific name; - whether the whole fish or fish waste (trimmings, offcuts, and offal) is used; - locations of origin; - stock status, including the stock status assessments or systems used. 	
<p>The following additional sector disclosure is for organizations in the fishing sector:</p> <ul style="list-style-type: none"> • For each species of aquatic organisms caught or harvested, including non-target species, report: <ul style="list-style-type: none"> - species scientific name; - volume in metric tons; - fishing methods; - locations of origin; - stock status, including the stock status assessments or systems used.⁸ 	

585 **References and resources**

586 [GRI 304: Biodiversity 2016](#) lists authoritative intergovernmental instruments and additional references
587 relevant to reporting on this topic.

588 The additional authoritative instruments and references used in developing this topic, as well as
589 resources that may be helpful for reporting on biodiversity by the agriculture, aquaculture, and fishing
590 sectors are listed in the [Bibliography](#).

⁷ The organization can use any stock status assessments or systems that are relevant to the location of origin and species.

⁸ The organization can use any stock status assessments or systems that are relevant to the location of origin and species.

591 **Topic 13.4 Natural ecosystem conversion**

592 **Natural ecosystem conversion refers to changing a natural ecosystem to another use or a**
593 **profound change in a natural ecosystem’s species composition, structure, or function. This**
594 **topic covers impacts related to natural ecosystem conversion, including discrete incidents of**
595 **land clearance, severe degradation, or the introduction of practices that lead to substantial**
596 **and sustained change in natural ecosystems.**

597 Natural ecosystems offer important services, including absorbing and storing vast quantities of carbon
598 dioxide (CO₂). When natural ecosystems are converted to other uses, stored carbon can be released
599 into the atmosphere, contributing to [greenhouse gas \(GHG\) emissions](#) and climate change. Estimates
600 show that the loss of primary tropical forests in 2019 resulted in the release of more than 2 billion tons
601 of CO₂ [86] (see [topics 13.1 Emissions](#) and [13.2 Climate adaptation and resilience](#)). Conversion of
602 natural ecosystems can also lead to other environmental impacts, such as loss of biodiversity (see
603 also [topic 13.3 Biodiversity](#)), acceleration of soil erosion (see also [topic 13.5 Soil health](#)), and
604 increased runoff and water pollution (see also [topic 13.7 Water and effluents](#)).

605 In agriculture and aquaculture sectors, natural ecosystem conversion can occur through the use of
606 land and aquatic environments for animal breeding, grazing, crop production, aquaculture production,
607 and ancillary activities. This can occur rapidly, with a significant change taking place in a short time, or
608 gradually, with incremental changes over a long time.

609 Terrestrial ecosystem conversion can include the conversion of forests through deforestation and the
610 conversion of other ecosystems, such as grasslands, woodlands, or savannas. Deforestation occurs
611 when primary and secondary forests are cleared, often by burning. Deforestation in tropical
612 rainforests can have a particularly severe impact because they are habitat to much of the world’s
613 biodiversity.

614 Aquaculture operations can result in clearing of mangroves, salt marshes, and wetlands or produce
615 sustained changes to the coastal, lake, and river ecosystems to make them fit for aquatic farming
616 sites. Aquaculture also relies heavily on crops, such as soy, for fish feed which can contribute to the
617 conversion of terrestrial ecosystems. Feed ingredients need to be traceable to identify and prevent
618 the potential negative impacts associated with conversion (see [topic 13.23 Supply chain traceability](#)).

619 The rate of deforestation and conversion in the agriculture sector has been increasing to give way to
620 plantations and pastures [91]. Deforestation and conversion occur in the supply chains of beef, soy,
621 palm oil, cocoa, coffee, rubber, and other products. To be deemed deforestation- and conversion-free,
622 products must be assessed as not causing or contributing to natural ecosystem conversion after an
623 appropriate cut-off date.⁹

624 People can be displaced due to physical changes to the landscapes surrounding their communities or
625 degradation or depletion of natural resources or ecosystem services that the community relies on (see
626 also [topic 13.12 Local communities](#) and [topic 13.13 Land and resource rights](#)). Loss of natural
627 ecosystems and resources can also cause food insecurity. For [indigenous peoples](#), natural
628 ecosystem conversion can result in the loss of cultural and spiritual heritage and livelihoods and
629 impact the rights to self-determination and self-governance (see also [topic 13.14 Rights of indigenous](#)
630 [peoples](#)).

⁹ A cut-off date is defined by the Accountability Framework as ‘the date after which deforestation or conversion renders a given area or production unit non-compliant with no-deforestation or no-conversion commitments, respectively’ [92].

631 **Reporting on natural ecosystem conversion**

632 If the organization has determined natural ecosystem conversion to be a material topic, this sub-
 633 section lists the disclosures identified as relevant for reporting on the topic by the agriculture,
 634 aquaculture, and fishing sectors.

STANDARD	DISCLOSURE	SECTOR STANDARD REF #
Management of the topic		
GRI 3: Material Topics 2021	<p data-bbox="453 539 999 568">Disclosure 3-3 Management of material topics</p> <p data-bbox="453 584 874 613"><i>Additional sector recommendations</i></p> <ul data-bbox="453 629 1214 1211" style="list-style-type: none"> • Describe policies or commitments to reduce or eliminate natural ecosystem conversion, including target¹⁰ and cut-off¹¹ dates, for the following: <ul data-bbox="496 734 1206 860" style="list-style-type: none"> - the organization’s own production; - sourcing of terrestrial animal and fish feed; - products sourced by the organization for aggregation, processing, or trade. • Describe how the organization ensures that its suppliers comply with its natural ecosystem conversion policies and commitments, including through sourcing policies and contracts. • Report the organization’s participation in multi-stakeholder, landscape¹², or sectoral initiatives intended to reduce or eliminate natural ecosystem conversion. • Describe the tools and systems used to monitor natural ecosystem conversion in the organization’s activities, supply chain, and sourcing locations. 	
Additional sector disclosures		

¹⁰ A target date is defined by the Accountability Framework as ‘the date by which [the organization] intends to have fully implemented its commitment or policy’ [92].

¹¹ Cut-off dates may differ between commodities and regions. Appropriate cut-off dates can be selected based on sector-wide or regional cut-off dates, or those specified in certification programs, legislation, or be based on the availability of monitoring data. More guidance on identifying appropriate cut-off dates can be found in Accountability Framework Operational Guidance on Cut-off Dates [93].

¹² Landscapes refer to natural and/or human-modified ecosystems, often with a characteristic configuration of topography, vegetation, land use, and settlements. Landscape initiatives refer to how organizations in the production and sourcing of agricultural products need to work beyond their own supply chains to address sustainability issues and support positive outcomes for the people and sourcing locations. These definitions are based on Food and Agriculture Organization, Landscape approaches: key concepts [84] and Proforest, Landscape initiatives [88].

Report the percentage of production volume from land owned, leased or managed by the organization determined to be deforestation- or conversion-free, by product, and describe the assessment methods used. ¹³	
For products sourced by the organization, report the following by product: <ul style="list-style-type: none"> - the percentage of sourced volume determined to be deforestation- or conversion-free, and describe the assessment methods used; - the percentage of sourced volume for which origins are not known to the point where it can be determined whether it is deforestation- or conversion-free, and describe actions taken to improve traceability. 	
Report the size in hectares, the location, and the type ¹⁴ of natural ecosystems converted since the cut-off date on land owned, leased, or managed by the organization.	
Report the size in hectares, the location, and the type ⁹ of natural ecosystems converted since the cut-off date by suppliers or in sourcing locations.	

635 **References and resources**

636 The authoritative instruments and references used in developing this topic, as well as resources that
637 may be helpful for reporting on natural ecosystem conversion by the agriculture, aquaculture, and
638 fishing sectors are listed in the [Bibliography](#).

¹³ Assessment methods can include monitoring, certification, sourcing from low-risk jurisdictions with no or negligible recent conversion, or sourcing from verified suppliers.

¹⁴ Natural ecosystem type can be characterized by biome, vegetation type, or high conservation value status relevant to the region and regulatory context.

639 **Topic 13.5 Soil health**

640 **Soil health is the capacity of soil to function as a living ecosystem and to sustain plant and**
 641 **animal productivity, promote plant and animal health, and maintain or enhance water and air**
 642 **quality. This topic covers impacts on soil health, including soil erosion, soil loss, and**
 643 **reduction in soil fertility.**

644 Recent estimates suggest that 80% of agricultural land is affected by moderate to severe erosion [97].
 645 Although soil erosion occurs naturally, agricultural activities can significantly accelerate this process,
 646 including through removing vegetation cover, tillage, soil compaction, irrigation, and overgrazing by
 647 livestock.

648 In agriculture, original vegetation cover is removed to make land available for crop production or
 649 animal grazing. Agricultural crops rarely hold onto the topsoil as well as the original vegetation cover,
 650 increasing soil erosion and potentially reducing soil fertility. Estimates show that half of the topsoil
 651 globally has been lost in the past 150 years [102]. Grazing livestock can also cause impacts on soil
 652 structure through excessive defoliation, defecation, and trampling.

653 Soil erosion can also be accelerated by tillage. Soil erosion in agricultural fields exceeds soil
 654 formation at rates estimated between 10 to 20 times higher when there is no tillage and over 100
 655 times higher when conventional tillage is used [101]. The increased erosion is because conventional
 656 tillage inverts and breaks up the soil, destroys the soil structure, and buries crop residues. Tilled soils
 657 have less capacity to support loads applied to the ground and are consequently more sensitive to
 658 compaction caused by agricultural machinery, which can lead to impacts on soil biodiversity. Minimum
 659 till or no-till methods, which reduce tillage area and tillage depth, crop protection, and other soil
 660 management practices, can help to reduce soil erosion.

661 Fertilizers, both organic and inorganic, as well as pesticides, have an impact on soil health (see also
 662 [topic 13.6 Pesticides use](#)). Excessive use of inorganic fertilizers can increase soil acidity levels and
 663 alter soil fertility. Pesticides can affect soil communities by influencing the performance of soil biota or
 664 modifying it. This can compromise the abundance and composition of the entire soil food web.

665 The main ingredients of fertilizers commonly used in agriculture are nitrogen, phosphorus, and
 666 potassium. The presence of phosphorus in agricultural runoff can accelerate eutrophication.
 667 Alterations to the global nitrogen cycle can lead to the rise of nitrous oxide levels in the atmosphere.
 668 Excessive use of nitrogen fertilizers in agriculture has been a major source of nitrate pollution in
 669 groundwater and surface water affecting access to clean water for local communities.

670 **Reporting on soil health**

671 If the organization has determined soil health to be a material topic, this sub-section lists the
 672 disclosures identified as relevant for reporting on the topic by the agriculture, aquaculture, and fishing
 673 sectors.

STANDARD	DISCLOSURE	SECTOR STANDARD REF#
Management of the topic		
GRI 3: Material Topics 2021	<p data-bbox="448 1621 999 1653">Disclosure 3-3 Management of material topics</p> <p data-bbox="448 1668 874 1700"><i>Additional sector recommendations</i></p> <ul data-bbox="448 1715 1171 1906" style="list-style-type: none"> • Describe the soil management plan, including: <ul style="list-style-type: none"> - a link to this plan if publicly available; - the main threats to soil health identified and a description of the soil management practices used; - the approach to input optimization, including the use of fertilizers. 	

674 **References and resources**

675 The authoritative instruments and references used in developing this topic, as well as resources that
676 may be helpful for reporting on soil health by the agriculture, aquaculture, and fishing sectors are
677 listed in the [Bibliography](#).

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678 **Topic 13.6 Pesticides use**

679 **Pesticides are chemical or biological substances intended to regulate plant growth or control,**
680 **repel, or destroy any pest. This topic covers an organization's approach and impacts related to**
681 **pesticides use, including the impact of their toxicity on non-target organisms.**

682 Pesticides include herbicides, insecticides, fungicides, nematicides, and rodenticides and can be used
683 in crop production to control weeds and other pests¹⁵. Pesticides can decrease the spread of
684 diseases and pests, increase production yields, and potentially limit the need to convert more land.

685 Conversely, if not handled properly pesticides can induce adverse health effects in humans by
686 interfering with reproduction, immune, and nervous systems. Pesticides can also have negative
687 impacts on biodiversity because of their toxicological effects. For example, pesticides that target
688 insects or weeds can be toxic to birds, fish, and non-target plants and insects. These impacts can
689 threaten ecosystem services, such as pollination, and adversely impact food security and people's
690 livelihoods (see also [topic 13.3 Biodiversity](#)).

691 Each pesticide has different properties and toxicological effects. The World Health Organization
692 (WHO) classifies the toxicity hazard levels for pesticides as either extremely hazardous, highly
693 hazardous, moderately hazardous, slightly hazardous, or unlikely to present an acute hazard. Toxicity
694 depends on the pesticide's function and other factors, such as its use and disposal. The regulation of
695 pesticides is not always consistent across the world. Some pesticides, usually those classified as
696 extremely and highly hazardous, are unregistered or banned in some countries but may remain
697 available in others.

698 Workers and other people in the immediate area have the potential to be most affected during or right
699 after pesticides are applied. Pesticides can also stay in soil and water for years and have long-term
700 negative impacts on local communities and the local environment (see also [topic 13.8 Waste](#)).

701 Women and children can be particularly vulnerable to negative health effects caused by exposure to
702 pesticides (see [topic 13.12 Local communities](#) and also [topic 13.19 Occupational health and safety](#)).
703 Exposure to pesticide residue is also possible through food and water (see also [topic 13.7 Water and](#)
704 [effluents](#) and [topic 13.10 Food safety](#)).

705 The Food and Agriculture Organization (FAO) estimates that in developing countries, 80% of the
706 increase in food production needed to keep pace with population growth is projected to come from
707 greater crop yields. This could trigger a further intensification of pesticide use to generate higher
708 yields. The intensive use of pesticides sometimes leads to resistance and outbreaks of secondary
709 pests.

710 Integrated pest management in agriculture seeking to optimize pest control and mitigate negative
711 impacts is a widely recognized approach that considers biological, chemical, physical, and crop-
712 specific pest control practices. When pest control through the application of chemicals cannot be
713 avoided, organizations are expected to manage pesticide use to minimize negative impacts and the
714 application of extremely and highly hazardous pesticides [105].

¹⁵ Pest is defined by the Food and Agriculture Organization and the World Health Organization as any species, strain or biotype of plant, animal or pathogenic agent injurious to plants and plant products, materials or environments and includes vectors of parasites or pathogens of human and animal disease and animals causing public health nuisance [97].

715 **Reporting on pesticides use**

716 If the organization has determined pesticides use to be a material topic, this sub-section lists the
 717 disclosures identified as relevant for reporting on the topic by the agriculture, aquaculture, and fishing
 718 sectors.

STANDARD	DISCLOSURE	SECTOR STANDARD REF#
Management of the topic		
GRI 3: Material Topics 2021	<p data-bbox="450 533 999 566">Disclosure 3-3 Management of material topics</p> <p data-bbox="450 577 874 611"><i>Additional sector recommendations</i></p> <ul data-bbox="450 622 1182 981" style="list-style-type: none"> • Describe the pest management plan of the organization, including the rationale for the selection and application of pesticides and any other practices of pest control. • Describe actions taken to prevent, mitigate and/or remediate negative impacts associated with the use of extremely and highly hazardous pesticides. • Describe the actions, initiatives, or plans to switch to less hazardous pesticides and actions taken to optimize pest control practices. • Describe the training provided to workers on pest management and the application of pesticides. 	
Additional sector disclosures		
	<p data-bbox="193 1066 1166 1122">Report the volume and intensity of pesticides used by the following toxicity hazard levels:¹⁶</p> <ul data-bbox="240 1133 719 1283" style="list-style-type: none"> - Extremely hazardous; - Highly hazardous; - Moderately hazardous; - Slightly hazardous; - Unlikely to present an acute hazard. 	

719 **References and resources**

720 The authoritative instruments and references used in developing this topic, as well as resources that
 721 may be helpful for reporting on pesticides use by the agriculture, aquaculture, and fishing sectors are
 722 listed in the [Bibliography](#).

¹⁶ The criteria for toxicity hazard levels and a list of pesticides classified by hazard level can be found in the World Health Organization Recommended Classification of Pesticides by Hazard [116].

723 **Topic 13.7 Water and effluents**

724 **Recognized as a human right, access to fresh water is essential for human life and well-being.**
 725 **The amount of water withdrawn and consumed by an organization and the quality of its**
 726 **discharges can have impacts on ecosystems and people. This topic covers impacts related to**
 727 **the withdrawal and consumption of water and the quality of water discharged.**

728 Water is a critical input for crop and animal production, as well as aquaculture. The agriculture sector
 729 accounts for an estimated 70% of total water withdrawn globally [120]. In crop production, withdrawn
 730 water is primarily used to irrigate land, apply pesticides and fertilizers, and control crop cooling and
 731 frost.

732 Water has critical importance to agricultural productivity. On average, irrigated land is twice as
 733 productive per unit as non-irrigated land. Irrigation can be achieved through different methods,
 734 including surface irrigation or subsurface irrigation. Water can be withdrawn from groundwater or
 735 surface water, such as lakes and reservoirs, or come in the form of treated wastewater or desalinated
 736 water. Intensive water withdrawal can decrease aquifer levels, which reduces the long-term
 737 sustainability of water resources and increases access costs for all users (see also [topic 13.12 Local](#)
 738 [communities](#)).

739 In animal production, water is used for animal hydration and cleaning. It is also used for the washing
 740 and sanitization of milking and slaughter equipment used to process animal products. Effluents
 741 containing waste from terrestrial animals, fertilizers, and pesticides can contribute to the pollution of
 742 surface and groundwater.

743 Aquaculture water use is associated with raising aquatic organisms in water and can require
 744 significant amount of surface water. Aquaculture production occurs in ponds, artificial channels, and,
 745 to a lesser extent, closed-recirculation tanks. Because aquaculture operations take place in controlled
 746 environments, much of the water withdrawn can be returned to the source after use.

747 Nutrient buildup from discharges in water bodies near fish farms is a typical water impact from
 748 aquaculture production. This issue is exacerbated in high-density farms when fish feces discharged
 749 into water potentially deplete oxygen levels and create algal blooms that lead to eutrophication. The
 750 eutrophication and acidification of water results in negative impacts on biodiversity. Water quality
 751 affects habitat and food sources for animals. Contaminated water can also adversely affect people's
 752 access to clean water, compromising their health and livelihoods.

753 In fishing operations, wastewater can be discharged to the sea from fishing vessels. This includes
 754 water used to store fish aboard the vessel, which can contain fish waste from gutting and bleeding, as
 755 well as materials and coating from the hold and onboard refrigeration systems. Wastewater could also
 756 come from cleaning holds and machinery containing detergents, disinfectants and oily mixtures.
 757 Discharges can cause oxygen depletion in sea water and pollution in coastal areas.¹⁷

758 **Reporting on water and effluents**

759 If the organization has determined water and effluents to be a material topic, this sub-section lists the
 760 disclosures identified as relevant for reporting on the topic by the agriculture, aquaculture, and fishing
 761 sectors.

STANDARD	DISCLOSURE	SECTOR STANDARD REF #
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¹⁷ The International Convention for the Prevention of Pollution from Ships (MARPOL) contains provisions on discharges of wastewater from vessels [117].

Management of the topic		
GRI 3: Material Topics 2021	Disclosure 3-3 Management of material topics	
Topic Standard disclosures		
GRI 303: Water and Effluents 2018	Disclosure 303-1 Interactions with water as a shared resource	
	Disclosure 303-2 Management of water discharge-related impacts	
	Disclosure 303-3 Water withdrawal	
	Disclosure 303-4 Water discharge	
	Disclosure 303-5 Water consumption	

762 **References and resources**

763 [GRI 303: Water and Effluents 2018](#) lists authoritative intergovernmental instruments and additional
764 references relevant to reporting on this topic.

765
766 The additional references used in developing this topic, as well as resources that may be helpful for
767 reporting on water and effluent by the agriculture, aquaculture, and fishing sectors are listed in the
768 [Bibliography](#).

769 **Topic 13.8 Waste**

770 **Waste refers to anything that a holder discards, intends to discard, or is required to discard.**
 771 **When inadequately managed, waste can have negative impacts on the environment and**
 772 **human health, which can extend beyond the locations where waste is generated and**
 773 **discarded. This topic covers impacts from waste and the management of waste.**

774 Waste from organizations in the agriculture, aquaculture, and fishing sectors includes organic waste,
 775 such as crop waste, animal manure, fish feces, animal carcasses; and inorganic waste, such as
 776 plastics. It can also include hazardous waste, such as pesticides containers, and materials from
 777 animal health products.

778 Some organic by-products have the potential to be used as a biomass energy source, feed or
 779 fertilizers, contributing to circularity measures. For example, trimmings and offcuts from aquaculture
 780 and fishing operations can be turned into fishmeal and oil, while manure produced by animals is an
 781 organic fertilizer that can improve soil health. However, if incinerated without energy recovery or
 782 directed to landfills, by-products turn into waste and cause negative environmental impacts, including
 783 greenhouse gas (GHG) emissions and water pollution (see also [topic 13.7 Water and effluents](#), [topic](#)
 784 [13.1 Emissions](#)). In addition, organic waste from terrestrial and aquatic animals may contain
 785 microorganisms and parasite eggs. These pathogens can spread in receiving environments and
 786 cause ill health in humans.

787 In aquaculture operations, fish feed and feces can settle at the bottom of ponds or in inactive zones of
 788 raceways as liquid or solid organic waste. Fish feces may also reach and pollute waterbodies.
 789 Pollution and waste impacts from fish feces and settleable solids can be minimized through water
 790 management (see also [topic 13.7 Water and effluents](#)).

791 Aquaculture activities generate considerable amounts of plastic waste. Plastics are widely used for
 792 equipment, disposable gloves, and for packaging various inputs, such as feed sacks and wrapped
 793 consumables. Plastic can also be used in pond liners, harvest nets, pipework, buoys, ropes,
 794 incubation jars, and containers. In fishing, various marine tools, such as floats, fishing nets and lines,
 795 strapping bands, wire ropes, and sails, also consist of plastics.

796 Discarded or abandoned plastic waste can contaminate the surrounding environments and enter the
 797 ocean and other waterbodies. Abandoned, lost, or otherwise discarded fishing gear contributes to
 798 waste and overfishing (see also [topic 13.3 Biodiversity](#)). Fish and aquatic animals sometimes mistake
 799 plastic waste for food and get trapped in items such as ropes, nets, and bags. The management of
 800 waste generated onboard fishing vessels, including plastics, paper products, food waste, and
 801 chemicals, is regulated by international maritime standards (see references [125], [126], and [127] in
 802 the Bibliography).

803 Incorrectly disposed waste from agriculture, aquaculture and fishing activities can have lasting
 804 impacts on receiving environments, causing long-term contamination of soil and water. Contamination
 805 of agricultural land and natural resources causes negative impacts on the health and safety of local
 806 communities and can impact the safety of food produced (see also [topic 13.10 Food safety](#), [topic](#)
 807 [13.12 Local communities](#), and [topic 13.14 Rights of indigenous peoples](#)).

808 **Reporting on waste**

809 If the organization has determined waste to be a material topic, this sub-section lists the disclosures
 810 identified as relevant for reporting on the topic by the agriculture, aquaculture, and fishing sectors.

STANDARD	DISCLOSURE	SECTOR STANDARD REF #
Management of the topic		
GRI 3: Material Topics 2021	Disclosure 3-3 Management of material topics	

Topic Standard disclosures		
GRI 306: Waste 2020	Disclosure 306-1 Waste generation and significant waste-related impacts	
	Disclosure 306-2 Management of significant waste-related impacts	
	Disclosure 306-3 Waste generated <i>Additional sector recommendations</i> The following additional sector recommendations are for organizations in the fishing sector: <ul style="list-style-type: none"> • Report a breakdown of the total weight of <u>waste</u> generated on vessels to which the International Convention for the Prevention of Pollution from Ships (MARPOL) is applicable by MARPOL categories in metric tons¹⁸. • Describe the <u>recovery</u> and <u>disposal</u> operations used to manage each MARPOL category of waste. 	
	Disclosure 306-4 Waste diverted from disposal	
	Disclosure 306-5 Waste directed to disposal	

811 **References and resources**

812 [GRI 306: Waste 2020](#) lists authoritative intergovernmental instruments and additional references
 813 relevant to reporting on this topic.

814 The additional references used in developing this topic, as well as resources that may be helpful for
 815 reporting on waste by the agriculture, aquaculture, and fishing sectors are listed in the [Bibliography](#).

¹⁸ A list of 'garbage types' or categories can be found in MARPOL Annex V [127]. Further information on these categories can be found in the 2017 Guidelines for the Implementation of MARPOL Annex V [125].

816 **Topic 13.9 Food security**

817 **Food security means that people have physical and economic access to sufficient, safe, and**
818 **nutritious food that is acceptable within a given culture and meets people’s dietary needs and**
819 **food preferences for an active and healthy life. Adequate food is a human right and is crucial**
820 **to the enjoyment of all rights. This topic covers impacts on the dimensions of food security¹⁹.**

821 Food insecurity is a prevalent global issue. In 2018, more than 820 million people faced hunger, and
822 as populations grow, global food needs will increase [147]. Many people cannot afford food or are
823 forced to consume insufficient or low-quality food. Since 2014, undernourishment and food insecurity
824 have consistently increased, putting global goals to end hunger at risk [146].

825 Agriculture, aquaculture, and fishing organizations have impacts on food supply and affordability.
826 Quantity, quality, and accessibility of food also depend on farming and fishing practices.

827 Globally, land used for agriculture is estimated at 38% of the total land surface [142]. Some regions
828 are already constrained, limiting further land use expansion for food production (see also [topic 13.4](#)
829 [Natural ecosystem conversion](#)). Almost half of the world’s calorie supply is derived from essential
830 crops, such as maize, rice, and wheat. Competing demands for land, cultivation costs, and low
831 margins may affect the supply and affordability of these crops. Climate change and adverse weather
832 events can also cause impacts on yields, potentially increasing food losses (see also [topic 13.2](#)
833 [Climate adaptation and resilience](#)).

834 **Box 1. Food loss**

835 In agriculture, aquaculture, and fishing, products originally intended as food for human consumption
836 that end up as waste are categorized as food loss. The Food and Agriculture Organization (FAO)
837 estimates that 13.8% of food, from harvest to retail, was lost globally in 2016 [145].

838 Inefficiencies can cause food loss at different stages of the supply chain. At the farm level, they can
839 be due to inadequate harvesting time, climatic conditions, handling practices, post-harvest activities,
840 and challenges related to selling products. Food loss is accompanied by the loss of resources –
841 including water, land, energy, labor, and capital – and contributes to greenhouse gas (GHG)
842 emissions.

843 Measures to prevent food loss include adequate storage temperatures and conditions, sound
844 infrastructure, and efficient transportation. Primary processing conditions and packaging can play a
845 role in preserving agriculture, aquaculture, and fishing products.

846 Achieving food security is likely to involve trade-offs in terms of how land and products are used. For
847 example, utilizing human-edible products for other uses means they are not available as food.

848 Intensive crop and animal production can result in increased availability of food. However, intensive
849 production can also be associated with negative impacts on the environment and yields in the longer-
850 term. Many agricultural practices deplete soil nutrients more quickly than can be formed, undermining
851 the sustainability dimension of food security (see also [topic 13.5 Soil health](#)). Regenerative and
852 organic practices, such as rotating crops or planting at optimal times, are considered to have the
853 potential to contribute to greater soil health and productivity, and resilience of food production.

854 **Reporting on food security**

¹⁹ Food security has multiple dimensions: food availability, access, use, stability, and sustainability. An additional dimension of agency is understood as the capacity of individuals or groups to make decisions about the food they eat and how that food is produced [151].

855 If the organization has determined food security to be a material topic, this sub-section lists the
 856 disclosures identified as relevant for reporting on the topic by the agriculture, aquaculture, and fishing
 857 sectors.

STANDARD	DISCLOSURE	SECTOR STANDARD REF #
Management of the topic		
GRI 3: Material Topics 2021	<p data-bbox="448 488 999 517">Disclosure 3-3 Management of material topics</p> <p data-bbox="448 533 874 562"><i>Additional sector recommendations</i></p> <ul data-bbox="448 573 1177 801" style="list-style-type: none"> • Describe the effectiveness of actions and programs on food security at local, regional, national, or global levels. • Report partnerships which the organization is part of that address food security, including engagement with governments. • Describe policies or commitments to address food loss in the supply chain. 	
Additional sector disclosures		
Report the total weight of food loss in metric tons and the food loss percentage, by the organization’s main products or product category, and describe the methodology used for this calculation. ²⁰		

858 **References and resources**

859 The authoritative instruments and references used in developing this topic, as well as resources that
 860 may be helpful for reporting on food security by the agriculture, aquaculture, and fishing sectors are
 861 listed in the [Bibliography](#).

²⁰ Guidance on calculating the food loss percentage can be found in the [Food Loss and Waste Accounting and Reporting Standard](#) [158] and the [SDG 12.3.1: Global Food Loss Index](#) [157].

862 **Topic 13.10 Food safety**

863 **Food safety concerns the handling of food and feed products in a way that prevents food**
 864 **contamination and food-borne illness. This topic addresses an organization’s efforts to**
 865 **prevent contamination and ensure food safety.**

866 According to the World Health Organization (WHO), an estimated 600 million people worldwide fall ill
 867 after eating contaminated food each year, resulting in about 420,000 deaths annually [163]. Besides
 868 threatening public health and well-being, food safety can affect local communities, which in turn may
 869 lead to the loss of economic activity on local and global scales (see also [topic 13.12 Local](#)
 870 [communities](#)).

871 Environmental contamination is a key driver of food safety impacts. The main sources of
 872 contamination from agriculture, aquaculture, and fishing activities include the pollution of water, soil,
 873 or air used by crops or animals. Contamination can also be caused by the inadequate management of
 874 crops or animals during their growth, harvest, catch, or products’ primary processing, transportation,
 875 and storage.

876 Harmful bacteria, such as salmonella, listeriosis, or campylobacter, viruses and parasites can
 877 contaminate food and cause ill health in humans. Similarly, food contamination can result from
 878 antimicrobials and pesticides residues, heavy metals, and microplastics (see also [topic 13.6](#)
 879 [Pesticides use](#) and [13.11 Animal health and welfare](#)).

880 Globally, antimicrobials, such as chemical substances and antibiotics, are widely used in terrestrial
 881 and aquatic animal production. High volumes of antimicrobials can contribute to the development of
 882 antimicrobial-resistant bacteria, particularly in intensive animal production settings. The WHO
 883 identifies antimicrobial resistance as one of the biggest threats to global health and human
 884 development [162]. Addressing antimicrobial resistance requires adequate animal health and welfare
 885 standards, including the prudent use of antibiotics for animals.

886 Because food and feed products from one world region can supply another region, impacts on food
 887 safety can evolve from local into global issues, such as outbreaks of foodborne illnesses spread
 888 beyond country borders. To allow for recalls over food safety issues, products need to be traceable
 889 through the supply chain (see [topic 13.23 Supply chain traceability](#)).

890 **Reporting on food safety**

891 If the organization has determined food safety to be a material topic, this sub-section lists the
 892 disclosures identified as relevant for reporting on the topic by the agriculture, aquaculture, and fishing
 893 sectors.

STANDARD	DISCLOSURE	SECTOR STANDARD REF #
Management of the topic		
GRI 3: Material Topics 2021	Disclosure 3-3 Management of material topics	
Topic Standard disclosures		
<u>GRI 416: Customer Health and Safety 2016</u>	Disclosure 416-1 Assessment of the health and safety impacts of product and service categories	
	Disclosure 416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	
Additional sector disclosures		

Report the percentage of production volume ²¹ from sites certified to internationally recognized food safety standards, and list these standards. ²²	
Report the number of recalls issued for food safety reasons and the total volume of products recalled.	

894 **References and resources**

895 [GRI 416: Customer Health and Safety 2016](#) lists authoritative intergovernmental instruments and
896 additional references relevant to reporting on this topic.

897

898 The additional references used in developing this topic, as well as resources that may be helpful for
899 reporting on food safety by the agriculture, aquaculture, and fishing sectors are listed in the
900 [Bibliography](#).

This document does not represent an official position of the GSSB

²¹ Production volume refers to the total volume of products of the organization, including products sourced by the organization from suppliers.

²² This disclosure covers certification programs, assurance schemes, or verification schemes which provide a written assurance that a product is in conformity with certain requirements.

901 **Topic 13.11 Animal health and welfare**

902 **Animal health and welfare refers to an animal's physical and mental state in relation to the**
 903 **conditions in which it lives and dies. The 'Five Freedoms' of animal welfare are freedom from**
 904 **hunger and thirst; freedom from discomfort; freedom from pain, injury, and disease; freedom**
 905 **to express normal behavior; and freedom from fear and distress. This topic covers impacts on**
 906 **animal health and the five freedoms of animal welfare.**

907 Globally, over 60 billion terrestrial animals are reared each year, a figure set to double by 2050 due to
 908 increases in animal protein consumption. Aquaculture farms produce 52 million tons of aquatic
 909 animals, representing half of all seafood consumed by humans worldwide [171]. Animal health and
 910 welfare is crucial because it concerns productivity, the safety of animal-derived products, and the
 911 humane treatment of animals.

912 Animal health management focuses on controlling potential impacts on health and preventing
 913 disease. This can include the use of antibiotics, anti-inflammatory, and hormone treatments. Overuse
 914 or misuse of antibiotics can contribute to antimicrobial resistance. Undesired residues of chemical
 915 substances in animal products can negatively impacts food safety, creating public health risks (see
 916 [topic 13.10 Food safety](#)). Inadequate animal health and welfare practices can also increase the
 917 spread of zoonotic diseases, such as salmonellosis, swine flu, and bird flu, which can occur through
 918 the movement and trade of terrestrial and aquatic animals and animal products without proper
 919 biosecurity controls.

920 The conditions that animals are kept in can cause negative impacts on animal health and welfare. For
 921 example, terrestrial animals can be confined to small spaces, cages, or crates, preventing their
 922 movement and inhibiting normal behavior. Highly confined spaces can also lead animals to be left
 923 untreated for disease or injuries.

924 On-farm husbandry practices such as dehorning, hot-iron branding, castration, tail docking, and
 925 debeaking are associated with pain and distress. Similarly, slaughter practices can be a major source
 926 of suffering and fear. Therefore, many countries require pre-slaughter stunning to render an animal
 927 unconscious.

928 In aquaculture and fishing, commonly used slaughter methods include asphyxiation, carbon dioxide
 929 stunning, and ice chilling (see references [173] and [174] in the [Bibliography](#)). According to the World
 930 Organisation for Animal Health (OIE), these methods fail to meet the standards set out in the Aquatic
 931 Animal Health Code.

932 Water quality, stock density, and rearing environment in aquaculture operations have major impacts
 933 on aquatic organisms' health and welfare. Sea lice and diseases are among major health concerns for
 934 farmed fish and can reduce survival. Substances used to treat pests, such as lice, are usually
 935 administered via fish feed and water. When treatment is not managed properly, these substances can
 936 negatively impact non-target species, such as crustaceans, resulting in biodiversity loss (see [topic](#)
 937 [13.3 Biodiversity](#)).

938 Genetic modification performed on terrestrial and aquatic animals to increase growth and productivity
 939 may also be a source of negative impacts on animal health and welfare.

940 **Reporting on animal health and welfare**

941 If the organization has determined animal health and welfare to be a material topic, this sub-section
 942 lists the disclosures identified as relevant for reporting on the topic by the agriculture, aquaculture,
 943 and fishing sectors.

STANDARD	DISCLOSURE	SECTOR STANDARD REF #
Management of the topic		
GRI 3: Material Topics 2021	Disclosure 3-3 Management of material topics	

	<p><i>Additional sector recommendations</i></p> <ul style="list-style-type: none"> • Describe policies regarding processing of animal products, animal transportation, handling, housing and confinement, and slaughter, by species. • Describe the approach to animal health planning and involvement of veterinarians, including the approach to using anesthetic, antibiotic, anti-inflammatory, hormone, and growth-promotion treatments, by species. • Describe commitments for responsible and prudent use of antibiotics²³ (e.g., avoiding prophylactic use) and describe how compliance with these commitments is evaluated. • Describe the results of assessments and audits of animal health and welfare, by species. 	
<p>Additional sector disclosures</p>		
	<p>Report the percentage of production volume²⁴ from sites of the organization certified to third-party animal health and welfare standards, and list these standards.</p>	
	<p>The following additional sector disclosure is for organizations in the aquaculture sector:</p> <p>Report the survival percentage of farmed aquatic animals and the main causes of mortality.</p>	

944 **References and resources**

945 The authoritative instruments and references used in developing this topic, as well as resources that
 946 may be helpful for reporting on animal health and welfare by the agriculture, aquaculture, and fishing
 947 sectors are listed in the [Bibliography](#).

²³ Guidance on what constitutes responsible and prudent use for terrestrial animals can be found in Chapter 6.10 Responsible and prudent use of antimicrobial agents in veterinary medicine in the *Terrestrial Animal Health Code 2021* [168]. Guidance on what constitutes responsible and prudent use for aquatic animals can be found in Chapter 6.2 Principles for responsible and prudent use of antimicrobial agents in aquatic animals in the *Aquatic Animal Health Code 2021* [167].

²⁴ Production volume refers to the total volume of products of the organization, including products sourced by the organization from suppliers.

948 **Topic 13.12 Local communities**

949 **Local communities comprise individuals living or working in areas that are affected or that**
950 **could be affected by an organization's activities. An organization is expected to conduct**
951 **community engagement to understand the vulnerabilities of local communities and how they**
952 **may be affected by the organization's activities. This topic covers socioeconomic, cultural,**
953 **health, and human rights impacts on local communities.**

954 Agriculture, aquaculture, and fishing organizations can have positive impacts on local communities
955 through employment and other economic impacts, but their use of land and natural resources can
956 also create negative impacts on communities.

957 Local communities can experience economic and environmental impacts from the extensive use of
958 groundwater and surface water in agriculture operations. The depletion of water sources can create a
959 need for deepening wells and require more energy to pump water to the surface for irrigating crops
960 and domestic purposes (see also [topic 13.7 Water and effluents](#)).

961 Land use by organizations in the agriculture, aquaculture, and fishing sectors can restrict
962 communities' access to land and natural resources and, in some cases, lead to displacement. In the
963 case of displacement, communities may be resettled to other areas, which are not always equivalent
964 in soil quality, suitability for agriculture, access to services, or cultural and social significance.
965 Compensation, if provided, may not always be adequate to make up for the resulting impacts on
966 cultural, economic, or leisure activities (see [topic 13.13 Land and resource rights](#)).

967 Inadequate management or disposal of hazardous substances used in agriculture and aquaculture,
968 such as pesticides, can impact the environment, food safety, and health of communities living in
969 proximity to operations. Cases of acute pesticide poisoning (APP) account for significant mortality
970 worldwide, especially in developing countries [189] (see also [topic 13.6 Pesticides use](#)). Gases
971 released from manure and organic waste contribute to air pollution, and odors can also cause
972 disturbances to local communities (see also [topics 13.1 Emissions](#) and [13.8 Waste](#)).

973 Although agriculture, aquaculture, and fishing organizations are often major employers and income
974 providers in rural areas, many rural communities still suffer from poverty and food insecurity. Lack of
975 sufficient income and the negative impacts on land, water, and biodiversity can cause migration to
976 other more viable areas. This can cause labor shortages and socioeconomic disruption in these areas
977 (see also [topic 13.22 Economic inclusion](#)).

978 Vulnerable groups such as women, children, indigenous peoples, nomadic communities, and migrant
979 workers and their families can be disproportionately affected by agriculture, aquaculture, and fishing
980 operations. Such groups often lack influence and can be underrepresented in consultation and
981 decision-making processes, increasing the potential for negative impacts, including on their human
982 rights.

983 Engagement and consultation with local communities, including vulnerable groups, can contribute to
984 preventing negative impacts (see also [13.13 Land and resource rights](#)). Where groups do not have
985 the right to free, prior, and informed consent, they can be involved in participatory approaches to
986 understand the effects of operations on their lives, rights, and well-being. Organizations are also
987 expected to establish or participate in effective operational-level grievance mechanisms which enable
988 local communities to raise concerns and seek remedy.²⁵

²⁵ Grievance mechanisms that the organization has established or participated in are reported in Disclosure 2-25 Processes to remediate negative impacts in *GRI 2: General Disclosures 2021*. See Guidance to Disclosure 2-25 for more information on grievance mechanisms and expectations for organizations to provide for or cooperate in remediation.

989 **Reporting on local communities**

990 If the organization has determined local communities to be a material topic, this sub-section lists the
 991 disclosures identified as relevant for reporting on the topic by the agriculture, aquaculture, and fishing
 992 sectors.

STANDARD	DISCLOSURE	SECTOR STANDARD REF#
Management of the topic		
GRI 3: Material Topics 2021	Disclosure 3-3 Management of material topics	
Topic Standard disclosures		
GRI 413: Local Communities 2016	Disclosure 413-1 Operations with local community engagement, impact assessments, and development programs	
	Disclosure 413-2 Operations with significant actual and potential negative impacts on local communities	

993 **References and resources**

994 [GRI 413: Local Communities 2016](#) lists authoritative intergovernmental instruments and additional
 995 references relevant to reporting on this topic.

996 The additional authoritative instruments and references used in developing this topic, as well as
 997 resources that may be helpful for reporting on local communities by the agriculture, aquaculture, and
 998 fishing sectors are listed in the [Bibliography](#).

999 **Topic 13.13 Land and resource rights**

I000 **Land and resource rights encompass the rights to use, manage and control land, fisheries,**
I001 **forests, and other natural resources. An organization's impacts on the availability and**
I002 **accessibility of these can affect local communities and other users. This topic covers impacts**
I003 **on human rights and tenure rights that result from an organization's use of land and natural**
I004 **resources.**

I005 Acquiring legal rights to land and natural resources is often a complex process. In addition, forms of
I006 land and resource tenure vary and can include public, private, communal, collective, indigenous, and
I007 customary tenure. Lack of recognition of customary claim to lands, fisheries, forests, and other natural
I008 resources – whether or not they are formally titled or legally registered – is a common cause of land
I009 and natural resource conflicts and negative impacts on human rights. Human rights, including
I010 people's civil, political, economic, social, and cultural rights, can all be affected by the sectors' use of
I011 land, fisheries, and forests [193].

I012 Agriculture, aquaculture, and fishing organizations can be granted land and fishing concessions over
I013 territories and fishing resources. Informal tenure in some countries reaches from 80 to 90% of total
I014 land, and those living on this land might lack legal protection [204]. Organizations may infringe on
I015 land and resource rights if they fail to undertake prior consultation and an assessment of the impacts
I016 with rightsholders. Fencing, landscape engineering, roads, and drainage works that block or divert
I017 routes may also restrict people's rights.

I018 Rightsholders whose rights are most commonly affected by resource rights conflicts include farmers
I019 and fishers and their organizations, forest users, pastoralists, indigenous peoples, and local
I020 communities (see also [topic 13.14 Rights of indigenous peoples](#) and [topic 13.12 Local communities](#)).

I021 **Box 2. Human rights and land rights defenders**

I022 Conflict situations can expose those who defend the rights related to land and natural resources to
I023 risks. More and more land rights defenders, smallholder farmers, indigenous community leaders,
I024 media, and civil society representatives active on these issues have become victims of violence and
I025 persecution. United Nations bodies, including special rapporteurs²⁶ on human rights defenders, the
I026 right to food, and indigenous peoples, have reported physical attacks and reprisals against defenders
I027 who oppose land appropriation and denounce forced evictions, environmental pollution and other
I028 violations [200].

I029 Fish captured in the wild is usually a common property resource. Therefore, fishing communities are
I030 important stakeholders concerned with the use of fishery resources and the entire ecosystem. This
I031 includes access to ports, waters, high seas, and catch quotas.

I032 Fishery resources rights can be granted to organizations without due consideration for local fishers.
I033 Commercial fishing vessels accessing fishing zones reserved for or used by small-scale fishers and
I034 fishing in coastal areas can change fishery resources by disrupting fish breeding habitats.

I035 Agriculture, aquaculture, and fishing organizations are expected to identify legitimate rightsholders
I036 through their own assessments and ensure independent verification of assessment results.
I037 Organizations can contribute to securing land tenure and access to natural resources for rightsholders
I038 by requiring their suppliers to respect such rights.

I039 **Reporting on land and resource rights**

²⁶ Special rapporteurs are mandate-holders for special procedures of the United Nations Human Rights Council. They are independent human rights experts with mandates to report and advise on human rights from a thematic or country-specific perspective. See reference [199] in the Bibliography.

I040 If the organization has determined land and resource rights to be a material topic, this sub-section
 I041 lists the disclosures identified as relevant for reporting on the topic by the agriculture, aquaculture,
 I042 and fishing sectors.

STANDARD	DISCLOSURE	SECTOR STANDARD REF #
Management of the topic		
GRI 3: Material Topics 2021	<p>Disclosure 3-3 Management of material topics</p> <p><i>Additional sector recommendations</i></p> <ul style="list-style-type: none"> • Describe commitments to respect land and natural resource rights (including customary, collective, and informal tenure rights)²⁷ and report the extent to which the commitments apply to the organization’s activities and to its <u>business relationships</u>. • Describe how the commitments to respect land and natural resource rights are implemented with <u>suppliers</u>. • Describe the approach to protecting human rights and land rights defenders from reprisals (i.e., non-retaliation for raising complaints or concerns). 	
Additional sector disclosures		
	List the locations of operations, where land and natural resource rights (including customary, collective, and informal tenure rights) may be affected by the organization’s operations.	
	Report the number, size in hectares, and location of operations where violations of land and natural resource rights (including customary, collective, and informal tenure rights) occurred and the groups of rightsholders affected.	

I043 **References and resources**

I044 The authoritative instruments and references used in developing this topic, as well as resources that
 I045 may be helpful for reporting on land and resource rights by the agriculture, aquaculture, and fishing
 I046 sectors are listed in the [Bibliography](#).

²⁷ The [Voluntary guidelines on the responsible governance of tenure of land, fisheries and forests in the context of national food security](#) outlines guiding principles, rights and responsibilities for responsible tenure governance. In article 3.2, it specifies that ‘non-state actors including business enterprises have a responsibility to respect human rights and legitimate tenure rights’ and outlines the associated expectations [193].

I047 **Topic 13.14 Rights of indigenous peoples**

I048 **Indigenous peoples are at higher risk of experiencing negative impacts more severely as a**
I049 **result of an organization’s activities. Indigenous peoples have both collective and individual**
I050 **rights, as set out in the United Nations Declaration on the Rights of Indigenous Peoples and**
I051 **other authoritative international human rights instruments. This topic covers impacts on the**
I052 **rights of indigenous peoples.**

I053 Indigenous peoples find deep cultural and spiritual value in their lands and territories, and often rely
I054 on natural resources for subsistence. These natural resources and cultural sites are located on land
I055 that indigenous communities customarily own, occupy, or use. Customary rights – a cornerstone of
I056 the rights of indigenous peoples under international law – are frequently not recognized in practice,
I057 which can lead to these rights being violated (see [topic 13.13. Land and resource rights](#)).

I058 The agriculture sector is a significant driver of land acquisitions to expand food production. Large-
I059 scale land acquisitions, including through foreign investment, can be facilitated to increase the size of
I060 farms and plantations and generate revenues through export. This often happens in regions where
I061 indigenous peoples have long derived their livelihoods from what ecosystems offer.

I062 The use of natural resources by the agriculture, aquaculture, and fishing sectors can have acute
I063 impacts on indigenous peoples. These impacts can threaten traditional hunting, fishing, and farming
I064 activities. Indigenous knowledge and culture may also be lost when disrupted.

I065 Indigenous farming practices are intertwined with indigenous cultures and are deeply linked to
I066 particular places. Natural ecosystem conversion and water use for agricultural and aquacultural
I067 activities can affect traditional farming. The environmental impacts from waste can lead to pollution
I068 and contamination of indigenous land and natural resources.

I069 Indigenous fishing communities rely on fish as their main food source, which is a central part of their
I070 traditional practices so their livelihoods, food security, and culture can be undermined due to the
I071 negative impacts on fishery resources. The degradation of local aquatic and coastal ecosystems,
I072 overfishing, and stock depletion, can reduce the availability and accessibility of these fishery
I073 resources. At the same time, the increased competition with commercial fishing operations or the
I074 introduction of non-local species can also negatively impact fishery resources.

I075 Because of the close relationship with the environment and dependence on natural resources,
I076 indigenous peoples are particularly affected by climate change. Climate change can further
I077 exacerbate the vulnerability of indigenous communities due to impacts on the availability of traditional
I078 food sources and decreased crop yields, jeopardizing traditional lifestyles (see also [topic 2.2 Climate](#)
I079 [adaptation and resilience](#) and [topic 2.3 Biodiversity](#)).

I080 The fundamental rights to self-determination and non-discrimination mandate respect for indigenous
I081 peoples’ collective and individual rights. Before initiating development or other activities that could
I082 have impacts on lands or resources that indigenous peoples use or own, organizations are expected
I083 to seek free, prior, and informed consent (FPIC). The relocation of indigenous peoples cannot occur
I084 without FPIC, and an agreement on just and fair compensation must be in place before relocation
I085 occurs and, where possible, with the option of return [210].

I086 When disputes take place, indigenous communities often lack legal and technical support, as well as
I087 access to remedy. This can lead to unfair compensation for lost access to resources, income
I088 insecurity, marginalization of indigenous communities, discrimination, displacement, loss of livelihood,
I089 and other negative impacts on human rights. In addition, indigenous women may be more severely
I090 exposed to negative impacts because of gender discrimination (see [topic 13.15 Non-discrimination](#)
I091 [and equal opportunity](#)).

I092 **Reporting on rights of indigenous peoples**

I093 If the organization has determined rights of indigenous peoples to be a material topic, this sub-section
I094 lists the disclosures identified as relevant for reporting on the topic by the agriculture, aquaculture,
I095 and fishing sectors.

STANDARD	DISCLOSURE	SECTOR STANDARD REF #
Management of the topic		
GRI 3: Material Topics 2021	<p>Disclosure 3-3 Management of material topics</p> <p><i>Additional sector recommendations</i></p> <ul style="list-style-type: none"> Describe the approach to engaging with indigenous peoples, including: <ul style="list-style-type: none"> how the organization seeks to ensure meaningful engagement; how the organization seeks to ensure indigenous women can participate safely and equitably. 	
Topic Standards disclosures		
GRI 411: Rights of Indigenous Peoples 2016	<p>Disclosure 411-1 Incidents of violations involving rights of indigenous peoples</p> <p><i>Additional sector recommendations</i></p> <ul style="list-style-type: none"> Describe the identified incidents of violations involving the rights of indigenous peoples. 	
Additional sector disclosures		
List the locations of operations where indigenous peoples are present or affected by activities of the organization.		
<p>Report if the organization has been involved in a process of seeking free, prior, and informed consent (FPIC)²⁸ from indigenous peoples for any of the organization's activities, including, in each case:</p> <ul style="list-style-type: none"> whether the process has been mutually accepted by the organization and the affected indigenous peoples; how the organization ensured that the constituent elements of FPIC have been implemented as part of the process;²⁹ whether an agreement has been reached and, if so, whether the agreement is publicly available. 		

1096 **References and resources**

1097 [GRI 411: Rights of Indigenous Peoples 2016](#) lists authoritative intergovernmental instruments and
1098 additional references relevant to reporting on this topic.

1099 The additional intergovernmental instruments and references used in developing this topic, as well as
1100 resources that may be helpful for reporting on the rights of indigenous peoples by the agriculture,
1101 aquaculture, and fishing sectors are listed in the [Bibliography](#).

²⁸ The normative framework for free, prior and informed consent consists of a series of international legal instruments including the United Nations Declaration on the Rights of Indigenous Peoples [210], the International Labour Organization Convention 169 (ILO 169) [208], and the Convention on Biological Diversity (CBD) [209].

²⁹ Free, prior and informed consent cannot be achieved if one of the constituent elements is missing [210]. The constituent elements are further described in 'Free, prior and informed consent: a human rights-based approach - Study of the Expert Mechanism on the Rights of Indigenous Peoples' [224].

I 102 **Topic 13.15 Non-discrimination and equal opportunity**

I 103 **Freedom from discrimination is a human right and a fundamental right at work. Discrimination**
I 104 **can impose unequal burdens on individuals or deny fair opportunities on the basis of**
I 105 **individual merit. This topic covers impacts from discrimination and an organization's practices**
I 106 **related to equal opportunity.**

I 107 Many agriculture, aquaculture, and fishing sector workers are self-employed or informally employed.
I 108 Casual and seasonal employment is also widespread. Non-standard forms of employment common in
I 109 the sectors can be a factor increasing the likelihood of discriminatory treatment of workers. Workers
I 110 can often face discrimination in terms of labor protection and might not enjoy equal rights or treatment
I 111 for work of equal value, including lower job security, wages, benefits, and paid leave.

I 112 The agriculture, aquaculture, and fishing sectors commonly use migrant labor, including temporary
I 113 migrant labor. Because of their migrant status, migrant workers may be subject to discriminatory
I 114 treatment regarding remuneration, access to occupational health services, and employment
I 115 protection. In fishing, vessel crews are typically subject to discriminatory pay based on nationality.
I 116 Undocumented migrant workers can be even more vulnerable to discrimination and labor abuses (see
I 117 also [topic 13.16 Forced or compulsory labor](#) and [topic 13.20 Employment practices](#)).

I 118 People living off traditional farming and fishing, including smallholder farmers, landless workers, and
I 119 communities, can experience discriminatory treatment. For example, they may face inequality in
I 120 accessing land or employment, thus lacking opportunities to provide for themselves. This can
I 121 exacerbate the likelihood of negative impacts on their human rights and render them more vulnerable
I 122 to labor exploitation (see [topic 13.12 Local communities](#)).

I 123 Characteristics among indigenous workers that may deviate from social practices of the majority,
I 124 including languages and clothing, can also lead to employment discrimination in the sectors.
I 125 Indigenous women can face discrimination on the grounds of both ethnicity and gender.

I 126 Women working in agriculture, aquaculture, and fishing often experience gender discrimination
I 127 through poorer working conditions, unequal opportunities, and lower wages than those of men.

I 128 Women are more frequently involved in lower-paid or less secure forms of employment. In fishing,
I 129 women play crucial roles throughout the value chain, working for commercial and small-scale
I 130 fisheries, however, they are typically less involved in offshore and long-distance fishing, which usually
I 131 pays more.

I 132 Women are also often less involved in cooperatives and farmer organizations, limiting their access to
I 133 processing facilities, improved technologies, and agricultural inputs. The result can be lower earnings
I 134 due to smaller yields despite working long hours.

I 135 Discrimination against women in the agriculture, aquaculture, and fishing sectors can also include
I 136 gender-based violence and harassment. It is less likely that women performing seasonal work or
I 137 informal work report sexual violence and other abuses they experience, and women in such work
I 138 arrangements may have less possibility to seek remedy.

I 139 **Box 3. Women's rights**

I 140 The majority of economically active women in low-income countries work in agriculture [229]. In many
I 141 countries, women do not have the same rights as men, or even if they do legally, the rights may go
I 142 unrecognized. These include rights to buy, sell, or inherit land; to open a savings account or borrow
I 143 money; to sign a contract; and to sell their produce.

I 144 Traditional gender roles can restrict women's freedom of movement and prevent them from bringing
I 145 their produce to market or leaving their villages without the permission of male relatives. Social
I 146 conventions and gender norms often regard women's work activities and output as part of their
I 147 traditional caretaking role rather than participation in the market economy, thus underestimating their
I 148 economic contribution. Women in these situations do not enjoy the right to the same decent standard
I 149 of living as men.

I 150 Women can also be denied their rights when it comes to maternity protection. Benefits such as
I 151 maternity leave and childcare allowance might be inaccessible for women in the agriculture,
I 152 aquaculture, and fishing sectors.

1153 **Reporting on non-discrimination and equal opportunity**

1154 If the organization has determined non-discrimination and equal opportunity to be a material topic, this
 1155 sub-section lists the disclosures identified as relevant for reporting on the topic by the agriculture,
 1156 aquaculture, and fishing sectors.

STANDARD	DISCLOSURE	SECTOR STANDARD REF #
Management of the topic		
GRI 3: Material Topics 2021	Disclosure 3-3 Management of material topics	
Topic Standard disclosures		
GRI 405: Diversity and Equal Opportunity 2016	Disclosure 405-1 Diversity of governance bodies and employees	
	Disclosure 405-2 Ratio of basic salary and remuneration of women to men <i>Additional sector recommendations</i> <ul style="list-style-type: none"> Report the ratio of the <u>basic salary</u> and <u>remuneration</u> of women to men for workers who are not employees and whose work is controlled by the organization. 	
GRI 406: Non-discrimination 2016	Disclosure 406-1 Incidents of discrimination and corrective actions taken	
Additional sector disclosures		
Describe any differences in employment terms and approach to compensation based on workers' nationality or migrant status, by location of operations.		

1157 **References and resources**

1158 [GRI 405: Diversity and Equal Opportunity 2016](#) and [GRI 406: Non-discrimination 2016](#) list
 1159 authoritative intergovernmental instruments relevant to reporting on this topic.

1160 The additional authoritative instruments and references used in developing this topic, as well as
 1161 resources that may be helpful for reporting on non-discrimination and equal opportunity by the
 1162 agriculture, aquaculture, and fishing sectors are listed in the [Bibliography](#).

1163 **Topic 13.16 Forced or compulsory labor**

1164 **Forced or compulsory labor is work or service which is exacted from any person under the**
 1165 **menace of penalty and for which a person has not offered themselves voluntarily. Freedom**
 1166 **from forced labor is a human right and a fundamental right at work.**

1167 The International Labour Organization (ILO) has identified the agriculture, aquaculture, and fishing
 1168 sectors as highly susceptible to forced or compulsory labor. Workers face non-payment or late
 1169 payment of wages, restrictions on freedom of movement, violence, threats, human trafficking, and
 1170 other forms of modern slavery. Instances of forced labor have been documented in the supply chains
 1171 of most products in the sectors (see references [251], [256] and [257]).

1172 Agriculture, aquaculture, and fishing workers are unlikely to be unionized, often earn less, and have
 1173 fewer skills than workers in other sectors. The sectors are labor-intensive and have a high demand for
 1174 workers, often filled by employment agencies. National labor laws do not always provide labor
 1175 protection to smallholder farmers, small-scale fishers, or seasonal and casual workers (see [topic 2.20](#)
 1176 [Employment practices](#)).

1177 Work in these the agriculture, aquaculture, and fishing is often undertaken in remote or low-income
 1178 rural areas. This can exacerbate the likelihood of abusive labor practices and cause workers to
 1179 become indebted to their employers due to fees owed for job access or accommodation. In some
 1180 cases, employers may use debt bondage to prevent workers from leaving.

1181 Migrant workers in the sectors are more likely to work under conditions of coercion. They may not
 1182 have valid work permits or be unaware of their legal status and even have their passports or
 1183 identification documents taken away. Undocumented migrant workers can also be forced or coerced
 1184 into illegal farming or fishing operations, carrying higher risks for their health and safety.

1185 Migrant fishing workers are a particularly vulnerable group. They often come from lower-income
 1186 countries and can be trafficked or unaware of having crossed multiple borders, putting their human
 1187 rights and even their lives at risk.

1188 In fishing operations, the continued pressure to deliver higher product volumes while keeping labor
 1189 costs low can contribute to instances of abusive labor practices. Eliminating forced labor aboard
 1190 fishing vessels and enforcing workers' rights can require additional effort because fishing vessels
 1191 regularly operate offshore or under the flag of a country far removed from the fishing location.
 1192 International standards largely rely on flag states to enforce labor laws on board fishing vessels.

1193 Identifying and preventing forced labor also requires understanding supply chains, where traceability
 1194 plays a key role (see [topic 13.23 Supply chain traceability](#)).

1195 **Reporting on forced or compulsory labor**

1196 If the organization has determined forced or compulsory labor to be a material topic, this sub-section
 1197 lists the disclosures identified as relevant for reporting on the topic by the agriculture, aquaculture,
 1198 and fishing sectors.

STANDARD	DISCLOSURE	SECTOR STANDARD REF #
Management of the topic		
GRI 3: Material Topics 2021	Disclosure 3-3 Management of material topics	
Topic Standards disclosures		
GRI 409: Forced or Compulsory Labor 2016	Disclosure 409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	

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I 199 **References and resources**

I 200 [GRI 409: Forced or Compulsory Labor 2016](#) lists authoritative intergovernmental instruments relevant
I 201 to reporting on this topic.

I 202 The additional intergovernmental instruments and references used in developing this topic, as well as
I 203 resources that may be helpful for reporting on forced or compulsory labor by the agriculture,
I 204 aquaculture, and fishing sectors are listed in the [Bibliography](#).

This document does not represent an official position of the GSSB

I205 **Topic 13.17 Child labor**

I206 **Child labor is defined as work that deprives children of their childhood, their potential, and**
I207 **their dignity, and that is harmful to their development, including by interfering with their**
I208 **education. It is a violation of human rights and can lead to lifelong negative impacts. Abolition**
I209 **of child labor is a fundamental principle and right at work.**

I210 The agriculture, aquaculture, and fishing sectors have the highest share of child labor compared to all
I211 other sectors and instances of child labor have been documented in the supply chains of many
I212 products in the sectors (see references [266] and [272]).³⁰

I213 More than 70% of all children in child labor are engaged in agriculture, aquaculture, and fishing. This
I214 is even higher among those aged five to 11 [266]. In some contexts, children's participation in non-
I215 hazardous agriculture, aquaculture, and fishing work can contribute to a child's skill-building and
I216 personal development. However, work defined as child labor is not associated with positive impacts
I217 and is considered inappropriate for a child based on hazards, hours, conditions of work, and
I218 interference with schooling. In some parts of the world, child labor may be socially acceptable,
I219 contributing to the propagation of the practice.

I220 Children working in agriculture, aquaculture, and fishing may perform tasks suited only for adult
I221 workers. These tasks are likely to have negative impacts on their health or development. For
I222 example, children can be tasked with applying pesticides in the agriculture sector. Exposure to
I223 pesticides can be particularly hazardous for children, as their bodies are more vulnerable to toxins,
I224 leading to increased risks of childhood cancers and impaired cognitive processes.

I225 Children are often designated to take care of animals. Because animal production activities are
I226 intensive, involving cleaning animals and their housing, collecting water, feeding, and milking, children
I227 can drop out of schooling, unable to combine it with this type of work.

I228 In fishing, children work throughout the supply chain, performing tasks such as catching, processing,
I229 and selling fish and other aquatic products. Fishing communities may have few sources of income,
I230 and child labor is frequently used to supplement income or in subsistence activities. Long hours and
I231 nightshifts in these sectors can also subject children to hazardous working conditions (see [topic 13.19](#)
I232 [Occupational Health and Safety](#)).

I233 Large parts of the agriculture, aquaculture, and fishing sectors involve informal work, increasing the
I234 likelihood of child labor. Seasonal work presents additional risks and raises the likelihood of school
I235 absence. Missing school for work negatively affects children's right to education.

I236 Less than one-third of children undertaking work receive payment. In many cases this is because
I237 children are working in family-run operations. Children also typically earn less than adults and, in
I238 some cases, they are also more productive, which employers may find advantageous.

I239 The International Labour Organization (ILO) identifies forced child labor and hazardous child labor as
I240 the worst forms of child labor [259]. A quarter of children in child labor fall victim to forced labor (see

³⁰ The United States Department of Labor has documented cases of child labor in the production of bananas in Belize, Brazil, Ecuador, Nicaragua, and the Philippines; beans in Mexico and Paraguay; citrus fruit in Belize and Turkey; cocoa in Brazil, Cameroon, Ghana, Guinea, and Sierra Leone; coffee in Brazil, Colombia, Costa Rica, Dominican Republic, El Salvador, Guatemala, Guinea, Honduras, Kenya, Mexico, Nicaragua, Panama, Sierra Leone, Tanzania, Uganda, and Vietnam; and rice in Brazil, Dominican Republic, Kenya, the Philippines, Uganda, and Vietnam. They have also documented cases of child labor in the production of beef in Brazil, and cattle in Chad, Costa Rica, El Salvador, Ethiopia, Lesotho, Mauritania, Namibia, Uganda, and Zambia. Child labor in aquaculture has been documented in cases involving fish in Brazil, Cambodia, Kenya, Paraguay, Peru, Philippines, Uganda, Vietnam, and Yemen; shellfish in El Salvador and Nicaragua; and shrimp in Bangladesh and Cambodia (See reference [272] in the Bibliography).

I241 [topic 2.16 Forced or compulsory labor](#)). This can happen when, for example, labor brokers recruit and
 I242 force children to travel far from home. In cases of debt bondage to an employer, parents might have
 I243 their children work alongside them.

I244 Young workers are also recognized as a vulnerable group under child labor standards and are subject
 I245 to protection from hazardous work, which they may be exposed to in the sectors.

I246 **Box 4. Young workers**

I247 Young workers above the applicable minimum working age and younger than 18 years are subject to
 I248 specific protections regarding the types of work they can perform. Young persons are still in cognitive
 I249 and physical development and therefore considered more vulnerable to negative impacts at work than
 I250 adults.

I251 According to the ILO, the work performed by young workers needs to be consistent with their physical
 I252 and mental development. Young workers in agriculture, aquaculture, and fishing may be exposed to
 I253 hazardous working conditions, occupational injuries, and disease. Restrictions also apply to work
 I254 hours to reduce their vulnerability.

I255 **Reporting on child labor**

I256 If the organization has determined child labor to be a material topic, this sub-section lists the
 I257 disclosures identified as relevant for reporting on the topic by the agriculture, aquaculture, and fishing
 I258 sectors.

STANDARD	DISCLOSURE	SECTOR STANDARD REF#
Management of the topic		
GRI 3: Material Topics 2021	Disclosure 3-3 Management of material topics	
Topic Standards disclosures		
GRI 408: Child Labor 2016	Disclosure 408-1 Operations and suppliers at significant risk for incidents of child labor	

I259 **References and resources**

I260 [GRI 408: Child Labor 2016](#) lists authoritative intergovernmental instruments and additional references
 I261 relevant to reporting on this topic.

I262 The additional intergovernmental instruments and references used in developing this topic, as well as
 I263 resources that may be helpful for reporting on child labor by the agriculture, aquaculture, and fishing
 I264 sectors are listed in the [Bibliography](#).

I265 **Topic 13.18 Freedom of association and collective bargaining**

I266 **Freedom of association and collective bargaining are human rights and fundamental rights at**
 I267 **work. They include the rights of employers and workers to form, join, and run their own**
 I268 **organizations without prior authorization or interference, and to collectively negotiate working**
 I269 **conditions and terms of employment. This topic covers an organization’s approach and**
 I270 **impacts related to freedom of association and collective bargaining.**

I271 The rights to freedom of association and collective bargaining of many workers in the agriculture,
 I272 aquaculture, and fishing sectors remain at risk. Workers are still denied their rights to organize and
 I273 bargain collectively in many countries, preventing them from effectively protecting their interests.

I274 Low-income workers, workers in informal employment, migrant, seasonal, and casual workers face
 I275 barriers to exercising the right to freedom of association and collective bargaining. This is amplified by
 I276 the asymmetric balance of power between employers and workers. Lack of access to freedom of
 I277 association and collective bargaining can exacerbate impacts on workers who already face increased
 I278 work-related vulnerabilities and isolation (see [topic 13.15 Non-discrimination and equal opportunity](#)).

I279 While it is more common for workers in large commercial agriculture, aquaculture, and fishing
 I280 operations to be represented by trade unions and covered by collective bargaining agreements, only
 I281 a small percentage are organized. Organizations preventing unionization of workers in the sectors is a
 I282 recurring issue. Trade unions’ members have also experienced intimidation and violence (see
 I283 references [\[281\]](#), [\[286\]](#) and [\[287\]](#)).

I284 Seasonal workers might find it hard to join unions due to their short-term employment. Trade unions
 I285 have reported restrictions on temporary workers or workers employed by suppliers to access the
 I286 same rights as other employees effectively. In some cases, organizations purposely hire workers on
 I287 short-term contracts or outsource jobs so that workers are not able to join trade unions. Migrant
 I288 workers can be more vulnerable in this regard, as they can be explicitly banned from joining national
 I289 unions of countries where they work.

I290 According to the International Labour Organization (ILO), all workers – including self-employed
 I291 persons, smallholder farmers, small-scale fishers, and those working in the informal economy –
 I292 should enjoy the right to freedom of association and collective bargaining.

I293 **Reporting on freedom of association and collective bargaining**

I294 If the organization has determined freedom of association and collective bargaining to be a material
 I295 topic, this section lists the disclosures identified as relevant for reporting on the topic by the
 I296 agriculture, aquaculture, and fishing sectors.

STANDARD	DISCLOSURE	SECTOR STANDARD REF#
Management of the topic		
GRI 3: Material Topics 2021	Disclosure 3-3 Management of material topics	
Topic Standards disclosures		
GRI 407: Freedom of Association and Collective Bargaining 2016	Disclosure 407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	

I297

I 298 **References and resources**

I 299 [GRI 407: Freedom of Association and Collective Bargaining 2016](#) lists authoritative intergovernmental
I 300 instruments relevant to reporting on this topic.

I 301 The additional intergovernmental instruments and references used in developing this topic, as well as
I 302 resources that may be helpful for reporting on freedom of association and collective bargaining by the
I 303 agriculture, aquaculture, and fishing sectors are listed in the [Bibliography](#).

This document does not represent an official position of the GSSB

I304 **Topic 13.19 Occupational health and safety**

I305 **Healthy and safe work conditions are recognized as a human right. Occupational health and**
I306 **safety involves the prevention of physical and mental harm to workers and promotion of**
I307 **workers' health. This topic covers impacts related to workers' health and safety.**

I308 Agriculture, aquaculture, and fishing are listed among the most hazardous sectors, with high numbers
I309 of work-related injuries and ill health each year [304, 309]. Work-related hazards associated with
I310 agriculture, aquaculture, and fishing include:

- I311 - handling dangerous machinery, tools, vessels, and vehicles;
- I312 - exposure to excessive noise and vibration, causing hearing and other sensory problems;
- I313 - slips, trips, falls from heights, falls overboard, and drowning;
- working with animals considerably heavier than the worker, lifting heavy weights, and other work giving rise to musculoskeletal disorders;
- I314 - working near people or animals, increasing the risk of exposure to infectious diseases;
- I315 - attacks by wild animals;
- I316 - exposure to dust and potentially harmful organic substances and chemicals;
- I317 - exposure to extreme temperatures and severe weather.

I318
I319 Because workers in agriculture, aquaculture, and fishing sectors often live where they work,
I320 occupational health and safety impacts can also be associated with workers' living conditions.
I321 Adequate working and living conditions provide access to potable drinking water, quantity and quality
I322 of food, hygiene, sanitation, and appropriate accommodation. Workers are entitled to safe, hygienic,
I323 and socially acceptable access to sanitation, a lack thereof can increase the risk of contracting
I324 infectious diseases.

I325 Workers may work long hours and many consecutive days in the agriculture sector, especially when
I326 harvesting crops. They can be exposed to pesticides and other chemical substances used. Children
I327 living with workers on farms and plantations can also be exposed to hazardous substances (see also
I328 [topic 13.17 Child labor](#) and [topic 13.6 Pesticides use](#)).

I329 Fishing is associated with many risks, such as ill health, work-related injuries, and death. Fishing far
I330 offshore is considered one of the most dangerous occupations. Vessel disasters and falls overboard
I331 pose the greatest safety risks and are the sector's leading causes of fatalities. Vessel safety risks are
I332 linked to weather, lack of weather warning systems, power loss, engine failure, or inadequate
I333 maintenance levels. At-sea crew transfers between fishing vessels and support vessels can pose
I334 additional safety risks, especially in rough seas.

I335 Most fishing vessels fall outside of size parameters regulated by international maritime safety
I336 standards. Small-scale fishers operate millions of fishing vessels that vary in degree of sophistication.
I337 Frequently, these vessels prove unsuitable for the conditions in which they may be used, such as
I338 carrying considerable amounts of fish or sailing far offshore.

I339 Vessel safety standards address risks related to general safety, such as fire safety, lighting,
I340 ventilation, personal safety, vessel stability, and survival at sea. Vessel safety training serves to
I341 prevent vessel disasters and ensure compliance with the safety standards. Insurance schemes can
I342 further provide income security for fishers and, in case of death or injury, to their families.

I343 Primary fish processing, such as catching, sorting, and storing fish, often requires handling dangerous
I344 tools, such as knives and hooks. When fish are manually beheaded, gutted, skinned, or filleted, it is
I345 common for workers to experience cuts or severe lacerations. Fish and other aquatic animals' bites,
I346 stings, and tail kicks can also lead to injuries. In the case of ill health or injury offshore, professional
I347 medical care or even an urgent medical evacuation might be unavailable.

I348 Fishing can involve long hours at sea, far offshore. The daily and weekly rest requirements
I349 determined by crewing levels can also affect fishing crews' health and safety. Because workers can
I350 reside aboard fishing vessels for long periods, poor living conditions can also disrupt their rest
I351 periods. Fishers may also experience difficulty taking shore leave or getting off their vessels at foreign
I352 ports.

I353 Fishers may be abandoned by vessel owners without the prospect of payment or repatriation (see
 I354 [topic 13.20 Employment practices](#)). There have been documented cases showing some
 I355 abandonment lasting for many months. Abandonment can have health and safety impacts, including
 I356 lack of medical care and regular food provision and harm to mental health caused by keeping people
 I357 in a state of high uncertainty.

I358 Due to a lack of safety norms enforcement and inspection, illegal fishing operations and operations in
 I359 contested waters can negatively impact the health and safety of workers. Addressing illegal,
 I360 unreported, and unregulated (IUU) fishing in [supply chains](#) can help eliminate factors leading to
 I361 compromised health and safety standards (see also [topic 13.23 Supply chain traceability](#)).

I362 The often isolated and transboundary movement of vessels means consistent access for labor
 I363 inspection, and occupational health and safety policy enforcement remains difficult.

I364 **Reporting on occupational health and safety**

I365 If the organization has determined occupational health and safety to be a [material topic](#), this sub-
 I366 section lists the disclosures identified as relevant for reporting on the topic by the agriculture,
 I367 aquaculture, and fishing sectors.

STANDARD	DISCLOSURE	SECTOR STANDARD REF#
Management of the topic		
GRI 3: Material Topics 2021	Disclosure 3-3 Management of material topics <i>Additional sector recommendations</i> The following additional sector recommendation is for organizations in the fishing sector: <ul style="list-style-type: none"> Describe policies on maximum working hours and minimum hours of rest for workers on fishing vessels and the approach to limiting worker fatigue.³¹ 	
Topic Standard disclosures		
GRI 403: Occupational Health and Safety 2018	Disclosure 403-1 Occupational health and safety management system	
	Disclosure 403-2 Hazard identification, risk assessment, and incident investigation	
	Disclosure 403-3 Occupational health services <i>Additional sector recommendations</i> The following additional sector recommendation is for organizations in the fishing sector: <ul style="list-style-type: none"> Describe any occupational health services' functions that specifically address the occupational health and safety risks for workers aboard fishing vessels, including 	

³¹ The minimum hours of rest are set out in the International Labour Organization (ILO) Convention 188, 'Work in Fishing Convention' [388].

	workers operating in high seas, and explain how the organization facilitates workers' access to these services.	
	Disclosure 403-4 Worker participation, consultation, and communication on occupational health and safety	
	Disclosure 403-5 Worker training on occupational health and safety	
	Disclosure 403-6 Promotion of worker health	
	Disclosure 403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	
	Disclosure 403-8 Workers covered by an occupational health and safety management system	
	Disclosure 403-9 Work-related injuries	
	Disclosure 403-10 Work-related ill health	

I 368 **References and resources**

I 369 [GRI 403: Occupational Health and Safety 2018](#) lists authoritative intergovernmental instruments and
I 370 additional references relevant to reporting on this topic.

I 371 The additional authoritative instruments and references used in developing this topic, as well as
I 372 resources that may be helpful for reporting on occupational health and safety by the agriculture,
I 373 aquaculture, and fishing sectors are listed in the [Bibliography](#).

1374 **Topic 13.20 Employment practices**

1375 **Employment practices refer to an organization’s approach to job creation, terms of**
1376 **employment and working conditions for its workers. This topic also covers the employment**
1377 **and working conditions in an organization’s supply chain.**

1378 An employment relationship is a legal relationship between a worker and an organization that confers
1379 rights and obligations to both parties. Informal employment is widespread in the agriculture,
1380 aquaculture, and fishing sectors, with work performed not being registered. Globally, 94% of workers
1381 in the agricultural sector are in informal employment [336].

1382 Informal workers do not have a secure employment contract and may be left without legal protection
1383 and employment benefits; their working time and other terms of employment are not clearly defined.
1384 Informal work also frequently goes undeclared, violating labor law and undermining tax collection.

1385 Where a formal employment relationship exists, a lack of transparency can still surround daily hours,
1386 pay rates, and working conditions. For example, workers can face unjustified or nontransparent
1387 deductions from their pay. Employers might withhold a portion of pay to cover various costs, such as
1388 recruitment fees, food supplies and water, accommodation, taking leave to rest, or transferring
1389 payments to workers’ families. In-kind payments, bonuses and piece rates are common forms of
1390 compensation. This can enhance productivity but may result in a lack of certainty around total
1391 earnings and limit a worker’s buying power.

1392 Employment arrangements in these sectors and related supply chains can be complex and involve
1393 many actors. Agriculture, aquaculture, and fishing organizations may rely on workers engaged
1394 directly, through employment agencies, or by suppliers. Employers may classify workers they engage
1395 as self-employed or engage workers through a third party to avoid a direct employment relationship.
1396 Such situations are referred to as disguised employment and can lead to workers being denied their
1397 due benefits. Similar negative impacts occur when workers are employed via temporary or daily
1398 contracts on an ongoing basis.

1399 While employment agencies fulfill the sectors’ demands, documented cases show that fundamental
1400 principles and rights at work are regularly violated where there is no due diligence on how these
1401 agencies operate. Workers can face unjustified recruitment fees, unlawful employment conditions,
1402 and restrictions on terminating their engagement. Unethical employment and recruitment practices in
1403 the sectors can also increase worker vulnerability and lead to exploitation. Fair or ethical recruitment
1404 means hiring workers lawfully and in a fair, transparent manner that respects their dignity and human
1405 rights (see references [329], [342], and [343] in the Bibliography). Ethical recruitment is characterized
1406 by:

- 1407 • recruitment fees being borne by the employer;
- 1408 • respect for freedom of movement;
- 1409 • transparent employment terms and conditions;
- 1410 • confidentiality and data protection;
- 1411 • access to remedy.

1412 Migrant workers often fill the need for labor in agriculture, aquaculture, and fishing. Migrant status,
1413 language, and communication barriers commonly leave migrant workers disadvantaged in terms of
1414 remuneration, housing, and social and medical protection (see [topic 13.15 Non-discrimination and](#)
1415 [equal opportunity](#)).

1416 **Box 5. Migrant workers**

1417 Migrant workers can be particularly vulnerable to unethical labor practices and abuse. They are more
1418 likely to face pay discrimination and less favorable employment terms because they depend on
1419 employers or employment agencies for jobs and work permits.

1420 Migrant workers can be made to pay a fee to access jobs in the agriculture, aquaculture, and fishing
1421 sectors and to hand over identity documents, which prevents them from leaving employers. Such
1422 practices make migrant workers fall victim to bonded or forced or compulsory labor, labor exploitation,
1423 and human trafficking (see also [topic 13.16 Forced or compulsory labor](#)).

1424 International labor standards expect workers in the agriculture, aquaculture, and fishing sectors to
 1425 have decent conditions of work, including accommodations, food, transportation to and from the
 1426 workplace, and accident insurance, where applicable. For fishers, international labor and maritime
 1427 standards specify the right to repatriation in case of abandonment.

1428 **Reporting on employment practices**

1429 If the organization has determined employment practices to be a material topic, this sub-section lists
 1430 the disclosures identified as relevant for reporting on the topic by the agriculture, aquaculture, and
 1431 fishing sectors.

STANDARD	DISCLOSURE	SECTOR STANDARD REF#
Management of the topic		
GRI 3: Material Topics 2021	<p data-bbox="450 698 999 734">Disclosure 3-3 Management of material topics</p> <p data-bbox="450 745 874 779"><i>Additional sector recommendations</i></p> <ul style="list-style-type: none"> <li data-bbox="450 795 1136 1444"> <p>• Describe policies or commitments regarding recruitment of workers, including:</p> <ul style="list-style-type: none"> <li data-bbox="497 873 1136 967">– whether the organization has an ethical recruitment policy and, if so, a link to this policy if publicly available; <li data-bbox="497 981 1110 1041">– whether these policies and commitments cover the approach to recruitment fees; <li data-bbox="497 1055 1129 1149">– whether there policies and commitments prohibit the withholding of identity documents, such as passports; <li data-bbox="497 1162 1082 1256">– whether under these policies workers are provided with written contracts in a language understood by the worker; <li data-bbox="497 1270 1136 1330">– whether these policies and commitments apply to employment agencies used to recruit workers; <li data-bbox="497 1344 1075 1438">– how instances of non-compliance with these policies and commitments are identified and addressed. <li data-bbox="450 1458 1114 1736"> <p>• Describe the approach to worker compensation, including:</p> <ul style="list-style-type: none"> <li data-bbox="497 1536 1114 1630">– whether it is based on bonuses and piece rates, and any deductions or withholdings from compensation; <li data-bbox="497 1644 1110 1738">– the approach to in-kind payments, including the percentage of remuneration paid in kind at significant locations of operation. <li data-bbox="450 1753 1102 1814"> <p>• Describe actions taken to determine and address situations where work undertaken within the supply</p> 	

	<p>chain does not take place within appropriate institutional and legal frameworks, including:³²</p> <ul style="list-style-type: none"> - situations where persons working for suppliers are not provided the social and labor protection that they are entitled to receive by national labor law; - situations where working conditions in the organization's supply chain do not meet international labor standards or national labor law; - situations of disguised employment relationships where workers in the organization's supply chain are falsely considered to be self-employed or where there is no legally recognized employer; - situations where work undertaken in the organization's supply chain is not subject to legally recognized contracts. 	
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I432 **References and resources**

I433 [GRI 401: Employment 2016](#) lists authoritative intergovernmental instruments relevant to reporting on
I434 this topic.

I435 The additional authoritative instruments and references used in developing this topic, as well as
I436 resources that may be helpful for reporting on employment practices by the agriculture, aquaculture,
I437 and fishing sectors are listed in the [Bibliography](#).

This document does not represent an official position of the GSSB

³² These additional sector recommendations are based on clause 1.2 in [GRI 401: Employment 2016](#).

1438 **Topic 13.21 Living income and living wage**

1439 **Living income and living wage refer to such level of income or wage which is sufficient to**
 1440 **afford a decent standard of living for all household members, including nutritious food, clean**
 1441 **water, housing, education, healthcare, and other essential needs, such as provision for**
 1442 **unexpected events. This topic covers the organization’s approach to worker compensation in**
 1443 **the context of whether it provides for living income or living wage.**

1444 As recognized by the Universal Declaration of Human Rights, all workers have a right to just and
 1445 favorable remuneration that ensures an existence worthy of human dignity for themselves and their
 1446 families. The lack of a decent standard of living can lead to poverty, malnutrition, and limited access
 1447 to basic services. Providing living income or living wage helps reduce inequality and in-work poverty.

1448 Workers in agriculture, aquaculture, and fishing are more than four times more likely to be in poverty
 1449 than those in other sectors [356]. Ensuring living income or living wage for workers includes paying
 1450 self-employed farmers and fishers a fair price for their products or providing such remuneration for a
 1451 standard workweek to waged workers that is sufficient to afford a decent standard of living.

1452 A legally set minimum wage can sometimes be used as a proxy for a living wage. However, a living
 1453 wage is calculated based on requirements for a decent standard of living and can be higher than the
 1454 minimum wage. In many countries, wage workers in the agriculture, aquaculture, and fishing sectors
 1455 fall outside of national minimum wage regulations or are subject to sector-specific minimum wage
 1456 rates that are lower than those applied to other categories of workers. A high spread of informal
 1457 employment in these sectors also poses a major barrier to the enforcement of wage norms.

1458 Workers in agriculture, aquaculture, and fishing can be compensated in various ways, such as in-kind
 1459 payment of a share of their catch or harvest, or bonuses and piece rates, making them more
 1460 vulnerable to under-compensation (see [topic 13.20 Employment practices](#)). While international labor
 1461 standards do not set a specific threshold, the International Labour Organization (ILO) has questioned
 1462 whether a high proportion of wages, such as more than 50%, being paid in-kind is appropriate given
 1463 its potential to diminish workers’ financial income [351].

1464 Many fishers and farmers are categorized as self-employed workers because they do not receive
 1465 wages but are compensated according to their production. Protections for this type of worker might
 1466 not exist, so their incomes may depend on the individuals’ negotiating power, production levels, and
 1467 prices. However, prices may be subject to volatile or unfavorable market forces and can be set
 1468 without accounting for possible production losses due to weather events, plant and animal diseases,
 1469 or other unforeseen circumstances that reduce production.

1470 Lack of living income or living wage can lead to negative impacts on the environment and people. For
 1471 example, a lack of living income can also be conducive to illegal clearing of forests or illicit farming or
 1472 fishing activities in an attempt to earn more. Farmers and fishers can also be pressed to cut
 1473 production costs by lowering their workers’ wages or relying on poor labor practices such as
 1474 exploitation, illegal migrant labor, or child labor. Lack of living income also limits the ability of
 1475 producers to invest in more efficient or sustainable production methods, which can further impact their
 1476 access to markets, income, and livelihoods (see [topic 13.22 Economic inclusion](#)).

1477 **Reporting on living income and living wage**

1478 If the organization has determined living income and living wage to be a material topic, this sub-
 1479 section lists the disclosures identified as relevant for reporting on the topic by the agriculture,
 1480 aquaculture, and fishing sectors.

STANDARD	DISCLOSURE	SECTOR STANDARD REF #
Management of the topic		

<p>GRI 3: Material Topics 2021</p>	<p>Disclosure 3-3 Management of material topics</p> <p><i>Additional sector recommendations</i></p> <ul style="list-style-type: none"> • Describe commitments related to providing a living income or paying a living wage. • Describe the methodology used for defining living income or living wage at significant locations of operation and report whether this has involved consultation with and participation of local stakeholders, including trade unions and employer organizations. • Describe how sourcing, pricing, and remuneration policies take living income or living wage into account, including how living income is considered when setting product prices. • Describe the tools and systems used to monitor wages paid by suppliers. 	
<p>Additional sector disclosures</p>		
	<p>Report the percentage of <u>employees</u> and workers who are not employees and whose work is controlled covered by collective bargaining agreements that have terms related to wage levels and frequency of wage payments at significant locations of operation.</p>	
	<p>Report the percentage of employees and workers who are not employees and whose work is controlled paid above living wage, with a breakdown by gender.</p>	

1481 **References and resources**

1482 The authoritative instruments and references used in developing this topic, as well as resources that
 1483 may be helpful for reporting on living income and living wage by the agriculture, aquaculture, and
 1484 fishing sectors are listed in the [Bibliography](#).

1485 **Topic 13.22 Economic inclusion**

1486 **Economic inclusion concerns an organization’s impacts on access to economic opportunities**
 1487 **for local communities and the productive potential of actual and possible suppliers. This topic**
 1488 **covers an organization’s approach to economic inclusion of farmers and fishers, and their**
 1489 **communities.**

1490 Small-scale producers – farmers and fishers, who grow, harvest, and supply products to organizations
 1491 – are key suppliers for the agriculture, aquaculture, and fishing sectors. There are 500 million
 1492 smallholder farmers in the agriculture sector, and in some regions, they produce up to 80% of all
 1493 agricultural products [364]. Similarly, small fishing vessels represent over 80% of the world’s total
 1494 fishing fleet [360], [370]. However, many of these farmers and fishers live in poor and rural areas,
 1495 where communities face economic and social exclusion due to inadequate infrastructure, lack of
 1496 technology, limited production capacity, or limited access to markets and finance [368].

1497 Farmers' and fishers' productivity and resilience can be strengthened by sustained demand, capital
 1498 provision, skill-building, and enhanced access to markets. For example, contract farming – when an
 1499 organization enters into forwarding agreements to purchase products – can enhance farmers'
 1500 financial certainty and market access. Organizations may also commit to providing production inputs
 1501 as part of these agreements, such as seeds and fertilizers. However, contract farming agreements
 1502 need to be executed in a way to prevent debt or dependency.

1503 Agriculture, aquaculture, and fishing organizations can also contribute to the capacity of small-scale
 1504 producers by reducing barriers to market and connecting them to financial services and productive
 1505 assets. Organizations may also facilitate the formalization and development of business enterprises
 1506 by farmers and fishers. This includes assistance with registering land titles, business registration, and
 1507 formal labor relations. Organizations can also encourage cooperatives that provide collective benefits.

1508 Economic inclusion can also be encouraged when organizations select suppliers by, for example,
 1509 prioritizing those owned by women or members of other vulnerable groups. Empowering women is a
 1510 key driver for economic inclusion in rural areas, as women are more likely to be in poverty and face
 1511 economic constraints at the individual or household levels (see [topic 13.15 Non-discrimination and](#)
 1512 [equal opportunity](#)).

1513 The development of infrastructure that extends beyond the scope of the organization’s operations,
 1514 such as roads, ports, or canals, can facilitate access to transportation, energy, sanitation, and other
 1515 services in otherwise unserved areas. Organizations may also contribute to community investments
 1516 and stimulate economic activity in the local area, providing economic opportunities for those not active
 1517 in the local economy.

1518 Empowering farmers and fishers can help them achieve high productivity and contribute to greater
 1519 food security, responding to current and future needs of sustainable food production (see [topic 13.9](#)
 1520 [Food security](#)).

1521 **Reporting on economic inclusion**

1522 If the organization has determined economic inclusion to be a material topic, this sub-section lists the
 1523 disclosures identified as relevant for reporting on the topic by the agriculture, aquaculture, and fishing
 1524 sectors.

STANDARD	DISCLOSURE	SECTOR STANDARD REF #
Management of the topic		
GRI 3: Material Topics 2021	<p data-bbox="448 1787 995 1821">Disclosure 3-3 Management of material topics</p> <p data-bbox="448 1827 871 1861"><i>Additional sector recommendations</i></p> <ul data-bbox="448 1868 1190 1960" style="list-style-type: none"> <li data-bbox="448 1868 1190 1960">• Describe actions taken to support the economic inclusion of farmers and fishers, and their communities (e.g., direct support through investments, partnerships, or training) and 	

	<p>the effectiveness of these actions (e.g., increased yields or productivity, number of farmers or fishers reached, percentage of products sourced from small producers).</p> <ul style="list-style-type: none"> Describe actions taken to identify and adjust the sourcing practices of the organization that cause or contribute to negative impacts on economic inclusion of farmers and fishers in the <u>supply chain</u>.³³ 	
Topic Standard disclosures		
GRI 201: Economic Performance 2016	Disclosure 201-1 Direct economic value generated and distributed	
GRI 203: Indirect Economic Impacts 2016	Disclosure 203-1 Infrastructure investments and services supported	
	Disclosure 203-2 Significant indirect economic impacts	

I 525 References and resources

I 526 [GRI 201: Economic Performance 2016](#) lists authoritative intergovernmental instruments and
I 527 additional references relevant to reporting on this topic.

I 528 The additional authoritative instruments and references used in developing this topic, as well as
I 529 resources that may be helpful for reporting on economic inclusion by the agriculture, aquaculture, and
I 530 fishing sectors are listed in the [Bibliography](#).

³³ These additional sector recommendations are based on the guidance to clause 1.1 in [GRI 204: Procurement Practices 2016](#).

1531 **Topic 13.23 Supply chain traceability**

1532 **Traceability is the ability to trace the source, origin, or production conditions of raw materials**
1533 **and final products. Traceability provides a way to identify and prevent potential negative**
1534 **impacts linked to an organization’s products. This topic covers an organization’s approach to**
1535 **supply chain traceability.**

1536 Agriculture, aquaculture, and fishing organizations may source their products and procure inputs,
1537 such as animal feed, from multiple farms, mills, plantations, waters, or hatcheries. Production
1538 conditions can differ highly across countries. The sectors’ supply chains can be complex, crossing
1539 international borders and aggregating products from multiple locations. Products can be associated
1540 with diverse negative impacts on the economy, environment, and people and involve informal
1541 operations, where impacts often go undocumented.

1542 Traceability mechanisms enable organizations to identify the origins of their products and actors in
1543 their supply chain. These mechanisms can help localize and withdraw non-conforming products. For
1544 example, traceability allows for urgent product recalls over food safety concerns and outbreaks of
1545 disease in animals.

1546 Feed traceability in animal production and aquaculture is a key concern. The sourcing of animal and
1547 fish feed can contribute to negative impacts on biodiversity and natural ecosystems. Aquaculture feed
1548 can rely on depleted fish stocks, further driving overfishing (see [topic 13.3 Biodiversity](#)). Plant-based
1549 feed can be associated with natural ecosystem conversion. For example, almost 80% of the world’s
1550 soybean crop is used as animal feed and soybean farming is associated with deforestation in many
1551 areas [379] (see [topic 13.4 Natural ecosystem conversion](#)).

1552 In the fishing sector, traceability mechanisms serve to ensure fishery resources’ sustainability and the
1553 legality of fishing operations. Identifying the source of fishing products requires increased scrutiny
1554 because of the transshipment of catch, re-exportation, and numerous processing stages.

1555 **Box 6. Illegal, unreported, and unregulated (IUU) fishing**

1556 Some estimates indicate that globally up to 30% of sourced fish comes from IUU fishing, which
1557 includes fishing without a license, exceeding fishing quotas, capturing undersized fish or endangered
1558 species, and using unauthorized fishing gear [377]. It also includes fishing in restricted or protected
1559 marine areas or inshore waters reserved for local fishers and unauthorized transfer of catch from one
1560 vessel to another.

1561 IUU fishing is a threat to marine ecosystems and biodiversity because of its potential impacts on the
1562 sustainability of fishing stocks. Traceability mechanisms are a fundamental tool against IUU fishing.
1563 Certified fisheries, fisheries improvement projects³⁴, or robust monitoring, control, and surveillance
1564 (MCS) measures can also provide some level of assurance against IUU fishing.

1565 Traceability can also facilitate the transparency of value created at each stage of the value chain and
1566 how the value is distributed among producers. This information is relevant for establishing purchasing
1567 prices for agriculture, aquaculture, and fishing products that provide for living income or living wage to
1568 workers, farmers, and fishers (see also [topic 13.21 Living income and living wage](#)).

1569 Tracing the origins of products can be challenging, and traceability across the agriculture,
1570 aquaculture, and fishing sectors is unevenly implemented. Organizations that source agriculture,
1571 aquaculture, or fishing products might, depending on the product, be able to trace each to its source
1572 or a specific geographic area. Suppliers may also have certifications and assurance schemes by third

³⁴ Improvement projects focus on improving production practices and the way impacts on species and ecosystems are managed. Improvement projects are often undertaken with the intention of undergoing an assessment as part of a certification process that ensures conformity with certain environmental, economic, and social performance standards in the future.

I573 parties that link their products to production sites upholding certain environmental, economic, and
 I574 social performance standards.

I575 **Reporting on supply chain traceability**

I576 If the organization has determined supply chain traceability to be a material topic, this sub-section lists
 I577 the disclosures identified as relevant for reporting on the topic by the agriculture, aquaculture, and
 I578 fishing sectors.

STANDARD	DISCLOSURE	SECTOR STANDARD REF #
Management of the topic		
GRI 3: Material Topics 2021	<p data-bbox="451 622 999 651">Disclosure 3-3 Management of material topics</p> <p data-bbox="451 669 874 698"><i>Additional sector recommendations</i></p> <ul data-bbox="451 719 1158 837" style="list-style-type: none"> • Describe the rationale and methodology for tracing the source, origin, or production conditions of the products sourced by the organization (such as raw materials and production inputs purchased).³⁵ <p data-bbox="451 846 1118 907">The following additional sector recommendations are for organizations in the fishing sector:</p> <ul data-bbox="451 920 1118 1106" style="list-style-type: none"> • Describe policies, assurance schemes, and risk assessment processes related to illegal, unreported, and unregulated (IUU) fishing. • List initiatives and partnerships intended to help address illegal, unreported, and unregulated (IUU) fishing that the organization participates in. 	
Additional sector disclosures		
	Describe the level of traceability in place for each product sourced, for example, whether the product can be traced to the national, regional, or local level, or a specific point of origin (e.g., farms, hatcheries, and feed mill levels). ³⁶	
	Report the percentage of sourced volume ³⁷ certified to internationally recognized standards that trace the path of products through the supply chain, by product and list these standards. ³⁸	

³⁵ This additional sector recommendation is based on the guidance to clause 1.1 in [GRI 204: Procurement Practices 2016](#).

³⁶ A description of the organization’s supply chain is reported under Disclosure 2-6 Activities, value chain and other business relationships in *GRI 2: General Disclosures 2021*.

³⁷ Sourced volume refers to the total volume of products sourced by the organization from suppliers.

³⁸ Certifications or standards that trace the path of products through the supply chain are sometimes referred to as chain of custody (CoC). CoC is the chronological documentation or document trail that records the sequence of custody, control, transfer, analysis, and disposition of products.

Describe improvement projects to get suppliers certified to internationally recognized standards that trace the path of products through the supply chain to ensure that all sourced volume is certified.	
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1579 **References and resources**

1580 The references used in developing this topic, as well as resources that may be helpful for reporting on
1581 supply chain traceability by the agriculture, aquaculture, and fishing sectors are listed in the
1582 [Bibliography](#).

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1583 **Topic 13.24 Public policy**

1584 An organization can participate in public policy development, directly or through an
 1585 intermediary organization, by means of lobbying or making financial or in-kind contributions
 1586 to political parties, politicians, or causes. While an organization can encourage public policy
 1587 development that benefits society, participation can also be associated with corruption,
 1588 bribery, undue influence, or an imbalanced representation of the organization’s interests. This
 1589 topic covers an organization’s approach to public policy advocacy and the impacts that can
 1590 result from an organization’s influence.

1591 Agriculture, aquaculture, and fishing organizations can potentially influence local, national, or
 1592 international policy concerning environmental regulations, access to natural resources, labor laws,
 1593 food safety, public health, and animal welfare.

1594 Advocacy or lobbying by the agriculture, aquaculture, and fishing sectors may target policies that limit
 1595 the sectors’ environmental impact; government price setting and subsidies; or mandatory quotas on
 1596 products. In agriculture, documented cases show that large agricultural organizations advocated for
 1597 postponing legal requirements for rotating crops and avoiding penalties for inadequate land use.
 1598 Agriculture lobby activities can also target approvals of genetically modified organisms (GMOs) and
 1599 objectives to decrease the use of pesticides, fertilizers, and animal antibiotics. Lobbying can also
 1600 affect farmers’ access to technology and genetic resources, such as seeds.

1601 In animal production, lobbying can inhibit public policy development that deals with livestock’s
 1602 negative impacts on the environment. Livestock products – particularly dairy and beef – are heavily
 1603 subsidized in many countries due to livestock organizations’ influence. Subsidies enabled expressly
 1604 through lobbying can facilitate the supply of animal products at prices that do not cover the costs to
 1605 the environment. Lobbying can also prevent stricter standards of animal welfare.

1606 In fishing, organizations can influence allowable catch and quota regulations, including international
 1607 trade negotiations and inter-country agreements on fishing quotas. Locally, lobbying can sway
 1608 attempts to limit catch in order to preserve fishing stocks (see also [topic 13.26 Anti-corruption](#)).

1609 **Reporting on public policy**

1610 If the organization has determined public policy to be a material topic, this sub-section lists the
 1611 disclosures identified as relevant for reporting on the topic by the agriculture, aquaculture, and fishing
 1612 sectors.

STANDARD	DISCLOSURE	SECTOR STANDARD REF #
Management of the topic		
GRI 3: Material Topics 2021	Disclosure 3-3 Management of material topics	
Topic Standard disclosures		
GRI 415: Public Policy 2016	Disclosure 415-1 Political contributions	

1613 **References and resources**

1614 [GRI 415: Public Policy 2016](#) lists authoritative intergovernmental instruments relevant to reporting on
 1615 this topic.

1616
 1617 The additional references used in developing this topic, as well as resources that may be helpful for
 1618 reporting on public policy by the agriculture, aquaculture, and fishing sectors are listed in the
 1619 [Bibliography](#).

1620 **Topic 13.25 Anti-competitive behavior**

1621 **Anti-competitive behavior refers to actions by an organization that can result in collusion with**
 1622 **potential competitors, abuse of dominant market position or exclusion of potential**
 1623 **competitors, thereby limiting the effects of market competition. This can include fixing prices**
 1624 **or coordinating bids, creating market or output restrictions, imposing geographic quotas, and**
 1625 **allocating customers, suppliers, geographic areas, or product lines. This topic covers impacts**
 1626 **as a result of anti-competitive behavior.**

1627 Many agriculture, aquaculture, and fishing products are purchased from producers and traded by a
 1628 limited number of organizations. In situations of limited market options, traders and buyers can exert
 1629 significant market power.

1630 Anti-competitive agreements between agriculture, aquaculture, and fishing organizations can lead to
 1631 purchasing prices for products being set below those in a competitive market and restrictions on the
 1632 product volumes. Many producers in these sectors are smallholder farmers and small-scale fishers,
 1633 often working in the informal sector and facing substantial barriers to accessing markets (see also
 1634 [topic 13.22 Economic inclusion](#)). Large organizations that source supplies from small producers can
 1635 take advantage of information asymmetry and market fragmentation to limit their choices of whom to
 1636 supply.

1637 Anti-competitive practices may render small producers in these sectors unable to cover their costs,
 1638 achieve living income, or pay wages to their workers, resulting in economic exclusion and risk to
 1639 livelihoods (see [13.21 Living income and living wage](#)). Other actions that purposely limit the effects of
 1640 market competition can also cause small producers to lose their independence and be pressured into
 1641 becoming subsidiaries of large multinational organizations. In some parts of the sectors, cartels have
 1642 caused the exclusion of small producers from international markets.

1643 Large cooperatives, commonly found in the sectors, can affect market competition by requiring
 1644 farmers and fishers to sell their products exclusively through them. While such arrangements can
 1645 benefit producers, they can also pose anti-competitive concerns by limiting consumers' choices in
 1646 cases where they represent a major share of the sector's productive capacity.

1647 **Reporting on anti-competitive behavior**

1648 If the organization has determined anti-competitive behavior to be a material topic, this sub-section
 1649 lists the disclosures identified as relevant for reporting on the topic by the agriculture, aquaculture,
 1650 and fishing sectors.

STANDARD	DISCLOSURE	SECTOR STANDARD REF #
Management of the topic		
GRI 3: Material Topics 2021	Disclosure 3-3 Management of material topics	
Topic Standard Disclosures		
GRI 206: Anti-competitive Behavior 2016	Disclosure 206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	

1651 **References and resources**

1652 [GRI 206: Anti-competitive Behavior 2016](#) lists authoritative intergovernmental instruments.

1653 The additional references used in developing this topic, as well as resources that may be helpful for
 1654 reporting on anti-competitive behavior by the agriculture, aquaculture, and fishing sectors are listed in
 1655 the Bibliography.

1656 **Topic 13.26 Anti-corruption**

1657 **Anti-corruption refers to how an organization manages the potential of being involved with**
 1658 **corruption. Corruption is practices such as bribery, facilitation payments, fraud, extortion,**
 1659 **collusion, money laundering, or the offer or receipt of an inducement to do something**
 1660 **dishonest or illegal. This topic covers the potential for corruption to occur and the related**
 1661 **impacts.**

1662 Corruption in the agriculture, aquaculture, and fishing sectors can erode the capacity of governments
 1663 to limit practices, such as deforestation and overfishing. Corruption also increases the likelihood of
 1664 potential negative impacts on workers and communities and reduces government revenues.
 1665 Organizations that engage in corruption can have an unfair advantage in competitive markets.

1666 In the agriculture, aquaculture, and fishing sectors, corruption may be related to the use of land and
 1667 other natural resources regulated by government agencies. It can take the form of, for example,
 1668 bribes paid to officials to register land, acquire land information, or obtain permits to establish an
 1669 operation. This can affect rightsholders and lead to the displacement of communities, particularly in
 1670 areas without secure land tenure (see also [topic 13.13 Land and resource rights](#)).

1671 Other forms of corruption can also involve the undue benefit from political reforms and land
 1672 transactions, such as privatizing state-owned land, approving zoning plans, and land expropriation.
 1673 These practices often ignore legal mechanisms and cause impacts on people and the environment.

1674 Corruption in the sectors may include inducing officials to ignore illegal farming or fishing operations,
 1675 leading to the loss of natural ecosystems when land is cleared. Corrupt practices in fishing can
 1676 facilitate access agreements between organizations and officials managing fishing resources, which
 1677 potentially result in unsustainable levels of fishing.

1678 Corrupt practices can also allow for illegal, unreported, and unregulated fishing (IUU) and exceeding
 1679 quotas, undermining stocks' sustainability. Fishers themselves might be involved in corruption to
 1680 increase catch quantities. Records of type or volume of catch may be falsified, or authorities may be
 1681 bribed to ignore or certify false records.

1682 Operating fishing vessels under a flag of convenience or an unknown flag can also be associated with
 1683 corruption when intended to bypass countries' legal restrictions.

1684 **Reporting on anti-corruption**

1685 If the organization has determined anti-corruption to be a material topic, this sub-section lists the
 1686 disclosures identified as relevant for reporting on the topic by the agriculture, aquaculture, and fishing
 1687 sectors.

STANDARD	DISCLOSURE	SECTOR STANDARD REF #
Management of the topic		
GRI 3: Material Topics 2021	Disclosure 3-3 Management of material topics	
Topic Standard disclosures		
GRI 205: Anti-corruption 2016	Disclosure 205-1 Operations assessed for risks related to corruption	
	Disclosure 205-2 Communication and training about anti-corruption policies and procedures	
	Disclosure 205-3 Confirmed incidents of corruption and actions taken	

I 688 **References and resources**

I 689 [GRI 205: Anti-corruption 2016](#) lists authoritative intergovernmental instruments and additional
I 690 references relevant to reporting on this topic.

I 691

I 692 The additional references used in developing this topic, as well as resources that may be helpful for
I 693 reporting on anti-corruption by the agriculture, aquaculture, and fishing sectors are listed in the

I 694 [Bibliography](#).

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1695

Glossary

1696 This glossary provides definitions for terms used in this Standard. The organization is required to
1697 apply these definitions when using the GRI Standards.

1698 The definitions included in this glossary may contain terms that are further defined in the complete
1699 [GRI Standards Glossary](#). All defined terms are underlined. If a term is not defined in this glossary or in
1700 the complete *GRI Standards Glossary*, definitions that are commonly used and understood apply.

- 1701 • **area of high biodiversity value**
- 1702 • **area protected**
- 1703 • **basic salary**
- 1704 • **benefit**
- 1705 • **business partner**
- 1706 • **business relationships**
- 1707 • **carbon dioxide (CO₂) equivalent**
- 1708 • **catchment**
- 1709 • **child**
- 1710 • **close call**
- 1711 • **collective bargaining**
- 1712 • **corruption**
- 1713 • **direct (Scope 1) GHG emissions**
- 1714 • **discharge**
- 1715 • **discrimination**
- 1716 • **disposal**
- 1717 • **effluent**
- 1718 • **employee**
- 1719 • **energy indirect (scope 2) GHG emissions**
- 1720 • **exposure**
- 1721 • **forced or compulsory labor**
- 1722 • **freedom of association**
- 1723 • **freshwater**
- 1724 • **governance body**
- 1725 • **greenhouse gas (GHG)**
- 1726 • **grievance mechanism**
- 1727 • **groundwater**
- 1728 • **hazardous waste**
- 1729 • **human rights**
- 1730 • **impact**
- 1731 • **indigenous peoples**
- 1732 • **infrastructure**
- 1733 • **local community**
- 1734 • **material topics**
- 1735 • **mitigation**
- 1736 • **other indirect (scope 3) GHG emissions**
- 1737 • **product**
- 1738 • **remedy / remediation**
- 1739 • **recovery**
- 1740 • **remuneration**
- 1741 • **rightsholder**
- 1742 • **runoff**
- 1743 • **severity (of an impact)**
- 1744 • **stakeholder**
- 1745 • **supplier**

- 1746 • **supply chain**
- 1747 • **surface water**
- 1748 • **sustainable development/sustainability**
- 1749 • **value chain**
- 1750 • **vulnerable group**
- 1751 • **waste**
- 1752 • **water consumption**
- 1753 • **water withdrawal**
- 1754 • **worker**
- 1755 • **work-related hazard**
- 1756 • **work-related injury or ill health**

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1757 Bibliography

1758 In addition to the authoritative intergovernmental instruments and other sources listed in GRI Topic
1759 Standards, the following have been used in developing the content of this Sector Standard.

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