



Item 03 – GRI Sector Standards Project for Agriculture and Fishing – Exposure draft for agriculture, aquaculture, and fishing

For GSSB approval

Date	15 April 2021
Meeting	29 April 2021
Project	GRI Sector Standards Project for Agriculture and Fishing
Description	<p>This document sets the GRI Agriculture, Aquaculture and Fishing exposure draft, including the explanatory memorandum. These are submitted for GSSB approval for public exposure.</p> <p>It also includes a background section for GSSB information, which provides more detail on the content development process.</p> <p>As per the project proposal, this Standard was intended to apply to the agriculture, aquaculture, and fishing sectors. The Agriculture and Fishing Working Group recommended the title of the Standard be changed to reflect this and ensure recognition by the aquaculture sector. This change is proposed to take effect in the exposure draft, subject to GSSB approval.</p> <p>Please note: This Standard makes references to the GRI Universal Standards. As the Universal Standards are currently under revision, the references in this draft use the names of the Universal Standards as they were at the time of exposure. The names and other references, along with several figures in the introduction and the glossary terms will be updated to align with the version of the Universal Standards submitted to the GSSB for approval in May. This content will be update in this Standard prior to release for public exposure.</p>

This document has been prepared by the GRI Standards Division and is made available to observers at meetings of the Global Sustainability Standards Board (GSSB). It does not represent an official position of the GSSB. Board positions are set out in the GRI Sustainability Reporting Standards. The GSSB is the independent standard setting body of GRI. For more information visit www.globalreporting.org.

1 Background

2 The GRI Sector Standards Project for Agriculture and Fishing commenced in December 2019. The
3 Agriculture and Fishing Working Group, which was appointed in April 2020, consists of 19 members
4 representing 14 countries across 6 regions, as well as a broad set of commodities and products
5 across agriculture, aquaculture, and fishing.

6 To date, the Working Group has been highly engaged, participating in a scoping survey, six full
7 working group meetings, as well as numerous structured sub-group discussions. As the second pilot
8 project for the Sector Program, a number of key learnings have been integrated into the approach to
9 developing the exposure draft for agriculture, aquaculture, and fishing. For example, one change was
10 an increased focus on scoping the likely material topics for the sectors with the Working Group prior
11 to drafting content.

12 In addition to the Working Group, in November 2020, an external peer review was undertaken to test
13 the proposed list of likely material topics, as well as the accuracy and detail of descriptions and
14 disclosures for select topics, with external experts and stakeholders.

15 The peer reviewers were primarily selected from shortlisted candidates that applied to the Working
16 Group. Additional participants were also recommended by members of the Working Group and Global
17 Sustainability Standards Board.

18 29 participants attended a dedicated peer review session, with 16 written formal responses received
19 from peer reviewers. Peer reviewers validated the list of topics and did not flag any critical flaws.

20 Preliminary findings on topic and disclosure gaps

21 It was anticipated that projects for Sector Standards would generate insight on the feasibility of
22 developing reporting requirements, recommendations, and/or guidance for the sector. The work on
23 agriculture, aquaculture, and fishing to date has surfaced some reporting expectations that might
24 result in recommendations to develop new GRI Topic Standards. Seven likely material topics included
25 in the exposure draft include no Topic Standards disclosures, namely:

- 26 • Natural ecosystem conversion
- 27 • Soil health
- 28 • Pesticides use
- 29 • Food security
- 30 • Animal health and welfare
- 31 • Land and resource rights
- 32 • Living income

33 Some of these topics, such as animal health and welfare, living income, and land and resource rights
34 feature in multiple sector-specific and sector-agnostic global standards and frameworks and might
35 result in recommendations to revise existing Topic Standards or develop new ones at the completion
36 of the project.

37 Name of the Sector Standard

38 As per the project proposal, this Standard was intended to apply to the agriculture, aquaculture, and
39 fishing sectors, however it was initially proposed that name would be Sector Standard: Agriculture and
40 Fishing.

41 The Working Group recommends the title of the Standard be changed to reflect the inclusion of all
42 three sectors in order to ensure recognition by the aquaculture sector. As such, it is proposed that the
43 Standard be known as *GRI Sector Standard: Agriculture, Aquaculture and Fishing* and that this takes
44 effect in the exposure draft.

45 **Public comment**

46 The public comment period for the exposure draft of agriculture, aquaculture and fishing is proposed
47 to commence on 19 May and run until 30 July. This will run in conjunction with the public comment
48 period for coal.

49 The primary objective of the public comment period is to test the clarity, feasibility, completeness, and
50 relevancy of the content, including:

- 51 • Whether the topics that have been identified as likely material for organizations in the
52 agriculture, aquaculture, and fishing sectors, and the way they are described, accurately
53 reflect the sectors' most significant impacts on the economy, environment, and people,
54 including impacts on their human rights; and
- 55 • That the list of disclosures from the GRI Topic Standards and other sources included for
56 each likely material topics are relevant for organizations in the sectors to report information
57 about their impacts and approach.

58 The public comment will engage stakeholders globally across GRI's key constituencies. All
59 engagement will be undertaken remotely.

60 Explanatory memorandum

61 This explanatory memorandum sets out the objectives GRI Sector Standards Project for Agriculture,
62 and Fishing for Agriculture, Aquaculture, and Fishing. It also includes the significant proposals
63 resulting from this project and summarizes the Global Sustainability Standards Board (GSSB)'s
64 involvement and views on development of the draft.

65 Objectives for the project

66 The GRI Sector Standards Project for Agriculture, and Fishing commenced in December 2019. This is
67 a pilot project for the GRI Sector Program.

68 This project aims to identify and describe the significant impacts and stakeholder concerns for the
69 agriculture, aquaculture, and fishing sectors from a sustainable development perspective, and provide
70 evidence and authoritative references for these. This will serve as a foundation for increased
71 transparency and more consistent reporting from organizations in the sectors.

72 As outlined in the GSSB's [Due Process Protocol](#), a [multi-stakeholder working group](#) was established
73 in April 2020 to contribute to the development of a Sector Standard.

74 The GRI Sector Standards Project for Agriculture, and Fishing applies to agriculture, aquaculture, and
75 fishing organizations. These three sectors are considered to have common characteristics as
76 producers of an essential societal need – food, as well as to share similar impacts on people and
77 economy, and in part on environment. The working group recommended that the name of the
78 Standard reflect all three sectors it covers – agriculture, aquaculture, and fishing.

79 For more information on the project, consult the [project proposal](#) and [terms of reference of the PWG](#).

80 The GRI Universal Standards have simultaneously been [under revision](#). The implementation model of
81 the Sector Standards will be incorporated into these revised Universal Standards. The final Universal
82 Standards are expected to be approved Q2 2021. For the purposes of this exposure draft, draft
83 versions of the Universal Standards are used.

84 Significant proposals

85 An exposure draft for agriculture, aquaculture, and fishing has been developed in line with the project
86 objectives set out above. Notable inclusions in this exposure draft are summarized below:

- 87 • **26 topics were identified as likely material** for organizations in the agriculture, aquaculture
88 and fishing sectors (see Table 1). For each likely material topic, the sectors' most significant
89 impacts are described and disclosures to report information about the organization's impacts
90 and approach in relation to the topic are listed.
- 91 • Out of 26 likely material topics included in the exposure, **17 topics include disclosures from**
92 **Topic Standards**. In addition, two topics *Employment practices* and *Supply chain traceability*
93 include reporting recommendations from the GRI Topic Standards, but do not include any
94 disclosures from Topic Standards.
- 95 • **7 topics do not include any disclosures nor recommendations from Topic Standards**,
96 these are: *Natural ecosystem conversion*, *Soil health*, *Pesticides use*, *Food security*, *Animal*
97 *health and welfare*, *Land and resource rights*, *Living income*. Sector-specific reporting has
98 been included for these topics.
- 99 • **Some topics list disclosures for only one sector**, for example *Water and Effluents* and
100 *Waste* include reporting on waste and effluents by MARPOL categories is for the fishing
101 sector only.
- 102 • While not all organization in the agriculture, aquaculture, and fishing sectors produce food for
103 human consumption, **the sectors' central role in food production** has been recognized
104 across topics and has resulted in inclusion of topics *Food security* and *Food safety* as well as
105 expanded scope of the topic *Waste and food loss*.

- 106 • **Sector Profile** section further outlines the sector’s activities, business relationships, and its
 107 interactions with the global sustainable development agenda, including linkages to the UN
 108 Sustainable Development Goals. A mapping between the likely material topics and the
 109 relevant SDGs is included as part of the larger context in the section *1.2 The sectors and*
 110 *sustainable development*, providing a starting point for organizations that seek to integrate the
 111 SDGs into their reporting.

112 Table 1: Likely material topics included in the draft Sector Standard: Agriculture, Aquaculture, and
 113 Fishing

Likely material topic	Disclosures from these GRI Topic Standards are included for reporting on the topic	Whether additional sector recommendations or disclosures are listed for the topic
1. Emissions	GRI 305: Emissions 2016	Additional sector recommendations included for: <ul style="list-style-type: none"> • Disclosure 305-1 Direct (Scope 1) GHG emissions • Disclosure 305-3 Other indirect (Scope 3) GHG emissions
2. Climate adaptation and resilience	<i>GRI 201: Economic Performance 2016</i>	Additional sector recommendations included for: <ul style="list-style-type: none"> • <i>Disclosure 201-2 Financial implications and other risks and opportunities due to climate change</i>
3. Biodiversity	<i>GRI 304: Biodiversity 2016</i>	Additional sector disclosure identified for organizations in aquaculture and fishing.
4. Natural ecosystem conversion	-	Additional sector recommendations included for <i>Disclosure MT-3 Management of material topics</i>
5. Soil health	-	Additional sector recommendations included for: <ul style="list-style-type: none"> • <i>Disclosure MT-3 Management of material topics</i>
6. Pesticides use	-	<ul style="list-style-type: none"> • Additional sector recommendations included for <i>Disclosure MT-3 Management of material topics</i> • Additional sector disclosure
7. Water and effluents	<i>GRI 303: Water and Effluents 2018</i>	Additional sector recommendations included for: <ul style="list-style-type: none"> • <i>Disclosure 303-4 Water discharge</i>
8. Waste and food loss	<i>GRI 306: Waste 2020</i>	Additional sector recommendations included for: <ul style="list-style-type: none"> • <i>Disclosure MT-3 Management of material topics</i> • <i>Disclosure 306-3 Waste generated</i>
9. Food security	-	Additional sector recommendations included for <i>Disclosure MT-3 Management of material topics</i>
10. Food safety	<i>GRI 416: Customer Health and Safety 2016</i>	<ul style="list-style-type: none"> • Additional sector recommendations included for

		<p><i>Disclosure MT-3 Management of material topics</i></p> <ul style="list-style-type: none"> • Additional sector disclosure
11. Animal health and welfare	-	<ul style="list-style-type: none"> • Additional sector recommendations included for <i>Disclosure MT-3 Management of material topics</i> • Additional sector disclosures
12. Local communities	<i>GRI 413: Local Communities 2016</i>	-
13. Land and resource rights	-	<ul style="list-style-type: none"> • Additional sector recommendations included for <i>Disclosure MT-3 Management of material topics</i>. • Additional sector disclosures
14. Rights of indigenous peoples	<i>GRI 411: Rights of Indigenous People 2016</i>	Additional sector recommendations included for <i>Disclosure MT-3 Management of material topics</i>
15. Non-discrimination and equal opportunity	<i>GRI 405: Diversity and Equal Opportunity 2016</i> <i>GRI 406: Non-discrimination 2016</i>	-
16. Forced labor	<i>GRI 409: Forced or Compulsory Labor 2016</i>	-
17. Child labor	<i>GRI 408: Child Labor 2016</i>	-
18. Freedom of association and collective bargaining	<i>GRI 407: Freedom of Association and Collective Bargaining 2016</i>	-
19. Occupational health and safety	<i>GRI 403: Occupational Health and Safety 2018</i>	-
20. Employment practices	<i>GRI 401 Employment 2016*</i>	Additional sector recommendations included for <i>Disclosure MT-3 Management of material topics</i>
21. Living income	-	<ul style="list-style-type: none"> • Additional sector recommendations included for <i>Disclosure MT-3 Management of material topics</i> • Additional sector disclosures.
22. Economic inclusion	<i>GRI 203: Indirect Economic Impacts</i> <i>GRI 204: Procurement Practices 2016*</i>	Additional sector recommendations included for <i>Disclosure MT-3 Management of material topics</i>
23. Supply chain traceability	<i>GRI 204: Procurement Practices 2016*</i>	<ul style="list-style-type: none"> • Additional sector recommendations included for <i>Disclosure MT-3 Management of material topics</i> • Additional sector disclosures.
24. Public policy and lobbying	<i>GRI 415: Public Policy 2016</i>	-
25. Anti-competitive behavior	<i>GRI 206: Anti-competitive Behavior 2016</i>	-
26. Anti-corruption	<i>GRI 205: Anti-corruption 2016</i>	-

114 **GSSB involvement and views on the development of this draft**

115 The GSSB appointed a subcommittee of three GSSB members for the Sector Program. The
116 subcommittee was consulted on key conceptual issues on a regular basis.

117 The GSSB confirmed its support for content of the exposure draft for agriculture, aquaculture, and
118 fishing when it voted to approve the draft for public exposure at its meeting on 29 April 2021. The
119 recording of the meetings can be accessed on the GSSB website.

This document does not represent an official position of the GSSB



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122 Introduction

123 GRI Sector Standard: Agriculture, Aquaculture, and Fishing provides information for organizations in
124 the agriculture, aquaculture, and fishing sectors about their most likely material topics. These topics
125 have been identified as likely material for organizations in the agriculture, aquaculture, and fishing
126 sectors on the basis of the sectors' most significant impacts on the economy, environment, and
127 people, including impacts on their human rights.

128 Sector Standard: Agriculture, Aquaculture, and Fishing also contains a list of disclosures from the GRI
129 Topic Standards and other sources for organizations in the agriculture, aquaculture, and fishing
130 sectors to report information about their impacts and approach in relation to each likely material topic.

131 Sector Standards are developed using multi-stakeholder expertise, authoritative intergovernmental
132 instruments, and other relevant evidence.

133 This Standard is structured as follows:

- 134 • [Section 1](#) provides a high-level overview of the sector, including its activities, business
135 relationships, sustainability context, and the connections between the Sustainable Development
136 Goals (SDGs) and the likely material topics for the sector.
- 137 • [Section 2](#) outlines the topics that have been identified as likely material for organizations in the
138 agriculture, aquaculture, and fishing sectors and therefore potentially merit reporting. For each
139 likely material topic, the agriculture, aquaculture, and fishing sectors' most significant impacts are
140 described and disclosures to report information about the organization's impacts and approach in
141 relation to the topic are listed.
- 142 • [Glossary](#) contains defined terms with specific meaning when used in the GRI Standards.
- 143 • [Bibliography](#) lists the authoritative intergovernmental instruments and other sources used to
144 develop each topic, as well as further resources that may be helpful for reporting on the topic.

145 The rest of this Introduction section offers an overview of the sectors this Standard applies to, an
146 overview of the system of GRI Standards, and further information on using this Standard.

147 Sectors this Standard applies to

148 GRI Sector Standard: Agriculture, Aquaculture, and Fishing applies to organizations undertaking the
149 following:

- 150 • Crop production
- 151 • Animal production
- 152 • Aquaculture
- 153 • Fishing

154 This Standard can be used by agriculture, aquaculture and fishing organizations of any size or type in
155 any geographic location.

156 Not all topics listed in this Standard may be material for all organizations in the sectors. The
157 organization will determine material topics based on its specific circumstances.

158 When identifying the applicable Sector Standards, the organization should consider its main sector. If
159 the organization has substantial activities across more than one sector, it must use all applicable
160 Sector Standards.

161 Sector classifications

162 Table 1 lists industry groupings relevant to the agriculture, aquaculture, and fishing sectors in the
163 Global Industry Classification System (GICS®), Industry Classification Benchmark (ICB), International
164 Standard Industrial Classification of All Economic Activities (ISIC), and Sustainable Industry

165 Classification System (SICS®). The table is intended to assist an organization in identifying whether
 166 the Sector Standard: Agriculture, Aquaculture and Fishing applies to it and is for reference only.
 167 Table 1. Industry groupings relevant to the agriculture, aquaculture, and fishing sectors in other classification
 168 systems

Classification system	Classification number	Classification name
GICS®	30202010	Agricultural products
ICB	3573	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

169 System of GRI Standards

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

174 The GRI Standards are structured as a system of interrelated standards that are organized into three
 175 series: Universal Standards, Sector Standards, and Topic Standards.

176 Universal Standards: GRI 101, 102, and 103

177 **Note:** All references to the GRI Universal Standards in this Standard refer to [the drafts] that have
 178 been made available as part of the [review of the Universal Standards]. The GRI Sector Standards
 179 will work in conjunction with the revised Universal Standards. The draft Universal Standards are
 180 subject to the approval of the Global Sustainability Standards Board and may change.

181 *GRI 101: Using the GRI Standards* sets out the requirements that the organization must comply with
 182 to report in accordance with the GRI Standards. The organization begins using the GRI Standards by
 183 consulting *GRI 101*.

184 *GRI 102: About the Organization* contains disclosures that the organization uses to provide
 185 information about its reporting practices and other organizational details, such as activities,
 186 governance, and policies.

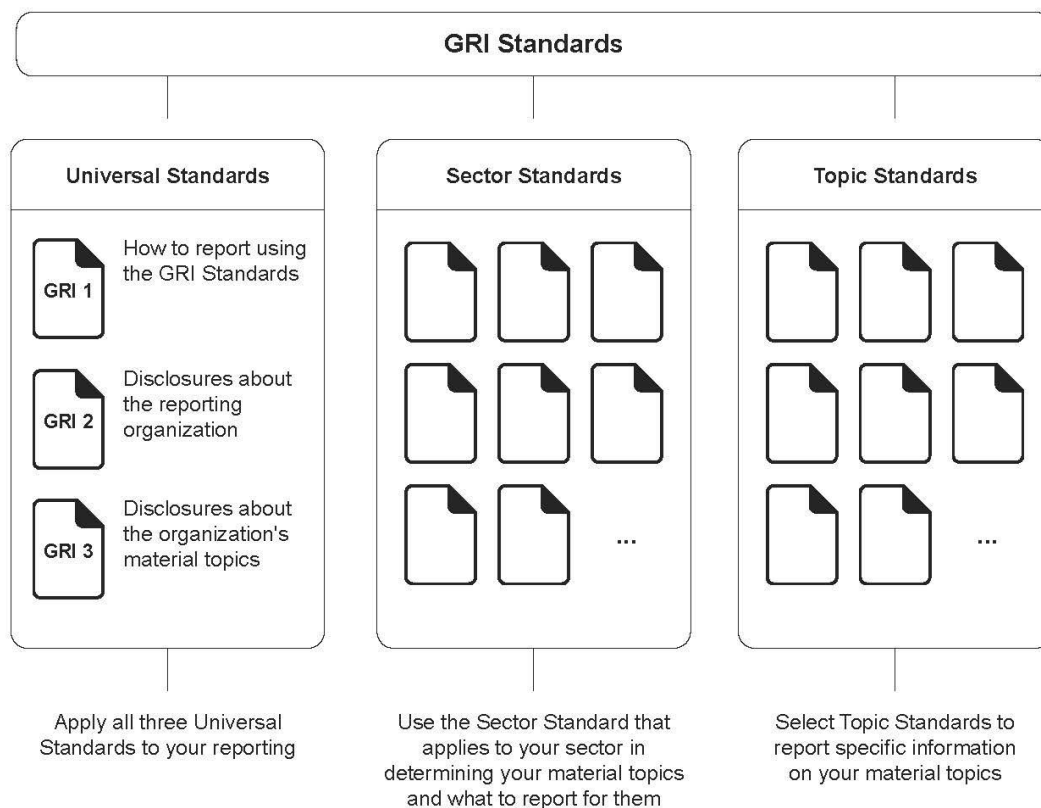
187 *GRI 103: Material Topics* provides guidance on how to determine material topics. It also contains
 188 disclosures that the organization uses to report information about its process to determine material
 189 topics, its list of material topics, and how it manages each topic.

190 Sector Standards

191 The Sector Standards provide information for organizations in a given sector about their most likely
 192 material topics. The organization uses the Sector Standards that apply to its sectors when
 193 determining its material topics and when determining what to report for each material topic.

194 Topic Standards

195 The Topic Standards contain disclosures that the organization uses to report information on its
 196 impacts and approach in relation to particular topics. The organization uses the Topic Standards
 197 according to the list of material topics it has determined using *GRI 103*.



199 Using this Standard

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

203 Determining material topics

204 Material topics are topics that represent the organization's most significant impacts on the economy,
 205 environment, and people, including impacts on their human rights.

206 An organization in the agriculture, aquaculture, and fishing sectors is required to use this Standard
 207 when determining its material topics. The organization needs to review each topic described in
 208 [Section 2](#) of this Standard and determine whether it is a material topic for the organization.

209 This Standard helps the organization determine its material topics, but the organization still needs to
 210 determine its material topics based on its specific circumstances. The topics an organization identifies
 211 as material may vary according to specific circumstances, such as its business model; sector;
 212 geographic, cultural, and legal operating contexts; ownership structure; and the nature of its impacts.
 213 [GRI 103: Material Topics](#) provides step-by-step guidance on how to determine material topics.

214 Not all topics listed in this Standard may be material for all organizations in the sectors. If any of the
 215 topics that are included in this Standard have been determined by the organization as not material,
 216 the organization is required to list them in the GRI content index and explain why they are not material
 217 (see [Requirement 7](#) in [Section 3](#) of [GRI 101: Using the GRI Standards](#)).

218 See [Requirement 3](#) in [Section 3](#) of [GRI 101: Using the GRI Standards](#) and [Box 1](#) in [GRI 103: Material](#)
 219 [Topics](#) for more information on using Sector Standards when determining material topics.

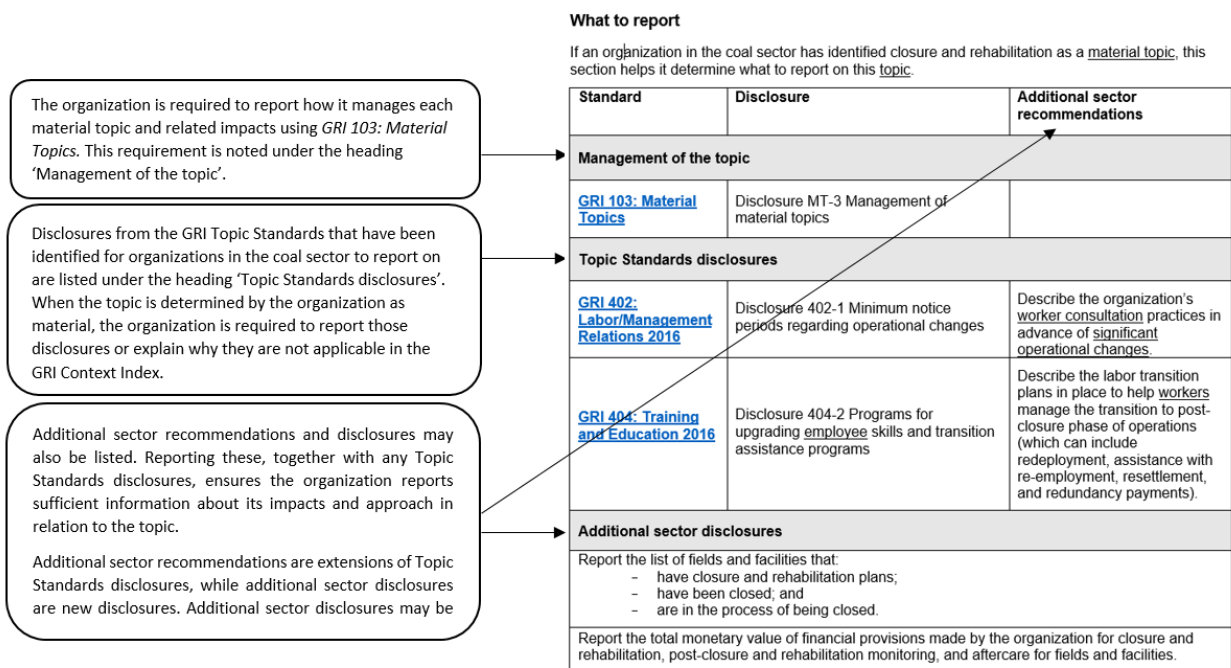
220 **Determining what to report**

221 When a topic included in this Standard is determined by the organization as material, the Standard
 222 helps the organization identify disclosures to report on its impacts and approach in relation to that
 223 topic.

224 A what to report section is included for each topic in [Section 2](#) of this Standard. What to report
 225 sections list disclosures from the GRI Topic Standards. They may also list additional sector
 226 recommendations and disclosures for the organization to report on, in cases where the Topic
 227 Standards do not provide disclosures, or where the disclosures from the Topic Standards do not
 228 provide sufficient information about an organization’s impacts and approach in relation to a topic.
 229 Additional sector disclosures may be based on other sources.

230 Figure 2 illustrates how what to report sections are structured.

231 Figure 2. Structure of what to report sections



232 For topics determined by the organization as material, the organization is required to report the
 233 disclosures drawn from Topic Standards listed in the what to report section for that topic. If any
 234 disclosures listed are not relevant for reporting on the organization’s impacts and approach in relation
 235 to the topic, then the organization is not required to report these but is required to list them in the GRI
 236 Context Index, provide the ‘not applicable’ reason for omission and a brief explanation (see
 237 [Requirement 7 in Section 3 of GRI 101: Using the GRI Standards](#)).

238 The additional sector recommendations and disclosures outline additional information that the
 239 organization should report on the topic. An organization should provide sufficient information about its
 240 impacts and approach in relation to each material topic, so that information users can make informed
 241 assessments and decisions about the organization. The additional sector disclosures and
 242 recommendations have been identified as relevant for organizations in the agriculture, aquaculture,
 243 and fishing sectors in relation to the topic. Reporting on these is encouraged, however, it is not a
 244 requirement.

245 When the organization reports the additional sector disclosures, it is required to list them in the GRI
 246 content index.

247 See [Requirement 5 in Section 3 of GRI 101: Using the GRI Standards](#) for more information on using
 248 Sector Standards when identifying disclosures to report on.

249 **Defined terms**

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

252 **References and resources**

253 Each GRI Topic Standard includes a list of authoritative intergovernmental instruments and other
254 sources used in developing the Topic Standard, as well as additional resources that can be consulted
255 by organizations on the topic. Additional authoritative instruments and sources used to develop the
256 topics in this Standard, as well as further resources that may be helpful for understanding and
257 reporting on the topic by organizations in the agriculture, aquaculture, and fishing sectors are listed at
258 the end of the Standard.

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259 **1. Sector profile**

260 The agriculture, aquaculture, and fishing sectors involve the cultivation, production, and capture of
261 organisms that can be used as food for human consumption or animal feed, fibers, fuels, and other
262 products. Agriculture consists of crop and animal production; aquaculture encompasses the
263 cultivation of live aquatic organisms; fishing entails capturing fish and other wild aquatic organisms.

264 Agriculture, aquaculture, and fishing operations can be formally or informally organized as large-scale
265 or small-scale business enterprises, government institutions, or other organizations, including
266 households and cooperatives. These organizations can own or operate farms, mills, and hatcheries.
267 Vertically integrated organizations can directly own or manage production, storage, processing, and
268 distribution.

269 **1.1 Sector activities and business relationships**

270 When determining its material topics, the organization should consider both the impacts of its
271 activities and its business relationships. See *GRI 103: Material Topics* for more information on how to
272 determine material topics.

273 **Activities**

274 The impacts of an organization vary according to the types of activities it undertakes. The following list
275 outlines some of the key activities of the agriculture, aquaculture, and fishing sectors.¹ This list is not
276 exhaustive.

277 **Crop production**

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

280 *Primary processing:*² cleaning, grading, hulling, pounding, and milling grains; soaking, heating, and
281 drying leaves; extracting and filtering oils.

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

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

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

287 *Trading:* buying and selling crops.

288 **Animal production**

289 *Production:* breeding and rearing livestock and poultry; collecting live animal products, such as milk,
290 eggs, honey, and wool; raising animals in captivity; operating animal farms.

¹ Based on United Nations (UN) International Standard Industrial Classification of All Economic Activities.

² Primary processing is processing in order to prepare agriculture, aquaculture, and fishing products for primary markets, as defined by the Food and Agriculture Organization (FAO), [Post-harvest processing](#), accessed 9 February 2021.

- 291 *Primary processing*: cleaning and washing animal products; processing of milk; candling eggs;
292 slaughtering animals for meat; deboning, cutting, smoking, and freezing meat; separating fur, skins,
293 feathers, and down.
- 294 *Aggregation*: gathering live animals and animal products from multiple farms for sale to downstream
295 markets, which can involve transaction via intermediary organizations or single actors.
- 296 *Storage*: keeping animal products in a way that preserves their quality and keeps them safe from, for
297 example, harmful bacteria.
- 298 *Transportation*: using traditional or mechanized transportation to move live animals and animal
299 products.
- 300 *Trading*: buying and selling live animals and animal products.

301 **Aquaculture**

- 302 *Production*: culturing or farming of aquatic organisms, such as fish, mollusks, and crustaceans, in
303 captive conditions that involve regular stocking, feeding, and protecting against predators; this
304 includes both capture-based aquaculture (CBA) and hatchery-based aquaculture (HBA) systems. It
305 also includes growing of laver and other seaweeds.
- 306 *Primary processing*: slaughtering fish, mollusks, and crustaceans; deshellings crustaceans;
307 undertaking service activities incidental to the operation of fish hatcheries and fish farms.
- 308 *Aggregation*: amassing fish, mollusks, and crustaceans from multiple sources for sale to downstream
309 markets, which can involve transaction via intermediaries or single actors.
- 310 *Storage*: keeping aquaculture products in a way that preserves their quality and keeps them safe
311 from, for example, harmful bacteria.
- 312 *Transportation*: using traditional or mechanized transportation to move aquaculture products.
- 313 *Trading*: buying and selling aquaculture products.

314 **Fishing**

- 315 *Fishing*: capturing aquatic organisms, such as fish, mollusks, and crustaceans, by hand or fishing
316 gear, which can be conducted on the intertidal shoreline via shore-based netting, or by commercial
317 fishing vessels in inshore, coastal waters, or offshore waters.
- 318 *Primary processing*: onboard handling of live wild aquatic organisms after capture and through to
319 point of landing.
- 320 *Aggregation*: amassing fish, mollusks, and crustaceans from multiple sources to downstream
321 markets, which can involve intermediary organizations or single actors.
- 322 *Storage*: keeping fish and fish products in a way that preserves their quality and keeps them safe
323 from, for example, harmful bacteria.
- 324 *Transportation*: using traditional or mechanized transportation to move fish and fish products.
- 325 *Trading*: buying and selling fish and fish products.

326 **Business relationships**

- 327 An organization's business relationships include relationships with business partners, entities in its
328 value chain, (including entities those beyond the first tier), and any other entities directly linked to its
329 operations, products, or services. The following types of business relationships are of particular
330 relevance when identifying the impacts of organizations in the agriculture, aquaculture, and fishing
331 sectors.
- 332 *Primary producers*: Agriculture, aquaculture, and fishing organizations can often buy their products
333 from primary producers who actively farm or fish. Primary producers can be other organizations or
334 persons, such as farmers and fishers, categorized as self-employed workers.

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

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

339 1.2 The sectors and sustainable development

340 Agriculture, aquaculture, and fishing sectors are fundamental to supporting food systems and
341 ensuring the right to food is enjoyed by all. The sectors also provide non-food products, such as
342 fibers, fuels, and rubber.

343 In the context of sustainable development, significant impacts associated with these sectors' activities
344 are linked to intensive use of natural resources, the location of operations in rural areas, the labor
345 needed for production, as well as the need to meet food demands for the world's growing population
346 while staying within the planetary environmental limits. Human rights impacts are associated with both
347 the use of land and natural resources and the vulnerability of rural workers and communities.

348 Over 2.5 billion people living in rural areas depend on the agriculture, aquaculture, and fishing sectors
349 for jobs and income. At the same time, agriculture, aquaculture, and fishing are among the sectors
350 with the highest informality rates in employment contracts, commercial transactions, and land tenure,
351 posing challenges to upholding labor and human rights. Many rural workers, including farmers and
352 fishers, live below the poverty line, needing better economic opportunities, access to technology and
353 training. In addition, organizations' purchasing practices and prices offered for products are the major
354 source of impact on small producers.

355 Agriculture, aquaculture, and fishing organizations rely on land, water, and fishery resources for
356 production, and have a substantial environmental footprint. For example, agriculture accounts for an
357 estimated 70% of freshwater withdrawals globally. Estimate show that the agriculture sector is the
358 second-largest source of greenhouse gas (GHG) emissions after the energy sector, while fishing
359 accounts for at least 1.2% of the global oil consumption. Animal production is also associated with
360 impacts on animal health and welfare and on human health through antimicrobial resistance and
361 zoonotic disease.

362 The agriculture sector has been responsible for 70% of losses in terrestrial biodiversity as a result of
363 land conversion, deforestation, and impacts of pesticides. Fishing has had significant impacts on
364 global ocean biodiversity, with one third of fish stocks being overfished and about 60% fished at their
365 maximum sustainable levels. Agriculture, aquaculture, and fishing production relies on natural
366 resources and hence on biodiversity. Implementing sustainable practices across the sectors is a
367 fundamental condition for food security and nutrition.

368 Climate change poses major challenges for the agriculture, aquaculture, and fishing sectors. It can
369 affect yields, disrupt production, and supply chains, jeopardizing food security. Impacts of climate
370 change can also deepen poverty levels, displace people from their lands, and thus increase migration.
371 Agriculture, aquaculture, and fishing organizations can contribute to food security through facilitating
372 adaptation and resilience, reducing food loss, and providing income and livelihoods.

373 Sustainable Development Goals

374 The Sustainable Development Goals (SDGs), part of the 2030 Agenda for Sustainable Development
375 adopted by the 193 United Nations member states, comprise the world's comprehensive plan to
376 achieving sustainable development.

377 Since the Sustainable Development Goals and the targets associated with them are integrated and
378 indivisible, and so agriculture, aquaculture, and fishing organizations have the potential to impact all
379 SDGs by either enhancing their positive contributions or avoiding and mitigating negative impacts.

380 Agriculture, aquaculture, and fishing are central to the 2030 Agenda. Providing food and helping reduce
381 poverty, the sectors are best positioned to contribute to the **Goal 2: Zero Hunger**. Agriculture,
382 aquaculture, and fishing sectors are also the world's biggest employer and the largest economic sectors

383 for many countries, impacting directly on **Goal 1: No Poverty** and **Goal 8: Decent Work and Economic**
 384 **Growth**.

385 By sustainably managing and efficiently using natural resources (**Goal 12: Responsible Consumption**
 386 **and Production**), agriculture has the potential to revitalize rural landscapes, contributing to **Goal 15:**
 387 **Life on land**. Aquaculture and fishing sectors can contribute to healthy marine and aquatic ecosystems
 388 covered under the **Goal 14: Life Below Water**. By implementing resilient fishing and farming practices,
 389 agriculture, aquaculture, and fishing sectors can help increase productivity, and build the adaptive
 390 capacity to respond to climate change (**Goal 13: Climate Action**).

391 Table 2 highlights connections between the likely material topics for the agriculture, aquaculture, and
 392 fishing sectors and the SDGs. These linkages were identified based on an assessment of the impacts
 393 described in each likely material topic, the targets associated with each SDG, and existing mapping
 394 undertaken for the sectors. It is a starting point for organizations that seek to integrate the SDGs into
 395 their reporting.

396 Table 2: Linkages between the likely material topics for the Agriculture, aquaculture, and fishing sectors and the
 397 SDGs.

Likely material topics	Corresponding SDGs
1. Emissions	Goal 3: Good Health and Well-being
	Goal 12: Responsible Consumption and Production
	Goal 13: Climate Action
	Goal 14: Life Below Water
	Goal 15: Life on Land
2. Climate adaptation and resilience	Goal 1: No poverty
	Goal 2: Zero Hunger
	Goal 13: Climate Action
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
4. Natural ecosystem conversion	Goal 15: Life on Land
	Goal 13: Climate Action
	Goal 14: Life Below Water
5. Soil health	Goal 15: Life on Land
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
7. Water and effluents	Goal 6: Clean Water and Sanitation
	Goal 12: Responsible Consumption and Production
	Goal 14: Life Below Water

8. Waste and food loss	Goal 2: Zero Hunger
	Goal 12: Responsible Consumption and Production
9. Food security	Goal 2: Zero Hunger
	Goal 14: Life Below Water
	Goal 13: Climate Action
	Goal 15: Life on Land
	Goal 17: Partnerships for the Goals
10. Food safety	Goal 2: Zero Hunger
	Goal 3: Good Health and Well-being
11. Animal health and welfare	Goal 15: Life on Land
12. Local communities	Goal 1: No poverty
	Goal 2: Zero Hunger
	Goal 5: Gender Equality
	Goal 6: Clean Water and Sanitation
	Goal 13: Climate Action
	Goal 15: Life on Land
	Goal 16: Peace and Justice Strong Institutions
13. Land and resource rights	Goal 1: No Poverty
	Goal 2: Zero Hunger
	Goal 12: Responsible Consumption and Production
	Goal 15: Life on Land
	Goal 16: Peace and Justice Strong Institutions
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
15. Non-discrimination and equal opportunity	Goal 5: Gender Equality
	Goal 8: Decent Work and Economic Growth
	Goal 10: Reduced Inequalities
	Goal 14: Life Below Water
	Goal 16: Peace and Justice Strong Institutions
16. Forced labor	Goal 5: Gender Equality
	Goal 8: Decent Work and Economic Growth
	Goal 16: Peace and Justice Strong Institutions
17. Child labor	Goal 1: No Poverty

	Goal 8: Decent Work and Economic Growth
	Goal 16: Peace, Justice and Strong Institutions
18. Freedom of association and collective bargaining	Goal 8: Decent Work and Economic Growth
	Goal 16: Peace and Justice Strong Institutions
19. Occupational health and safety	Goal 3: Good Health and Well-being
	Goal 8: Decent Work and Economic Growth
20. Employment practices	Goal 1: No Poverty
	Goal 8: Decent Work and Economic Growth
	Goal 10: Reduced Inequalities
21. Living income	Goal 1: No Poverty
	Goal 2: Zero Hunger
	Goal 8: Decent Work and Economic Growth
	Goal 10: Reduced Inequalities
22. Economic inclusion	Goal 1: No Poverty
	Goal 2: Zero Hunger
	Goal 8: Decent Work and Economic Growth
	Goal 9: Industry, Innovation and Infrastructure
	Goal 11: Sustainable Cities and Communities
	Goal 14: Life Below Water
23. Supply chain traceability	Goal 12: Responsible Consumption and Production
	Goal 14: Life Below Water
	Goal 16: Peace, Justice and Strong Institutions
24. Public policy and lobbying	Goal 2: Zero Hunger
	Goal 14: Life Below Water
	Goal 15: Life on Land
	Goal 16: Peace and Justice Strong Institutions
25. Anti-competitive behavior	Goal 16: Peace and Justice Strong Institutions
26. Anti-corruption	Goal 16: Peace and Justice Strong Institutions

2. Likely material topics

399 The following section outlines the likely material topics for the Agriculture, Aquaculture, and Fishing
400 sectors. Each topic describes the most significant impacts related to the topic and lists disclosure that
401 have been identified as relevant for reporting on the topics by the sectors. The organization needs to
402 review each topic in this section and determine whether it is material for it to report on.

403 2.1 Emissions

404 **This topic addresses emissions into air, including greenhouse gas (GHG), ozone-depleting**
405 **substances (ODS), and nitrogen oxides (NOX) and sulfur oxides (SOX), among other**
406 **significant air emissions. Emissions can have negative impacts on air quality, ecosystems,**
407 **and human and animal health. GHG emissions are a major contributor to climate change.**

408 Agriculture is responsible for large portions of two of the most significant sources of greenhouse gas
409 (GHG) emissions: carbon dioxide (CO₂) and methane (CH₄). From 2007 to 2016, activities in the
410 sector accounted for approximately 13% of CO₂, 44% of CH₄, and 82% of nitrous oxide (N₂O)
411 emissions from human activities globally; these figures totaled 23% of total net anthropogenic
412 emissions of GHGs.

413 Crop production primarily produces GHG emissions through soil cultivation, with the largest
414 discharges coming from soil tillage, soil decomposition, and burning vegetation and crop residues
415 (see *Soil health*). Fertilizers, pesticides, and fossil fuels used to power machinery and vehicles also
416 release GHG emissions. Crop residue decomposition and burning plant biomass are other direct
417 sources of emissions, including CO₂, N₂O, and particulate matter.

418 Ruminant livestock produce GHG emissions during their respiration and digestion processes. Animal
419 manure also emits gases, such as CH₄, N₂O, and CO₂. In 2014, livestock on managed pastures and
420 rangelands accounted for over half of total anthropogenic N₂O emissions from agriculture. GHGs can
421 also be emitted from the use of fossil fuel to power machinery and vehicles in animal production.

422 Impacts associated with crop and animal production also include emissions arising from land use
423 change, including the conversion of land from a natural ecosystem to use for agriculture or
424 aquaculture (see *Natural ecosystem conversion*). Land use changes can contribute to the release of
425 large amounts of CO₂, especially when mature forests or grasslands are cleared.

426 Land conversion for crops used as animal and fish feed is an additional source of emissions in animal
427 production and aquaculture; in aquaculture, it is the leading cause of other indirect (Scope 3)
428 emissions. Emissions are also associated with production, processing, and transportation of feed.

429 Land-based aquaculture farms can require high energy levels to regulate water temperature and
430 circulation, contributing to GHG emissions through combustion of fuel.

431 In fishing, emissions can be associated with burning diesel fuel, marine fuel oils, and intermediate fuel
432 oils. Such fuel is used to power vessels, process fish on board, and freeze or refrigerate fish. Besides
433 contributing to GHG emissions, combustion of fuels produces localized air pollution. Use of
434 refrigerants to store fish products can result in emissions of ozone-depleting substances.

435 Oceans have a high capacity to store anthropogenic carbon, and the largest storage pools are found
436 in marine sediments. Trawls are one of the most commonly used types of fishing gear, with about a
437 quarter of marine fish caught by bottom trawls worldwide. Trawls that get dragged along the seabed
438 cause the release of CO₂ stored in sediments of the ocean floor. It is estimated that bottom trawling
439 causes one gigaton of emissions a year.

440 **What to report**

441 If the organization has identified emissions as a material topic, this section lists the disclosures that
 442 have been identified as relevant for reporting on the topic by the agriculture, aquaculture, and fishing
 443 sectors.

Standard	Disclosure	Additional sector recommendations
Management of the topic		
GRI 103: Material Topics	Disclosure MT-3 Management of material topics	
Topic Standards disclosures		
GRI 305: Emissions 2016	Disclosure 305-1 Direct (Scope 1) GHG emissions	When reporting on gross <u>direct (Scope 1) GHG emissions</u> in metric tons of CO ₂ equivalent, include emissions associated with natural ecosystem conversion.
	Disclosure 305-2 Energy indirect (Scope 2) GHG emissions	
	Disclosure 305-3 Other indirect (Scope 3) GHG emissions	When reporting on gross <u>other indirect (Scope 3) GHG emissions</u> in metric tons of CO ₂ equivalent, include emissions associated with natural ecosystem conversion.
	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	

444 **Resources and references**

445 [GRI 305: Emissions 2016](#) lists authoritative intergovernmental instruments and other sources relevant
 446 to reporting on this topic.

447 The additional intergovernmental instruments and references used to develop this topic description,
 448 as well as further resources that may be helpful for understanding and reporting on the topic by the
 449 agriculture, aquaculture and fishing sectors are listed in the Bibliography on page 74.

450 **2.2 Climate adaptation and resilience**

451 **Organizations contribute to climate change and are simultaneously affected by it. Climate**
 452 **adaptation and resilience refers to how organizations are adjusting to current and anticipated**
 453 **climate-related risks, as well as contributing to the ability of societies and economies to**
 454 **withstand impacts from climate change.**

455 For organizations in the agriculture, aquaculture and fishing sectors, impacts related to climate
 456 change include physical environmental impacts driven by acute events and long-term shifts in climate
 457 patterns. Climate change has resulted in increased frequency, intensity, and duration of heat-related
 458 events, including more volatile weather systems in most world regions. Impacts of climate change cut
 459 across environmental and socioeconomic systems.

460 In recent decades, climate change has caused a negative impact on crop yields and suitability. The
 461 warmer winters related to climate change pose a risk to harvests, specifically affecting fruits and
 462 vegetables that need a period of colder weather to produce viable harvests. According to the
 463 Intergovernmental Panel on Climate Change (IPCC), between 34 and 600 million more people could
 464 suffer from hunger by 2080, depending on how climate change scenarios unfold.

465 A major concern for the agriculture sector is the exacerbation of land degradation caused by global
 466 warming. This can lead to increased rainfall intensity, flooding, drought frequency and severity, pest
 467 prevalence, diseases, heat stress, dry spells, wind, sea-level rise, wave action, and permafrost thaw.

468 Aquaculture and fishing operations are likely to be affected by negative impacts such as water
 469 temperature increase, oxygen deficit, sea-level rise, decreased pH levels, and changes in productivity
 470 patterns. Small-scale fishers in tropical, less developed, and poor regions are particularly vulnerable
 471 to climate change impacts. Aquaculture and inland fishing are threatened by changes in precipitation
 472 and water management, increased stress on freshwater resources, and frequency and intensity of
 473 extreme climate events.

474 An organization's failure to adapt to climate change-related impacts can lead to disruptions in
 475 operations, loss of livelihood for people, and increased occupational health and safety impacts. This
 476 can affect an organization's workers, suppliers, customers, and shareholders as well as smallholder
 477 farmers, indigenous people, and local communities. Disruptions in operations can leave demands for
 478 agriculture, aquaculture, and fishing products unfulfilled, in turn causing negative impacts on food
 479 security.

480 In addition to their key role in climate change mitigation (see Emissions), organizations can take
 481 action to adapt to climate change and build resilience. One broadly identified adaptation option for the
 482 agriculture, aquaculture, and fishing sectors is diversification in production, including reliance on wider
 483 genetic base and genetic improvements for tolerance to heat and drought. Mitigating food loss is also
 484 a form of climate adaptation as less lost food means less land is needed for the same output.
 485 Preservation of indigenous and local knowledge of biodiversity is also recognized as a contributing
 486 factor to enhancing climate resilience, as it focuses on preserving ecosystems and offers adaptive
 487 strategies to cope with unfavorable climatic conditions in local areas.

488 **What to report**

489 If the organization has identified climate adaptation and resilience as a material topic, this section lists
 490 the disclosures that have been identified as relevant for reporting on the topic by the agriculture,
 491 aquaculture, and fishing sectors.

Standard	Disclosure	Additional sector recommendations
Management of the topic		
GRI 103: Material Topics	Disclosure MT-3 Management of material topics	
Topic Standards disclosures		

GRI 201: Economic Performance 2016	Disclosure 201-2 Financial implications and other risks and opportunities due to climate change	Describe the climate change-related scenarios used for identifying the risks and opportunities posed by climate change that have the potential to generate substantive changes in operations, revenue, or expenditure.
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492 **Resources and references**

493 [GRI 201: Economic Performance 2016](#) lists authoritative intergovernmental instruments and other
 494 sources relevant to reporting on this topic.

495 The additional intergovernmental instruments and references used to develop this topic description,
 496 as well as further resources that may be helpful for understanding and reporting on the topic by the
 497 agriculture, aquaculture and fishing sectors are listed in the Bibliography on page 75.

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498 2.3 Biodiversity

499 **Biodiversity not only has intrinsic value, but is also vital to climate, human and cultural health**
500 **and well-being, food security and economic prosperity. This topic covers impacts on**
501 **biodiversity, including on plant and animal species, and genetic diversity.**

502 Biodiversity is essential for food production and the supply of a wide range of ecosystem services.
503 80% of terrestrial biodiversity is found in indigenous peoples' lands and forests. Respecting
504 indigenous peoples' rights to land and natural resources is key to biodiversity conservation.

505 According to the International Union for Conservation of Nature (IUCN), major threats to biodiversity
506 include habitat loss and degradation, overexploitation of biological resources, pollution, climate
507 change, and introduced invasive species.

508 Impacts from agriculture, aquaculture, and fishing on biodiversity include air, soil, and water
509 contamination, deforestation, soil erosion, and sedimentation of waterways. Other impacts involving
510 species include increased mortality rates, habitat fragmentation, and the introduction of invasive
511 species and pathogens leading to species loss or extinction.

512 Biodiversity generally declines as agriculture, aquaculture, or fishing activities intensify. This is driven
513 by natural ecosystem conversion and a change of habitat (see *Natural ecosystem conversion*).

514 Biodiversity can be further impacted by monoculture, also known as monocropping, whereby the
515 same crops or animal species are grown or bred year after year. While this practice may increase
516 production or reduce emissions, it decreases agrobiodiversity on farms and plantations and
517 biodiversity in adjacent environments.

518 Continuous monocropping in agriculture can result in a buildup of pests and diseases. Monocultures
519 usually require high pesticides use, which can be toxic to many non-target species, including
520 pollinators – insects or animals that carry pollen from one plant or plant part to another. Pollination is
521 a crucial ecosystem service, especially within agriculture, as 75% of global food crops rely on it.

522 Agriculture and aquaculture operations can also impact species that exist in natural ecosystems'
523 surrounding areas. For example, animal production can be a major source of surplus nitrogen and
524 phosphorous pollution, which can lead to eutrophication in adjacent lakes and rivers, rendering them
525 uninhabitable for aquatic biodiversity (see *Water and effluents*). This can impact the right to food and
526 other human rights of local communities. A similar impact can be caused by aquaculture activities due
527 to a buildup of fish excrement in waterbodies. Aquaculture can also result in impacts on local
528 biodiversity through escapes from aquaculture farms, which in turn can establish themselves to
529 compete with the area's native biodiversity.

530 Fishing is one of the most significant drivers of declining ocean biodiversity, due to overfishing, by-
531 catch, illegal, unreported, and unregulated fishing (IUU), and introduction of non-locally adapted
532 species. Overfishing leads to impacts on the biodiversity of marine ecosystems by altering the
533 population size and body-size composition of targeted species as well as non-targeted species.
534 These alterations result in impacts on predator-prey relationships and cause shifts in trophic
535 structures (see *Natural ecosystem conversion*). Overfishing can also be driven by capture-based
536 aquaculture, which relies on wild fish stocks for feed. In 2017, 34.2% of the world's marine fish stocks
537 were classified as overfished, and the proportion of world marine fish stocks within biologically
538 sustainable levels had declined to 65.8% from 90% in 1974.

539 In addition, in fishing lost or discarded fishing gear, known as ghost gear, continues to trap species, a
540 phenomenon known as ghost fishing. This can pose a threat to both target and non-target species,
541 potentially killing endangered and protected species and damaging underwater habitats. Ghost gear
542 contributes to marine pollution (see *Waste and food loss*).

543 **What to report**

544 If the organization has identified biodiversity as a material topic, this section lists the disclosures that
 545 have been identified as relevant for reporting on the topic by the agriculture, aquaculture, and fishing
 546 sectors.

Standard	Disclosure	Additional sector recommendations
Management of the topic		
GRI 103: Material Topics	Disclosure MT-3 Management of material topics	
Topic Standards disclosures		
GRI 304: Biodiversity 2016	Disclosure 304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	
	Disclosure 304-2 Significant impacts of activities, products, and services on biodiversity	
	Disclosure 304-3 Habitats protected or restored	
	Disclosure 304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations	
Additional sector disclosures		
<p>The following additional sector disclosures are for organizations in the aquaculture and fishing sectors:</p> <p>Report the volume in metric tons of aquatic organisms caught or harvested by species scientific name, fishing or farming method, and location of origin.</p>		

547 **Resources and references**

548 [GRI 304: Biodiversity 2016](#) lists authoritative intergovernmental instruments and other sources
 549 relevant to reporting on this topic.

550 The additional intergovernmental instruments and references used to develop this topic description,
 551 as well as further resources that may be helpful for understanding and reporting on the topic by the
 552 agriculture, aquaculture and fishing sectors are listed in the Bibliography on page 75.

553 **2.4 Natural ecosystem conversion**

554 **Natural ecosystem conversion refers to the changing of a natural ecosystem to another use or**
 555 **the profound change in a natural ecosystem’s species composition, structure, or function.**
 556 **This topic covers impacts related to natural ecosystem conversion, including impacts related**
 557 **to discrete incidents of land clearance as well as severe degradation or introduction of**
 558 **management practices that lead to substantial and sustained change in natural ecosystems.**

559 Natural ecosystems perform important services, including absorbing and storing vast quantities of
 560 carbon dioxide (CO₂). When natural ecosystems are converted to other uses, stored carbon can be
 561 released into the atmosphere, contributing to greenhouse gas (GHG) emissions and climate change
 562 (see *Emissions* and *Climate adaptation and resilience*). Estimates show that the loss of primary
 563 tropical forest in 2019 resulted in the release of more than 2 billion tons of CO₂.

564 In the agriculture and aquaculture sectors, natural ecosystem conversion can be the result of using
 565 land and aquatic environments for animal breeding, grazing, crop production, aquaculture production,
 566 and ancillary activities. This can occur rapidly, with a large change taking place in a short time, or
 567 gradually, with incremental changes over a long time.

568 Terrestrial ecosystem conversion, in particular, can occur as crop or animal production expands. It
 569 can include deforestation as well as conversion of other ecosystems, such as grasslands, woodlands,
 570 or savannas. Deforestation occurs when primary and secondary forests are cleared, often by burning.

571 Aquatic ecosystem conversion happens as the result of reclamation of coastal, lake, river, wetland,
 572 peatland, or benthic ecosystems. Conversion of aquatic environments by aquaculture operations can
 573 include the clearing of arable land, mangroves, salt marshes, and wetlands or sustained changes to
 574 lake and river ecosystems to make them fit for aquatic farming sites. Aquaculture also relies heavily
 575 on crops for fish feed and can contribute to the conversion of terrestrial ecosystems.

576 In fishing, bottom trawling causes impacts on the seabed’s physical structure, affecting bottom plants,
 577 corals, sponges, fish, and other animals. This can profoundly change how natural benthic ecosystems
 578 function or lead to their destruction, causing impacts on biodiversity and CO₂ emissions (see
 579 *Emissions*).

580 Conversion of natural ecosystems can also lead to other environmental impacts, such as loss of
 581 biodiversity (see *Biodiversity*), acceleration of soil erosion (see *Soil health*), and increased run-off and
 582 effluent pollution (see *Water and effluents*).

583 People can be displaced due to physical changes to the landscapes surrounding their communities or
 584 degradation or depletion of natural resources or ecosystem services that the community relies on (see
 585 *Local communities* and *Land and resource rights*). Loss of natural ecosystems and resources can
 586 cause food insecurity. For indigenous peoples, it can result in loss of cultural and spiritual heritage
 587 and livelihoods. Natural ecosystem conversion also causes impacts on the rights of indigenous
 588 people and local communities to self-determination and self-governance (see *Rights of indigenous*
 589 *peoples*).

590 **What to report**

591 If the organization has identified natural ecosystem conversion as a material topic, this section lists
 592 the disclosures that have been identified as relevant for reporting on the topic by the agriculture,
 593 aquaculture, and fishing sectors.

Standard	Disclosure	Additional sector recommendations
Management of the topic		
GRI 103: Material Topics	Disclosure MT-3 Management of material topics	– Describe policies or commitments to reduce or eliminate natural ecosystem conversion from production in the

		<p>organization's activities, including target and cut-off dates;³</p> <ul style="list-style-type: none"> - Report multi-stakeholder or sectoral initiatives intended to reduce or eliminate natural ecosystem conversion the organization participates in; - Describe how the organization ensures that its <u>suppliers</u> comply with its natural ecosystem conversion policies and commitments, including through sourcing policies and contracts; - Describe the tools and systems used for monitoring natural ecosystem conversion in the organization's own activities, business relationships, and sourcing locations.
Additional sector disclosures		
<p>Report the percentage of the total production from own activities and suppliers that has not caused or contributed to natural ecosystem conversion and methods for determining that, for example, certification, sourcing from low-risk jurisdictions, or sourcing from verified suppliers.</p>		
<p>Report the percentage of the total production from own activities and suppliers, for which it is unknown whether it has caused or contributed to natural ecosystem conversion, and actions being taken to improve traceability.</p>		
<p>Report the size in hectares, location, and <u>type</u> of the natural ecosystem on the land owned, leased, or managed by the organization, which has been converted since the appropriate cut-off date. <i>Note: Natural ecosystem type can be characterized by biome, vegetation type, and/or high conservation value status as relevant to region and regulatory context.</i></p>		
<p>Size in hectares, location, and type of the natural ecosystem converted by suppliers or in sourcing areas since the appropriate cut-off date.</p>		

594 **Resources and references**

595 The intergovernmental instruments and references used to develop this topic description, as well as
596 further resources that may be helpful for understanding and reporting on the topic by the agriculture,
597 aquaculture and fishing sectors are listed in the Bibliography on page 76.

³ A cut-off date is the past starting date of the period for which the organization reports on conversion, conversion after the cut-off date renders a product non-compliant with commitments and policies on natural ecosystem conversion.

Note: Appropriate cut-off dates may be selected based on cut-off dates of organization's policies, certification programs, sectoral/regional cut-off dates, legislation, and/or on availability of monitoring data. If an organization has not identified an appropriate cut-off date, then one should be calculated for the past five years.

598 **2.5 Soil health**

599 **Soil health is the capacity of soil to function as a living ecosystem and to sustain plant and**
 600 **animal productivity, maintain or enhance water and air quality, and promote plant and animal**
 601 **health. This topic covers impacts on soil health, including soil erosion, reduction in soil**
 602 **fertility, salinization, and waterlogging.**

603 Recent estimates suggest that 80% of land used for agriculture suffers from moderate to severe
 604 erosion. Although a naturally occurring process, soil erosion can accelerate greatly through
 605 agricultural activities, including removal of vegetation cover, tillage, soil compaction, and overgrazing
 606 by livestock, particularly when these practices are conducted on steep slopes in areas subjected to
 607 intense rainstorms or wind events.

608 In agriculture, original vegetation cover is removed to make land available for crop production or
 609 animal grazing. Agricultural crops rarely hold onto the topsoil as well as the original vegetation cover,
 610 increasing soil erosion and potentially reducing soil fertility over time. Estimates show that half of the
 611 topsoil globally has been lost in the last 150 years.

612 Soil erosion can also be accelerated by tillage. Conventional tillage inverts and breaks up the soil,
 613 destroys the soil structure, and buries crop residues. Minimum till or no-till methods reduce tillage
 614 area and/or tillage depth, as practiced in regenerative agriculture. Rates of soil erosion from
 615 agricultural fields exceed rates of soil formation at an estimate currently ranging between 10 to 20
 616 times higher when there is no tillage to over 100 times higher when conventional tillage is used.

617 Tillage can also increase the soil's sensitivity to compaction, which can lead to impacts on soil
 618 biodiversity. Tilled soils have less capacity to support loads applied to the ground and are
 619 consequently more sensitive to compaction caused by agricultural machinery. A reduction in soil
 620 carrying capacity can also come from overgrazing. Grazing livestock can cause impacts on soil
 621 structure through excessive defoliation, defecation, and trampling.

622 Fertilizers, both organic and inorganic, as well as pesticides have an impact on soil health (see
 623 *Pesticides use*). Excessive use of fertilizer can increase soil acidity levels. Pesticides use can impact
 624 soil communities by influencing the performance of soil biota or modifying it. This can affect the entire
 625 soil food web in terms of abundance and composition. Incorrect fertilizer and pesticide application
 626 results in runoff to water, which can affect local communities, including indigenous peoples, and their
 627 human rights to health, food, clean water, and livelihoods.

628 **What to report**

629 If the organization has identified soil health as a material topic, this section lists the disclosures that
 630 have been identified as relevant for reporting on the topic by the agriculture, aquaculture, and fishing
 631 sectors.

Standard	Disclosure	Additional sector recommendations
Management of the topic		
GRI 103: Material Topics	Disclosure MT-3 Management of material topics	Describe the soil management plan of the organization, including the approach to fertilizer application.

632 **Resources and references**

633 The intergovernmental instruments and references used to develop this topic description, as well as
 634 further resources that may be helpful for understanding and reporting on the topic by the agriculture,
 635 aquaculture and fishing sectors are listed in the Bibliography on page 75.

636 **2.6 Pesticides use**

637 **Pesticides are chemical or biological substances intended for repelling, destroying, or**
638 **controlling any pest or regulating plant growth. Pesticides include herbicides, insecticides,**
639 **fungicides, nematicides, and rodenticides. This topic covers the impacts of pesticides use,**
640 **including major impact of toxicity to target and non-target organisms.**

641 Pesticides can be used in crop, animal, and aquaculture production. Because pesticides are toxic,
642 inadequately applying or managing them can induce health effects in humans, including on
643 reproduction, immune, and nervous systems, as well as threaten food security and livelihoods.
644 Toxicity depends on the pesticide’s function and other factors, such as how it is used and disposed.

645 Pesticides, usually with high toxicity, can be unregistered or banned in some countries but available in
646 others. Pesticides with high toxicity can stay in soil and water for years, with long-term impacts on
647 local communities, including indigenous peoples, and the local environment. (see *Waste and food*
648 *loss*).

649 Pesticides can have negative impacts on biodiversity, for example, those targeting insects or weeds
650 can be toxic to birds, fish, and non-targeted plants and insects (see *Biodiversity*). Pesticides also have
651 the potential to contribute to greenhouse gas (GHG) emissions (see *Emissions*).

652 People at risk of being most affected are workers applying pesticides and others in the immediate
653 area during or right after pesticides are spread. Exposure to pesticides of certain vulnerable groups,
654 such as women and children, can be particularly dangerous. In some world regions, pregnant and
655 breastfeeding women may themselves be tasked with applying pesticides (see *Occupational health*
656 *and safety* and *Local communities*). General populations can be exposed to pesticide residue through
657 food and water (see *Water and effluents* and *Food safety*).

658 In crop production, pesticides are widely used to protect or increase yields and the number of times
659 per year a crop can be grown on the same land. The Food and Agriculture Organization (FAO)
660 estimates that in developing countries, 80% of the projected increase in food production needed to
661 keep pace with population growth are projected to come from greater crop yields. This could trigger
662 further intensification of pesticides use in an attempt to generate higher yields.

663 In animal production, pesticides are used to control weeds and various pests, such as parasites. In
664 aquaculture, pesticides are used to treat pests, such as lice, that can cause infections in fish.
665 Pesticides are usually administered via fish feed and water, which can have impacts on non-targeted
666 species, such as crustaceans, resulting in biodiversity loss. Water contamination and accumulation of
667 chemicals in fish targeted for human consumption can result in public health impacts. Even low levels
668 of pesticide residue in water can cause chronic disease in humans.

669 **What to report**

670 If the organization has identified pesticides use as a material topic, this section lists the disclosures
671 that have been identified as relevant for reporting on the topic by the agriculture, aquaculture, and
672 fishing sectors.

Standard	Disclosure	Additional sector recommendations
Management of the topic		

GRI 103: Material Topics	Disclosure MT-3 Management of material topics	<ul style="list-style-type: none"> - Describe the pest management plan of the organization, including the rationale for the selection of chemicals and any other techniques of pest control. - Describe the training provided to workers on pest management and the application of pesticides.
Additional sector disclosures		
Report the volume and intensity of pesticides used, by type.		

673 **Resources and references**

674 The intergovernmental instruments and references used to develop this topic description, as well as
675 further resources that may be helpful for understanding and reporting on the topic by the agriculture,
676 aquaculture and fishing sectors are listed in the Bibliography on page 77.

677 **2.7 Water and effluents**

678 **Recognized by the United Nations as a human right, access to freshwater is essential for**
 679 **human life and wellbeing. The amount of water withdrawn and consumed by an organization**
 680 **and the quality of its discharges can have impacts on ecosystems and people.**

681 The agriculture sector accounts for an estimated 70% of total water withdrawn globally. Withdrawn
 682 water is primarily used to irrigate land for crops. Water is also used for pesticide and fertilizer
 683 application, crop cooling, and frost control. In animal production, water is used for animal hydration
 684 and to clean animal housing and machinery, including milking equipment.

685 Water has critical importance to agricultural productivity – irrigated agriculture land is, on average,
 686 twice as productive per unit as non-irrigated land. Irrigation can be achieved through different
 687 methods, including surface irrigation, using gravity flow, sprinkler application, or subsurface irrigation.
 688 Water can be withdrawn from groundwater or surface water, such as lakes and reservoirs, or be in the
 689 form of treated wastewater or desalinated water. Intensive water withdrawal can decrease aquifer
 690 levels, which reduces the long-term sustainability of water resources and increases access cost for all
 691 users (see *Local communities*).

692 Pesticide residues are frequently found in water bodies. Animal effluents, together with agricultural
 693 fertilizer and pesticide effluents, can contribute to pollution of surface and groundwater as well as lead
 694 to eutrophication and acidification of water, causing negative impacts on biodiversity. Water
 695 contamination can have impacts on the right to water and other human rights of people, including
 696 those of local communities and indigenous people, affecting their access to natural resources, health,
 697 and livelihoods.

698 Impacts from aquaculture production include nutrient buildup in water bodies surrounding fish farms
 699 as a result of discharges. In high-density farms, high quantities of fish waste are discharged to water,
 700 potentially depleting oxygen levels and creating algal blooms that can lead to eutrophication.

701 In fishing operations, wastewater can be discharged to sea from fishing vessels. This includes water
 702 used to store fish aboard the vessel, which can contain fish waste from fish gutting and bleeding as
 703 well as materials and coating from the hold itself and onboard refrigeration systems. Wastewater
 704 could also come from cleaning holds and machinery, containing detergents, and disinfectants.

705 **What to report**

706 If the organization has identified water and effluents as a material topic, this section lists the
 707 disclosures that have been identified as relevant for reporting on the topic by the agriculture,
 708 aquaculture, and fishing sectors.

Standard	Disclosure	Additional sector recommendations
Management of the topic		
GRI 103: Material Topics	Disclosure MT-3 Management of material topics	
Topic Standards 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	The following additional sector recommendation is for organizations in the fishing sector: Report total volume of water and <u>effluents</u> discharged by MARPOL categories and describe how these are disposed.
	Disclosure 303-5 Water consumption	

709 **Resources and references**

710 [GRI 303: Water and Effluents 2018](#) lists authoritative intergovernmental instruments and other
711 sources relevant to reporting on this topic.

712 The additional intergovernmental instruments and references used to develop this topic description,
713 as well as further resources that may be helpful for understanding and reporting on the topic by the
714 agriculture, aquaculture and fishing sectors are listed in the Bibliography on page 77.

715 2.8 Waste and food loss

716 **Waste refers to anything a holder discards, intends to discard, or is required to discard. When**
717 **inadequately managed, waste can have significant negative impacts on the environment and**
718 **human health, extending beyond locations where waste is generated and discarded. This topic**
719 **covers impacts from waste, including products originally intended for human consumption as**
720 **food.**

721 Waste from organizations in the agriculture, aquaculture, and fishing sectors can include organic by-
722 products, such as crop waste, animal waste and manure, animal carcasses, fish feces; and inorganic
723 waste such as plastics; hazardous waste, and toxic waste, including pesticides and their containers;
724 and materials from animal health products.

725 Organic by-products, including animal manure, have potential to be used as an energy source as
726 biomass or for animal feed, contributing to circularity measures. For example, by-products of
727 aquaculture and fishing operations can be turned into fishmeal and oil. Manure can be used as an
728 organic fertilizer, improving soil health. However, intensive animal production can often result in
729 output of more manure than a local area can absorb. If incinerated without energy recovery or
730 directed to landfill, organic by-products can turn into waste and cause significant environmental
731 impacts, including greenhouse gas (GHG) emissions, water pollution, and – for terrestrial animals –
732 impacts on soil health (see *Water and effluents*, *Emissions* and *Soil health*).

733 Organic waste from animals may contain microorganisms and parasite eggs. These pathogens can
734 spread in receiving environments and cause ill health and disease in humans. In aquaculture
735 operations, fish feed and feces can long settle at the bottom of ponds or in inactive zones of raceways
736 as liquid or solid organic waste. Antimicrobial compounds can also be found in manure. Fish feces
737 may reach water bodies. A key way to minimize pollution and waste impacts from fish feces and
738 settleable solids is through water management (see *Water and effluents*).

739 **FOOD LOSS**

740 In agriculture, aquaculture, and fishing production, organic waste streams that contain products
741 originally intended as food for human consumption are categorized as food loss. The Food and
742 Agriculture Organization (FAO) of the United Nations estimates that 13.8% of food, from harvest to
743 retail, was lost globally in 2016.

744 Food loss can be caused by inefficiencies at different stages of the supply chain. At the farm level,
745 they can be due to inadequate harvesting time, climatic conditions, harvest and handling practices,
746 and challenges related to selling products. Losses during post-harvest activities and losses of by-
747 product can also be considered food loss, which can be accompanied by loss of resources – including
748 water, land, energy, labor, and capital – and can contribute to greenhouse gas (GHG) emissions.

749 Measures to prevent food loss include adequate storage temperatures and conditions; sound
750 infrastructure; and efficient transportation and logistics. Primary processing conditions and packaging
751 can play a role in preserving agriculture, aquaculture, and fishing products.

752 Aquaculture activities generate considerable amounts of plastic waste. Plastics are widely used for
753 equipment, including disposable gloves, and packaging various inputs, such as feed sacks and
754 wrapped consumables. Plastic can also be used in pond liners, harvest nets, pipework, buoys, ropes,
755 incubation jars, and containers. Discarded or abandoned plastic waste can contaminate the
756 surrounding environments and get into the ocean.

757 In fishing, plastics are used to make various marine tools, including floats, fishing nets and lines,
758 strapping bands, wire ropes, sails, and other manufactured items. Fish and marine animals
759 sometimes mistake plastic waste for food and get trapped in items, such as ropes, nets, and bags.
760 Lost or discarded fishing gear, known as ghost gear, can continue capturing species, contributing to
761 overfishing and damaging benthic ecosystems. (see *Biodiversity*).

762 Incorrectly disposed inorganic materials, such as plastic waste, used bottles, and packages can have
763 lasting impacts on receiving environments. For example, chemical residue in packaging may leak into
764 soil and water, causing long-term contamination. Contamination of agricultural land and natural

765 resources causes negative impacts on the health and safety of local communities and can impact the
 766 safety of food produced (see *Local communities, Rights of indigenous peoples, and Food safety*).

767 **What to report**

768 If the organization has identified waste and food loss as a material topic, this section lists the
 769 disclosures that have been identified as relevant for reporting on the topic by the agriculture,
 770 aquaculture, and fishing sectors.

Standard	Disclosure	Additional sector recommendations
Management of the topic		
GRI 103: Material Topics	Disclosure MT-3 Management of material topics	Describe the policies and commitments to address food loss in the supply chain.
Topic Standards 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	The following additional sector recommendation is for organizations in the fishing sector: – Report total volume of <u>waste</u> by MARPOL categories and how these are <u>disposed</u> .
	Disclosure 306-4 Waste diverted from disposal	
	Disclosure 306-5 Waste directed to disposal	
Additional sector disclosures		
Report the total weight of food loss in metric tons and food loss percentage by product, and describe the methodology used for this calculation. ⁴		

771 **Resources and references**

772 [GRI 306: Waste 2020](#) lists authoritative intergovernmental instruments and other sources relevant to
 773 reporting on this topic.

⁴ Further details and guidance on food loss percentage are available in Food and Agriculture Organization (FAO), [SDG 12.3.1: Global Food Loss Index](#), 2018.

774 The additional intergovernmental instruments and references used to develop this topic description,
775 as well as further resources that may be helpful for understanding and reporting on the topic by the
776 agriculture, aquaculture and fishing sectors are listed in the Bibliography on page 78.

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777 2.9 Food security

778 **Food security means that people have physical and economic access to sufficient, safe, and**
779 **nutritious food that is acceptable within a given culture, meets people’s dietary needs, and**
780 **food preferences for an active and healthy life. The right to adequate food is a human right and**
781 **is crucial to the enjoyment of all rights. This topic covers impacts on the key dimensions of**
782 **food security.**

783 People around the world face moderate to severe food insecurity, being unable to afford food or
784 forced to consume insufficient or low-quality food. More than 820 million people already face hunger,
785 and with population growth will come the growth of global food needs. Since 2014, undernourishment
786 and food insecurity have increased worldwide, risking the achievement of SDG 2: Zero Hunger.

787 The Food and Agriculture Organization (FAO) identifies multiple dimensions to food security: food
788 availability, access, use, and stability; agency, understood as the capacity of individuals or groups to
789 make their own decisions about what food they eat and how that food is produced; and sustainability.
790 Organizations in the agriculture, aquaculture, and fishing sectors can have impacts on all of these
791 dimensions, thus contributing to or undermining food security.⁵

792 Governments are moving to regulate food production with the objective of having a lower
793 environmental footprint and providing for more balanced, nutritious diets. This includes making
794 essential and nutritious foods more accessible and affordable, especially in low-income countries.
795 Agriculture, aquaculture, and fishing organizations can make decisions that ensure efficient use of
796 resources while providing more food to people. Achieving food security is likely to involve trade-offs
797 related to land use and choices concerning diets being provided for. Organizations are more and
798 more expected to engage with governments and other stakeholders, including consumers about their
799 food production concerns.

800 Globally, the amount of land used for agriculture is estimated at 38% of the total land surface. Some
801 regions have constraints associated with using more land to expand food production (see *Natural*
802 *ecosystem conversion*). To lessen the need to convert more land for agriculture use, organizations
803 can improve management of cropland and grazing lands already in use.

804 Maize, rice, and wheat serve as a basis of human diets globally, providing almost half of the world’s
805 calorie supply. However, competing demands for land, cultivation costs, and low margins could push
806 out these essential crops. Climate change and adverse weather events can also cause impacts on
807 yields, potentially increasing food losses and prices of critical crops (see *Climate adaptation and*
808 *resilience*). Agriculture, aquaculture, and fishing organizations can have a role in ensuring stability of
809 supply of essential foods.

810 Many crops and fish products are used for animal and fish feed, though most of the time, these
811 products are suitable for human consumption as food. The quarter of wild catch fish that the
812 aquaculture sector uses as feed is deemed suitable for humans. Much of world’s crops are used as
813 feed for animal production, especially livestock.

814 Compared with livestock products, aquaculture and fishing products are more efficient in terms of
815 edible yields, proportion of an animal that can be used for human consumption, and feed conversion
816 rates, measure of feed converted into animal weight gain, which in turn determines the use of natural

⁵ The World Food Summit Plan of Action of 1996 was adopted by 112 heads or deputy heads of state and government who committed to “implement policies aimed at eradicating poverty and inequality and improving physical and economic access by all, at all times, to sufficient, nutritionally adequate and safe food and its effective utilisation; and pursue participatory and sustainable food, agriculture, fisheries, forestry and rural development policies and practices in high and low potential areas, which are essential to adequate and reliable food supplies at the household, national, regional and global levels.”

817 resources, and the volume of food produced. About 70% of Earth is covered by ocean, providing
 818 space for operations involving aquaculture and fishing products, both of which are a source of protein
 819 and essential micronutrients. However, only about 2% of global food supply comes from the sea,
 820 indicating the potential to fill gaps in nutrition and food security.

821 Quantity, quality, and accessibility of food also depend on farming and fishing practices. While
 822 intensive crop and animal production can result in increased availability of food in the short term, it is
 823 associated with negative impacts on the environment and has a potential impact on the availability of
 824 food in the longer term. In many agricultural systems in the world, soil nutrients are currently depleting
 825 more quickly than they are formed, undermining the sustainability dimension of food security (see *Soil*
 826 *health*).

827 Regenerative and organic practices, such as rotating crops, planting at optimal times, and applying
 828 manure instead of nonorganic fertilizers, are considered to have a potential to contribute to greater
 829 soil health and productivity and resilience of food production.

830 **What to report**

831 If the organization has identified food security as a material topic, this section lists the disclosures that
 832 have been identified as relevant for reporting on the topic by the agriculture, aquaculture, and fishing
 833 sectors.

Standard	Disclosure	Additional sector recommendations
Management of the topic		
GRI 103: Material Topics	Disclosure MT-3 Management of material topics	<ul style="list-style-type: none"> - Describe commitments to ensure that the organization’s operations contribute to food security or nutrition; - Describe the actions and programs of the organization on food security and nutrition, including an explanation of their relevance to local, regional, national, or global food security and the effectiveness of these actions and programs; - Report partnerships which the organization is part of that address food security or nutrition, including engagement with governments.

834 **Resources and references**

835 The intergovernmental instruments and references used to develop this topic description, as well as
 836 further resources that may be helpful for understanding and reporting on the topic by the agriculture,
 837 aquaculture and fishing sectors are listed in the Bibliography on page 78.

838 **2.10 Food safety**

839 **Food safety concerns the production, primary processing, storage and transportation of food**
 840 **and feed products in a way that prevents food-borne illness. This topic addresses an**
 841 **organization’s efforts to prevent contamination and ensure safety of food, including through**
 842 **adherence to food safety regulations and voluntary codes.**

843 According to the World Health Organization (WHO), an estimated 600 million people worldwide fall ill
 844 after eating contaminated food each year, resulting in 420,000 deaths. Besides threatening public
 845 health and wellbeing, food safety impacts can have consequences on local communities (see *Local*
 846 *communities*). These, in turn, can have impacts on the economy, the environment, or people,
 847 including outcomes on local and global scales through loss of economic activity.

848 Environmental contamination is a driver of food safety impacts. Main sources of contamination from
 849 agriculture, aquaculture, and fishing activities include pollution in water, soil, or air used by crops or
 850 animals. Contamination can also be caused by inadequate management of crops or animals during
 851 their growth, harvest, catch, or products’ primary processing and storage. Contamination can lead to
 852 food containing harmful bacteria, such as salmonella, listeriosis, and campylobacter, viruses,
 853 parasites, or chemical substances, which can cause ill health in humans.

854 Substances used in agriculture and aquaculture that can impact food safety are antimicrobials,
 855 pesticides, heavy metals, microplastics, and other micropollutants (see *Pesticides use* and *Animal*
 856 *health and welfare*). Globally, antimicrobials, such as chemicals and antibiotics, are widely used in
 857 terrestrial and aquatic animal production to address animal health and animal welfare, sometimes to
 858 enhance animal growth rates and productivity. Demands on global food systems has led into an
 859 increase in the use of antimicrobials to improve food production. These high volumes can contribute
 860 to the development of antimicrobial-resistant bacteria, particularly in settings of intensive animal
 861 production. The WHO identifies antimicrobial resistance as one of today’s biggest threats to global
 862 health, food safety, and human development. Addressing antimicrobial resistance requires adequate
 863 animal health and welfare standards and biosecurity controls.

864 Because food and feed products grown or caught in one world region can supply customers in
 865 another, impacts on food safety can emerge as local issues but then evolve into global issues, such
 866 as contamination or an outbreak of foodborne illness. This highlights the importance of effective and
 867 compelling food safety requirements and standards (see *Supply chain traceability*).

868 **What to report**

869 If the organization has identified food safety as a material topic, this section lists the disclosures that
 870 have been identified as relevant for reporting on the topic by the agriculture, aquaculture, and fishing
 871 sectors.

Standard	Disclosure	Additional sector recommendations
Management of the topic		
GRI 103: Material Topics	Disclosure MT-3 Management of material topics	<ul style="list-style-type: none"> - Describe the use and commitments to use of food certification and assurance schemes that define standards for food safety. - Report compliance with national and international standards in relation to food safety.
Topic Standards disclosures		
GRI 416: Customer Health and Safety 2016	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 products sourced from <u>suppliers</u> certified by Global Food Safety Initiative (GFSI) or a recognized food safety certification programs.		
Report the number of GFSI audits passed.		
Report the number of recalls issued for food safety reasons and total volume of product recalled.		

872 **Resources and references**

873 *GRI 416: Customer Health and Safety 2016* lists authoritative intergovernmental instruments and
874 other sources relevant to reporting on this topic.

875 The additional intergovernmental instruments and references used to develop this topic description,
876 as well as further resources that may be helpful for understanding and reporting on the topic by the
877 agriculture, aquaculture and fishing sectors are listed in the Bibliography on page 79.

878 **2.11 Animal health and welfare**

879 **Animal health and welfare refers to the physical and mental state of an animal in relation to the**
 880 **conditions in which it lives and dies. The ‘Five Freedoms’ of animal welfare are freedom from**
 881 **hunger and thirst; freedom from discomfort; freedom from pain, freedom injury, and disease;**
 882 **freedom to express normal behavior; and freedom from fear and distress.**

883 Each year over 60 billion terrestrial animals are reared worldwide. That figure is set to double by 2050
 884 due to potential increases in consumption of animal protein. Aquaculture farms produce 52 million
 885 tons of aquatic animals, which now represent half of all seafood consumed by humans worldwide.
 886 Animal health and welfare is crucial for agriculture, aquaculture, and fishing not only for ethical
 887 reasons, but also to ensure productivity. Activities that have significant impacts on animal health and
 888 welfare include breeding, rearing or catching, feeding, and grazing; harvesting eggs, milking;
 889 transporting; and slaughtering.

890 Animal health management focuses on controlling potential impacts on health and preventing
 891 disease. This can include use of antibiotics, anti-inflammatory and hormone treatments. To avoid
 892 negative impacts on animal and human health, these substances should be applied with prudence
 893 and only when necessary.

894 On-farm husbandry practices such as dehorning, hot-iron branding, castration, tail docking, and
 895 debeaking have been associated with pain and distress. Slaughter practices can also be major
 896 sources of pain, discomfort, and stress. Many countries require pre-slaughter stunning to render an
 897 animal unconscious. Slaughter methods can also vary according to cultural, social, and religious
 898 influences.

899 Negative impacts on animal health and welfare can be caused by conditions animals are kept in. For
 900 example, terrestrial animals can be confined to small spaces, cages, and crates, or left untreated for
 901 disease or injuries, preventing movement, and making them unable to express normal behavior.

902 In aquaculture, water quality, stock density, and rearing environment can have impacts on fish health
 903 and welfare. In both aquaculture and fishing, the most prevalent slaughter methods are asphyxiation,
 904 carbon dioxide stunning, and ice chilling. According to the World Organisation for Animal Health
 905 (OIE), these methods lead to poor fish welfare, failing to meet standards set out in its terrestrial and
 906 aquatic animal health codes.

907 Genetic modification can be performed on terrestrial and aquatic animals to ensure their fast growth
 908 and greater productivity. However, genetic modification must be undertaken in a manner that prevents
 909 negative impacts on animal health and welfare

910 Inadequate animal health and welfare practices can increase spread of zoonotic diseases, such as
 911 salmonellosis, swine flu, and bird flu. This can occur through, for example, movement and trade of
 912 animals and animal products without proper controls. Animal health issues can cause impacts on food
 913 safety through the presence of infected animal products or residues of substances used on animals,
 914 including antimicrobials and pesticides (See *Pesticides use* and *Food safety*).

915 **What to report**

916 If the organization has identified animal health and welfare as a material topic, this section lists the
 917 disclosures that have been identified as relevant for reporting on the topic by the agriculture,
 918 aquaculture, and fishing sectors.

Standard	Disclosure	Additional sector recommendations
Management of the topic		
GRI 103: Material Topics	Disclosure MT-3 Management of material topics	When reporting on the management of animal health and welfare, the organization should report:

		<ul style="list-style-type: none"> - Describe the policies regarding processing of animal products, animal transportation, handling, and slaughter; - 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 for each species and breed produced by the organization. - List the animal health and welfare certifications or schemes implemented. - Describe the assessments and audits of animal health and welfare.
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Additional sector disclosures

Report the veterinary care record outlining the total volume of anesthetic, antibiotic, anti-inflammatory, hormone, and/or growth-promotion treatments administered, by species and breed.

919 Resources and references

920 The intergovernmental instruments and references used to develop this topic description, as well as
 921 further resources that may be helpful for understanding and reporting on the topic by the agriculture,
 922 aquaculture and fishing sectors are listed in the Bibliography on page 79.

923 2.12 Local communities

924 **Local communities can comprise individuals or groups of individuals living or working in**
925 **areas that are affected or that could be affected by an organization’s activities. An organization**
926 **is expected to conduct community engagement to understand the vulnerabilities of local**
927 **communities and how they may be affected by the organization’s activities. This topic covers**
928 **socioeconomic, cultural, health, and human rights impacts on local communities.**

929 Agriculture, aquaculture, and fishing organization can have various actual and potential impacts on
930 local communities. Among significant impact sources is non-recognition of their land and resource
931 rights (see *Land and resource rights*). Land use by organizations in the agriculture, aquaculture, and
932 fishing sectors can restrict communities’ access to land and natural resources, and cause
933 displacement. Communities can be resettled to other areas, which are not always equivalent in terms
934 of soil quality, suitability for agriculture, access to services, or cultural and social significance. In cases
935 of lost access to areas for cultural, economic, or leisure purposes, compensation may be provided but
936 it is not always adequate.

937 Local communities can also experience significant economic and environmental impacts from the
938 extensive use of groundwater for irrigation in agriculture operations. Groundwater depletion can
939 create a need for deepening wells, which in turn increases the energy that adjacent areas need to
940 pump water to the surface for irrigating crops and individual purposes. Communities might then face
941 depleted water sources or need to import water (see *Water and effluents*).

942 Inadequate management or disposal of hazardous substances, such as pesticides, can impact the
943 environment, food safety, and health of communities living in proximity to operations, such as
944 plantations. Cases of acute pesticide poisoning (APP) account for significant mortality worldwide,
945 especially in developing countries (see *Pesticides use*).⁶

946 Gases released from manure and organic waste contribute to air pollution and odors, causing
947 negative impacts on local communities near agriculture and aquaculture operations (see *Emissions*
948 and *Waste and food loss*). Related unpleasant odors and poor air quality can induce higher stress
949 levels and negative health effects in people.

950 Although organizations in these sectors are often major employers in rural areas, creating jobs and
951 providing income for communities, the majority of those who suffer from food insecurity and poverty
952 live in these rural areas. Lack of income and negative impacts on land, water, and biodiversity can
953 cause vulnerability or compel rural communities to migrate to urban areas (see *Economic inclusion*
954 and *Living income*).

955 Within local communities, vulnerable groups such as women, children, migrant workers, and their
956 families can be disproportionately affected by agriculture, aquaculture, and fishing operations. Such
957 groups often lack a voice as they can be regularly discriminated against and be a minority in decision-
958 making and planning, with can increase the likelihood of negative impacts on their rights.

959 To minimize negative impacts on human rights, agriculture, aquaculture, and fishing organizations are
960 expected to account for the heterogeneity of local communities and take specific action to identify and
961 engage with vulnerable groups (see *Rights of indigenous peoples* and *Non-discrimination and equal*
962 *opportunity*). Community engagement, consultations, and grievance mechanisms can play important
963 roles in mitigating negative impacts.

⁶ WHO estimates that worldwide exposure to pesticides causes an annual 20,000 deaths and at least 3 million cases of acute poisoning. World Health Organization, [Acute pesticide poisoning: a proposed classification tool](#), 2008.

964 **What to report**

965 If the organization has identified local communities as a material topic, this section lists the
 966 disclosures that have been identified as relevant for reporting on the topic by the agriculture,
 967 aquaculture, and fishing sectors.

Standard	Disclosure	Additional sector recommendations
Management of the topic		
GRI 103: Material Topics	Disclosure MT-3 Management of material topics	
Topic Standards 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	

968 **Resources and references**

969 [GRI 413: Local Communities 2016](#) lists authoritative intergovernmental instruments and other sources
 970 relevant to reporting on this topic.

971 The additional intergovernmental instruments and references used to develop this topic description,
 972 as well as further resources that may be helpful for understanding and reporting on the topic by the
 973 agriculture, aquaculture and fishing sectors are listed in the Bibliography on page 80.

974 2.13 Land and resource rights

975 Land and resource rights encompass the rights to use, manage and control land, fisheries,
976 forests, and other natural resources. Organizations can have impacts on the availability and
977 accessibility of these to local communities and other users. This topic covers impacts from an
978 organization's use of land and natural resources on human rights and tenure rights.

979 The process by which individuals, communities, and organizations acquire rights and associated
980 duties to use and control lands, fisheries, forests, and other natural resources varies according to
981 national jurisdictions' governance of land tenure and natural resources. Forms of tenure can include
982 public, private, communal, collective, indigenous, and customary tenure. In some countries, informal
983 tenure can amount to 80 to 90% of total land, which means those living on this land might lack formal
984 rights and legal protection.

985 According to the Committee on World Food Security's Voluntary Guidelines on Tenure of Land,
986 Fisheries and Forests (VGGT), human rights – including people's civil, political, economic, social and
987 cultural rights – are associated with access to and use of land, fisheries, and forests. Agriculture,
988 aquaculture, and fishing organizations can be granted land concessions over territories; if they accept
989 them without undertaking impact assessment and prior consultation, organizations may infringe on
990 human rights. Restrictions and physical barriers imposed on access to land and resources through
991 fencing, landscape engineering, roads, and drainage works that block or divert routes also can cause
992 negative impacts on people's rights.

993 Lack of recognition of customary claim to lands, territories, and fishing resources – whether or not
994 they are formally titled or legally registered – is a common cause of land and natural resource
995 conflicts. Rights holders who are most commonly affected by these conflicts include farmers and
996 fishers and their organizations, forest users, pastoralists, indigenous peoples, local communities, and
997 civil society representatives defending land rights (see *Rights of indigenous people* and *Local*
998 *communities*).

999 HUMAN RIGHTS OF LAND RIGHTS DEFENDERS

1000 Situations of conflict can jeopardize the rights of those who defend the rights related to land and
1001 fisheries, including those of indigenous peoples. More and more land rights defenders, smallholder
1002 farmers, indigenous community leaders, media, and civil society representative active on these issues
1003 have become victims of violence or prosecution. United Nations bodies – including special
1004 rapporteurs on human rights defenders, on the right to food, and on indigenous peoples – have
1005 reported on violations of defenders' rights. In some cases, these violations are related to disputed
1006 land acquisitions through commercial agriculture.

1007 Unlike in aquaculture, fish captured in the wild is usually a common property resource. Fishery
1008 resource rights concern access to ports, waters, high seas, and catch quotas; coastal fishing rights
1009 concern access to fish and other aquatic animals in coastal areas where they are captured, the
1010 quantity of catch, and how long these rights are applicable. Commercial fishing vessels, illegally
1011 accessing fishing zones that are reserved for small-scale fishers, can displace small boats or destroy
1012 fish breeding habitats, forcing the fish to migrate.

1013 Fishers and fishing communities are legitimate rights holders when it comes to the use of fishery
1014 resources and entire ecosystem. Fishing organizations are expected to duly engage fishers in fishery
1015 management.

1016 Agriculture, aquaculture, and fishing organizations are expected to identify legitimate rights holders
1017 through their own assessments and ensure independent verification of assessment results. These
1018 organizations can also have a positive impact when it comes to securing land tenure and access to
1019 natural resources by requiring their suppliers to respect such rights.

1020 What to report

1021 If the organization has identified land and resource rights as a material topic, this section lists the
1022 disclosures that have been identified as relevant for reporting on the topic by the agriculture,
1023 aquaculture, and fishing sectors.

Standard	Disclosure	Additional sector recommendations
Management of the topic		
GRI 103: Material Topics	Disclosure MT-3 Management of material topics	<ul style="list-style-type: none"> - Describe the commitments of the organization to respect communities' and indigenous peoples' land rights, including traditional, customary, and use rights, and report the extent to which the commitments apply to the organization's activities and to its business relationships. - Describe whether and how the organization's commitments to respect communities' and indigenous peoples' land rights are implemented with <u>suppliers</u>. <p>The following additional sector recommendation is for organizations in the fishing sector:</p> <ul style="list-style-type: none"> - Describe the consultation process on fishery management with legitimate representatives of fishing communities concerned with the use of fishery resources.
Additional sector disclosures		
Describe the criteria used to determine operations where land tenure and access to natural resources cannot be assured or are at risk and the countries identified that meet the criteria.		
List the operations and suppliers whose rights associated with land tenure and access to natural resource cannot be assured or are at risk.		
List affected and potentially affected rights holders due to the organization's use of land and natural resources (e.g., indigenous peoples, local communities, and types of workers in or around the organization's locations of operation).		
Report the number, size, and percentage of operational sites owned, leased, and managed where violations of any tenure rights, including customary, collective, and informal tenure rights, occurred.		

1024 Resources and references

1025 The additional intergovernmental instruments and references used to develop this topic description,
 1026 as well as further resources that may be helpful for understanding and reporting on the topic by the
 1027 agriculture, aquaculture and fishing sectors are listed in the Bibliography on page 81.

I028 2.14 Rights of indigenous peoples

I029 **Indigenous peoples have both collective and individual rights, as set out in UN Declaration on**
I030 **the Rights of Indigenous Peoples and other international human rights instruments.**

I031 **Indigenous peoples are considered a vulnerable group that could experience negative impacts**
I032 **as a result of an organization's activities more severely than the general population. This topic**
I033 **covers impacts on the rights of indigenous peoples.**

I034 Fundamental rights of self-determination and non-discrimination mandate equal respect for
I035 indigenous peoples' collective rights, including those concerning property, as well as their individual
I036 rights. Indigenous peoples find deep cultural and spiritual value in their lands and territories, and often
I037 depend on natural resources for subsistence. These communities frequently lack formal collective
I038 ownership rights over the land and resources they customarily own, occupy, or use. Their customary
I039 land, territory, and resource rights are communal and collective, meaning they independently govern
I040 their lands, fisheries, and forests through collective communal participation. Customary rights – a
I041 cornerstone of the rights of indigenous peoples under international law – are frequently not
I042 recognized in practice, leading to rights violations.

I043 Many indigenous fishing communities also face challenges because their rights to use fishery
I044 resources are of a customary or traditional nature. These communities consume several times more
I045 fish than average because they rely on it as their main source of food. Fish also has a central role in
I046 their cultures and traditional practices. Degradation of local aquatic and coastal natural ecosystems,
I047 overfishing, stocks depletion, competition for catch, and impacts on access to fish associated with
I048 commercial fishing operations can threaten indigenous peoples' livelihoods and traditional fishing
I049 practices.

I050 When agriculture, aquaculture, and fishing operations expand into indigenous peoples' territories
I051 without obtaining free, prior, and informed consent, their rights to land and natural resources and their
I052 human rights are violated. Indigenous communities may be forcibly removed from their homes, farms,
I053 and forests to clear space for sectors' activities. Conflicts involving indigenous peoples and
I054 organizations in the agriculture, aquaculture, and fishing sectors are on the rise, leading to
I055 discrimination, displacement, loss of livelihood, income insecurity. In extreme cases, such conflicts
I056 have led to threats, intimidation, violence, and loss of life.

I057 When disputes take place, indigenous communities regularly lack legal support and access to
I058 remedy. This can lead to unfair compensation for lost land access and natural resources, income
I059 insecurity, marginalization of indigenous communities, and other severe impacts on human rights.

I060 Natural ecosystem conversion can irreversibly damage traditional activities, such as hunting, fishing,
I061 and farming, thus threatening indigenous peoples' livelihoods and survival. Water impacts caused by
I062 agriculture and aquaculture organizations can jeopardize their ability to practice traditional agriculture
I063 and limit indigenous people's water access and use. Impacts from waste, including hazardous waste
I064 from pesticides, can lead to pollution and contamination of indigenous land and natural resources,
I065 negatively affecting the right to health and food security.

I066 Because of the close relationship with environment and dependence on natural resources, indigenous
I067 peoples are particularly affected by climate change. They are forced adapt their farming and fishing
I068 practices and lifestyles to extreme weather events, change in availability of traditional food sources,
I069 and decreased crop yields. Climate change can further exacerbate the vulnerability of indigenous
I070 communities and impacts on their human rights (see *Biodiversity* and *Climate adaptation and*
I071 *resilience*).

I072 **What to report**

I073 If the organization has identified rights of indigenous peoples as a material topic, this section lists the
 I074 disclosures that have been identified as relevant for reporting on the topic by the agriculture,
 I075 aquaculture, and fishing sectors.

Standard	Disclosure	Additional sector recommendations
Management of the topic		
GRI 103: Material Topics	Disclosure MT-3 Management of material topics	Describe the approach to free, prior, and informed consent and the other rights as set out in the UN Declaration on the Rights of Indigenous Peoples and the International Labour Organization Convention 169 'Indigenous and Tribal Peoples'.
Topic Standards disclosures		
GRI 411: Rights of Indigenous People 2016	Disclosure 411-1 Incidents of violations involving rights of indigenous peoples	

I076 **Resources and references**

I077 [GRI 411: Rights of Indigenous People 2016](#) lists authoritative intergovernmental instruments and
 I078 other sources relevant to reporting on this topic.

I079 The additional intergovernmental instruments and references used to develop this topic description,
 I080 as well as further resources that may be helpful for understanding and reporting on the topic by the
 I081 agriculture, aquaculture and fishing sectors are listed in the Bibliography on page 81.

1082 2.15 Non-discrimination and equal opportunity

1083 **Freedom from discrimination is a human right and a fundamental right at work. Discrimination**
1084 **can impose unequal burdens on individuals or deny them opportunities instead of treating**
1085 **them fairly and on the basis of individual merit. Discrimination can occur on the grounds of**
1086 **race, color, sex, religion, political opinion, national extraction, social origin, age, disability,**
1087 **migrant status, and/or gender. This topic covers impacts from discrimination and an**
1088 **organization’s practices related to equal opportunity.**

1089 Many agriculture, aquaculture, and fishing workers are self-employed, informally employed, and do
1090 not have job security. These categories of workers often lack adequate labor standards and face
1091 discrimination. For example, seasonal and casual workers might not enjoy the same rights or
1092 treatment when it comes to work of equal value, benefits, and paid leave.

1093 The agriculture, aquaculture, and fishing sectors commonly use migrant labor, including temporary
1094 migrant labor. Because of their migrant status, migrant workers and their families may face
1095 discriminatory practices when it comes to remuneration, provision of healthcare, and employment
1096 protection. In fishing, vessel crews are typically subject to discriminatory pay based on nationality.
1097 Undocumented migrant workers can be even more vulnerable to labor abuses (see *Forced labor* and
1098 *Employment practices*).

1099 For indigenous workers, characteristics that deviate from the majority group’s social practices, such
1100 as what languages they speak or what clothing they wear, can lead to employment discrimination in
1101 the sectors. Indigenous women can face discrimination on the grounds of both ethnicity and gender.

1102 In many countries, people living in rural areas – including smallholder farmers, landless workers, and
1103 communities living from traditional agriculture, aquaculture, and fishing activities – can experience
1104 discriminatory treatment. For example, they may inherit historic inequality in accessing land or be
1105 pushed to remote and less fertile lands, thus lacking opportunities to provide for themselves. As a
1106 consequence, people from these groups can be more vulnerable to labor exploitation and human
1107 rights violations.

1108 Gender discrimination often disadvantages women working in agriculture, aquaculture, and fishing.
1109 Discrimination may be reflected in women’s poorer working conditions, unequal opportunities, and
1110 lower wages than those of men. Women are more frequently involved in lower-paid or less secure
1111 forms of employment, such as seasonal, casual, or part-time. Women are also likelier to perform what
1112 sectors may characterize as ‘light work’, such as spraying pesticides in agriculture, which is deemed
1113 work of lower value. In fishing, women play crucial roles throughout the value chain, working for both
1114 commercial and small-scale fisheries, though in most of the world, women are less involved in
1115 offshore and long-distance capture fishing, which usually pays more.

1116 Women rarely get to be involved in cooperatives and farmer organizations. This means that their
1117 access to processing facilities, improved technologies, and agricultural inputs, such as seeds,
1118 fertilizers, and machinery, can be much more limited than that of men. Women may then receive
1119 lower earnings and have smaller yields despite working more hours per year than men.

1120 Discrimination against women in the agriculture, aquaculture, and fishing sectors can also include
1121 gender-based violence and harassment. Seasonal work and informal work arrangements can render
1122 women even more vulnerable to sexual violence and other abuses.

1123 **WOMEN’S RIGHTS**

1124 The majority of economically active women in low-income countries work in agriculture. In many
1125 countries, women do not have the same rights as men or, even if they do legally, the rights go
1126 unrecognized. These include rights to buy, sell, or inherit land; to open a savings account or borrow
1127 money; to sign a contract; and to sell their produce.

1128 Traditional gender roles can restrict women’s freedom of movement and prevent them from bringing
1129 their produce to market or leaving their villages without the permission of male relatives. Social
1130 conventions and gender norms often regard women’s work activities and output as part of their
1131 traditional caretaking role rather than as participation in the market economy, thus underestimating
1132 their economic contribution. Women in these situations do not enjoy the right to the same decent
1133 standard of living as men.

1134 Women can also be denied their rights when it comes to maternity protection. Benefits such as
 1135 maternity leave and childcare allowance might be inaccessible for women in the agriculture,
 1136 aquaculture, and fishing sectors. As a result, they might be pressed to hide or terminate their
 1137 pregnancies.

1138 **What to report**

1139 If the organization has identified non-discrimination and equal opportunity as a material topic, this
 1140 section lists the disclosures that have been identified as relevant for reporting on the topic by the
 1141 agriculture, aquaculture, and fishing sectors.

Standard	Disclosure	Additional sector recommendations
Management of the topic		
GRI 103: Material Topics	Disclosure MT-3 Management of material topics	
Topic Standards 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	Report the ratio of <u>basic salary and remuneration</u> of women to men for workers (excluding employees).
GRI 406: Non-discrimination 2016	Disclosure 406-1 Incidents of discrimination and corrective actions taken	

1142 **Resources and references**

1143 [GRI 405: Diversity and Equal Opportunity 2016](#) and [GRI 406: Non-discrimination 2016](#) list
 1144 authoritative intergovernmental instruments and other sources relevant to reporting on this topic.

1145 The additional intergovernmental instruments and references used to develop this topic description,
 1146 as well as further resources that may be helpful for understanding and reporting on the topic by the
 1147 agriculture, aquaculture and fishing sectors are listed in the Bibliography on page 82.

1148 **2.16 Forced labor**

1149 **Forced labor is work or service which is exacted under the menace of penalty and for which a**
 1150 **person has not offered themselves voluntarily. Freedom from forced labor is a fundamental**
 1151 **right at work.**

1152 The International Labour Organization (ILO) has identified the agriculture, aquaculture, and fishing
 1153 sectors as highly susceptible to forced labor. Forced labor has been documented in the supply chains
 1154 of most agricultural products. The sector is labor-intensive and has increased demand for seasonal
 1155 workers, often filled by recruitment agencies.

1156 Agriculture, aquaculture, and fishing workers are unlikely to be unionized, often earn less, and have
 1157 fewer skills than workers in other sectors. National labor laws do not always extend labor protections
 1158 to smallholder agricultural workers, small-scale fishers, or the seasonal and casual workers commonly
 1159 employed in the sector, leaving them vulnerable to forced labor (see *Employment practices*). These
 1160 workers can face abusive labor practices, non-payment or late payment of wages, restrictions on the
 1161 freedom of movement, violence, threats, and human trafficking.

1162 Forced labor in crop and animal production can take place on plantations and farms, which are often
 1163 located in low-income rural areas, exacerbating the likelihood of forced labor. Agriculture,
 1164 aquaculture, and fishing workers can become indebted to their employers due to fees owed for job
 1165 access or getting accommodations; additionally, employers can use debt bondage to prevent workers
 1166 from leaving.

1167 Migrant workers, who often fill the need for labor in the sectors, are likelier to work under conditions of
 1168 coercion and involuntariness. They may have their passports or identification documents taken away
 1169 from them. Undocumented migrant workers can also be forced or coerced into illegal farming or
 1170 fishing operations, carrying high risks for their health and safety.

1171 Eliminating forced labor and enforcing workers' rights can require additional effort in the fishing sector,
 1172 because fishing vessels regularly operate offshore or under the flag of a country far removed from
 1173 where they are fishing. Fishing workers may be migrants from lower-income countries and can often
 1174 be working without an employment contract. The fishing sector also regularly relies on recruitment
 1175 agencies to procure workers, often operating with little oversight from regulatory bodies.

1176 Fishing operations increasingly serve the global market. The pressure to deliver higher volumes of
 1177 product while keeping labor costs low can contribute to the likelihood of abusive labor practices and
 1178 forced labor.

1179 **What to report**

1180 If the organization has identified forced labor as a material topic, this section lists the disclosures that
 1181 have been identified as relevant for reporting on the topic by the agriculture, aquaculture, and fishing
 1182 sectors.

Standard	Disclosure	Additional sector recommendations
Management of the topic		
GRI 103: Material Topics	Disclosure MT-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	

1183 **Resources and references**

1184 [GRI 409: Forced or Compulsory Labor 2016](#) lists authoritative intergovernmental instruments and
1185 other sources relevant to reporting on this topic.

1186 The additional intergovernmental instruments and references used to develop this topic description,
1187 as well as further resources that may be helpful for understanding and reporting on the topic by the
1188 agriculture, aquaculture and fishing sectors are listed in the Bibliography on page 82.

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1189 2.17 Child labor

1190 **Child labor is work that ‘deprives children of their childhood, their potential and their dignity,**
1191 **and that is harmful to their physical or mental development including by interfering with their**
1192 **education. Freedom from child labor is a fundamental human right.**

1193 Across all sectors, agriculture, aquaculture, and fishing have the highest share of child labor. More
1194 than two thirds of the world’s child workers are in the agriculture, aquaculture, and fishing sectors;
1195 among those aged five to 11, this share is even higher.⁷ Most children work unpaid in family farming,
1196 less than one third are paid workers. In some parts of the world, child labor may be socially
1197 acceptable or expected, contributing to the propagation of the practice.

1198 In low-income countries families might rely on the income of a working child. Families can also involve
1199 their children in work when they cannot afford the cost of hiring additional labor. This does little to lift a
1200 family out of poverty and can have negative impacts on the child’s potential to grow and develop.

1201 Large parts of the agriculture, aquaculture, and fishing sectors involve informal work, which increases
1202 the likelihood of child labor and the ease with which children are hired. Child workers are paid less
1203 than adults but might have higher productivity, which some employers find financially advantageous.

1204 Seasonal migration presents additional risks of child labor. Seasonal workers and migrant families
1205 may bring their children with them to work. The nature of seasonal work in agriculture, particularly
1206 harvesting, raises the likelihood of children being removed from school in order to work, which
1207 threatens their right to education. If schooling is interrupted or even if children have access to
1208 schooling at their destination, it can be difficult for them to rejoin their formal education system upon
1209 return from work. Education is an important means to keep children out of child labor, especially in
1210 rural areas.

1211 Children working in agriculture, aquaculture, and fishing frequently perform tasks suited only for
1212 adults. These tasks and other forms of hazardous work are likely to put their health or development at
1213 risk. In the agriculture sector, for example, child workers can be tasked with applying pesticides.
1214 Pesticides can be extremely dangerous for children, as their bodies are highly vulnerable to toxins;
1215 chronic exposure to pesticides can lead to childhood cancers, poor cognitive processes, and
1216 development issues. Children may also have to operate dangerous tools, for example, when working
1217 as sugarcane cutters.

1218 In animal production, children may be designated to take care of animals and perform labor-intensive
1219 tasks. Because animal production activities are ongoing – involving cleaning animals and their
1220 housing, collecting water, feeding, and milking – children can rarely combine this type of work with
1221 schooling.

1222 In aquaculture and fishing, children are engaged to work throughout the supply chain, catching fish
1223 and sea products, processing, and selling. Fishing communities often have few sources of income,

⁷ U.S. Department of Labor. [A 2018 List of Goods Produced by Child Labor or Forced Labor](#). 2018, p.11-14: Child labor in crop production has been documented in cases involving bananas in Belize, Brazil, Ecuador, Nicaragua, and the Philippines; beans in Mexico and Paraguay; citrus 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; rice in Brazil, Dominican Republic, Kenya, the Philippines, Uganda, and Vietnam. Child labor in animal production has been documented in cases involving beef in Brazil; 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; and shellfish in El Salvador and Nicaragua; and shrimp in Bangladesh and Cambodia.

I224 and child labor is frequently used to provide subsistence. Children might be subjected to the common
 I225 hazardous working conditions in these sector, including working long hours and nightshifts.

I226 A quarter of child workers fall victim to forced labor (see *Forced labor*). This can happen when, for
 I227 example, labor brokers recruit and force them to travel far from home. In cases of debt bondage to an
 I228 employer, parents might have their children work alongside themselves. The International Labour
 I229 Organization (ILO) identifies hazardous child labor and forced child labor as worst forms of child labor.

I230 **What to report**

I231 If the organization has identified child labor as a material topic, this section lists the disclosures that
 I232 have been identified as relevant for reporting on the topic by the agriculture, aquaculture, and fishing
 I233 sectors.

Standard	Disclosure	Additional sector recommendations
Management of the topic		
GRI 103: Material Topics	Disclosure MT-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	

I234 **Resources and references**

I235 [GRI 408: Child Labor 2016](#) lists authoritative intergovernmental instruments and other sources
 I236 relevant to reporting on this topic.

I237 The additional intergovernmental instruments and references used to develop this topic description,
 I238 as well as further resources that may be helpful for understanding and reporting on the topic by the
 I239 agriculture, aquaculture and fishing sectors are listed in the Bibliography on page 83.

1240 **2.18 Freedom of association and collective bargaining**

1241 **Freedom of association and collective bargaining include the rights of employers and workers**
 1242 **to form, join, and run their own organizations without prior authorization or interference as**
 1243 **well as the right of workers to collectively negotiate working conditions and terms of**
 1244 **employment. Freedom of association and collective bargaining are fundamental rights at work.**

1245 Many agriculture, aquaculture, and fishing workers' rights to freedom of association and collective
 1246 bargaining remain at risk. In many countries, workers in these sectors are still denied their rights to
 1247 organize and bargain collectively.

1248 Low income, informal employment, family labor, migrant, seasonal, and casual work as well as
 1249 asymmetric power of employees – all of which are common in the agriculture, aquaculture, and fishing
 1250 sectors – create barriers to exercising the right to freedom of association and collective bargaining.

1251 This can exacerbate impacts on workers who already face increased work-related vulnerabilities and
 1252 isolation (see *Employment practices*).

1253 While it is more common for workers in large commercial agriculture, aquaculture, and fishing
 1254 operations to be represented by trade unions and covered by collective agreements, still only a small
 1255 percentage of workers in these sectors are organized. Trade unions have reported restrictions being
 1256 placed on temporary workers or workers employed by their suppliers to effectively access the same
 1257 rights as employees. Organizations preventing unionization of workers in the sectors is a recurring
 1258 issue. Other negative impacts on unions include their members' exposure to intimidation, violence,
 1259 and assassination of leaders.

1260 Seasonal workers might find it hard to join unions due to their short-term employment. In some cases,
 1261 trade union leaders have reported that organizations purposely hire workers on short-term contracts
 1262 or outsource jobs so the workers are unable to join trade unions. Migrant workers can be even more
 1263 vulnerable in this regard, as they can be explicitly banned from joining national unions of countries
 1264 where they work.

1265 According to the International Labour Organization (ILO), all workers – including self-employed
 1266 persons, smallholder farmers, small-scale fishers, and those working in the informal economy –
 1267 should enjoy the right to freedom of association and collective bargaining.

1268 **What to report**

1269 If the organization has identified freedom of association and collective bargaining as a material topic,
 1270 this section lists the disclosures that have been identified as relevant for reporting on the topic by the
 1271 agriculture, aquaculture, and fishing sectors.

Standard	Disclosure	Additional sector recommendations
Management of the topic		
GRI 103: Material Topics	Disclosure MT-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	

1272 **Resources and references**

1273 [GRI 407: Freedom of Association and Collective Bargaining 2016](#) lists authoritative intergovernmental
 1274 instruments and other sources relevant to reporting on this topic.

I275 The additional intergovernmental instruments and references used to develop this topic description,
I276 as well as further resources that may be helpful for understanding and reporting on the topic by the
I277 agriculture, aquaculture and fishing sectors are listed in the Bibliography on page 84.

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1278 2.19 Occupational health and safety

1279 **Healthy and safe work conditions are recognized as a human right. Occupational health and**
1280 **safety include prevention of physical and mental harm and promotion of workers' health. This**
1281 **topic covers impacts related to workers' health and safety.**

1282 Agriculture, aquaculture, and fishing are considered two of the most hazardous sectors, with high
1283 numbers of work-related accidents and ill health each year. Aquaculture workers also regularly
1284 contend with hazardous working conditions. Work-related hazards associated with agriculture,
1285 aquaculture, and fishing include:

- 1286 - handling dangerous machinery, tools, and vehicles;
- 1287 - working in close proximity to people and/or animals, which can heighten risk of exposure to
1288 infectious diseases;
- 1289 - exposure to excessive noise and vibration causing hearing and other sensory problems;
- 1290 - slips, trips, and falls from heights;
- 1291 - working with animals considerably heavier than the worker; lifting heavy weights; and other
1292 work giving rise to musculoskeletal disorders;
- 1293 - exposure to dust and potentially harmful organic substances, chemicals, and infectious
1294 agents;
- 1295 - exposure to extreme temperatures and inclement weather, which can cause hypothermia;
- 1296 - falls overboard, drowning;
- 1297 - attacks by wild animals.

1298 Because workers in agriculture, aquaculture, and fishing often live where they work, occupational
1299 health and safety impacts can also be associated with workers' living conditions. Adequate working
1300 and living conditions in the context of agriculture, aquaculture and fishing concern access to potable
1301 drinking water, quantity and quality of food provision, hygiene, sanitation, and appropriate
1302 accommodations and sleeping quarters. The right to sanitation entitles workers have safe, hygienic,
1303 and socially acceptable access to sanitation.

1304 In the agriculture sector, farmers may work long hours and many consecutive days, especially when
1305 harvesting crops. Workers may lack personal protection equipment, which is not always available in
1306 all countries. Lack of access to sanitation and hygiene facilities can increase the risk of contracting
1307 infectious diseases for workers and their children who often accompany them.

1308 Workers and their families can be exposed to pesticides and other chemical substances used in
1309 agriculture (see *Local communities*). Exposure to pesticides by children living on farms and
1310 plantations can be more dangerous than for adults. If children work alongside their families, they can
1311 also be exposed to pesticides directly (see *Child labor* and *Pesticides use*).

1312 In many countries, injury and fatality rates in the fishing sector are much higher than average. Fishing,
1313 particularly far offshore, is considered one of the most dangerous occupations. Vessel disasters and
1314 falls overboard pose the greatest safety risks and are the sector's leading causes of fatalities.

1315 Vessel safety risks vary, and can be linked to weather, lack of weather warning systems, or loss of
1316 power due to engine failure or inadequate maintenance levels. In some cases, fishing management
1317 can involve strategies, such as putting limits on fishing time and area, that could lead to fishers taking
1318 more risks. Most fishing vessels fall outside of size parameters prescribed by international safety
1319 regulations. Small-scale fishers operate millions of fishing vessels that vary in degree of
1320 sophistication. Frequently, small-scale fishing vessels prove unsuitable for the conditions in which
1321 they are used, such as for carrying considerable amounts of fish, or for sailing far offshore.

1322 Vessel safety standards address risks related to general safety, such as fire safety, lighting, and
1323 ventilation as well as personal safety, vessel stability, and survival at sea. Safety training specific to
1324 vessel safety can help prevent vessel disasters, while compliance with safety standards can help
1325 prevent loss of life. Insurance schemes can be used to protect fishers, considering the high level and
1326 many types of risks associated with fishing, such as death, work-related accidents, and ill health.

1327 Catching, sorting, and storing fish also often require manipulation of dangerous tools, such as knives
1328 and hooks. When fish are manually beheaded, gutted, skinned, or filleted, it is common for workers to

I329 experience cuts and loss of fingers. Bites, stings, and tail kicks by fish and other marine animals can
 I330 also lead to injuries. In the case of illness or injury offshore, professional medical care might be
 I331 unavailable or difficult to access or medical evacuation may not be an option.

I332 Fishing can involve long hours at sea, far offshore. Workers on fishing vessels can also be subjected
 I333 to lack of rest due to understaffing onboard, which can pose additional health and safety risks.
 I334 Because workers can reside aboard fishing vessels for long periods of time, any living condition
 I335 issues can also have impacts on them when they are off shift. Levels of crewing and daily and weekly
 I336 rest can also affect their health and safety. Sometimes fishers can face difficulties in taking shore
 I337 leave, being unable to get off their vessels at foreign ports.

I338 Fishers as a category of seafarers can be at risk of being abandoned without pay or repatriation by
 I339 vessel owners (see *Employment practices*). Abandoned fishers may remain aboard vessels without
 I340 pay, regular food supplies, and medical care. Documented cases show some abandonment lasting for
 I341 many months. Abandonment can have health and safety impacts, including harm to mental health
 I342 caused by keeping people in a state of high uncertainty.

I343 Illegal fishing operations can also impact worker health and safety due to lack of safety norms and
 I344 inspection. Operating in contested waters can pose additional risks. Addressing illegal, unreported,
 I345 and unregulated (IUU) fishing in supply chains can help eliminate factors leading to compromised
 I346 health and safety standards (see *Supply chain traceability*).

I347 **What to report**

I348 If the organization has identified occupational health and safety as a material topic, this section lists
 I349 the disclosures that have been identified as relevant for reporting on the topic by the agriculture,
 I350 aquaculture, and fishing sectors.

Standard	Disclosure	Additional sector recommendations
Management of the topic		
GRI 103: Material Topics	Disclosure MT-3 Management of material topics	
Topic Standards 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	
	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 351 **Resources and references**

I 352 *GRI 403: Occupational Health and Safety 2018* lists authoritative intergovernmental instruments and
I 353 other sources relevant to reporting on this topic.

I 354 The additional intergovernmental instruments and references used to develop this topic description,
I 355 as well as further resources that may be helpful for understanding and reporting on the topic by the
I 356 agriculture, aquaculture and fishing sectors are listed in the Bibliography on page 84.

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I 357 **2.20 Employment practices**

I 358 **Employment practices refer to an organization’s approach to job creation, terms of**
I 359 **employment and working conditions for its workers. This topic also covers the employment**
I 360 **and working conditions in an organization’s supply chain.**

I 361 An employment relationship is a legal relationship between a worker and an organization that confers
I 362 rights and obligations to both parties. In the agriculture, aquaculture, and fishing sectors, informal
I 363 employment, when work is performed without a signed agreement, is a common practice. Many
I 364 workers do not have an employment contract, and their working time and other terms of employment
I 365 are not defined, leading to work going undeclared. Undeclared work is an illegitimate labor practice,
I 366 which violates labor and tax laws and may leave workers without legal protection and employment
I 367 benefits.

I 368 Where formal arrangements exist, a lack of transparency can still surround daily hours, pay rates, and
I 369 working conditions. For example, workers in the fishing sector can face unspecified, unjustified, or
I 370 nontransparent deductions from their pay; employers might withhold a portion of pay to cover various
I 371 costs, such as for recruitment fees, food supplies and water, accommodations, taking leave to rest, or
I 372 transferring pay to workers’ families. Workers can also be employed via temporary or daily contracts
I 373 on an ongoing basis, which denies their due benefits.

I 374 Employment arrangements in these sectors and related supply chains can be complex and involve a
I 375 wide range of actors. Agriculture, aquaculture, and fishing organizations may rely on workers who are
I 376 engaged directly, through recruitment agencies, and/or by suppliers. While recruitment agencies fulfill
I 377 the sectors’ demands, documented cases show that fundamental principles and rights at work are
I 378 regularly violated. Workers can face unjustified recruitment fees, unlawful employment conditions, and
I 379 restrictions on terminating their engagement. Unethical employment and recruitment practices in the
I 380 sectors can also increase worker vulnerability and lead to exploitation.

I 381 Fair or ethical recruitment means hiring workers lawfully and in a fair, transparent manner that
I 382 respects their dignity and human rights. Ethical recruitment is characterized by:

- I 383 - recruitment fees being borne by the employer;
- I 384 - respect for freedom of movement;
- I 385 - transparent employment terms and conditions;
- I 386 - confidentiality and data protection;
- I 387 - access to remedy.

I 388 Migrant workers often fill the need for labor in agriculture, aquaculture, and fishing. Migrant workers
I 389 can be in a full-time, seasonal, or temporary employment relationship. Migrant status, language, and
I 390 communication barriers commonly leave migrant workers disadvantaged in terms of remuneration,
I 391 housing, and social and medical protection.

I 392 **MIGRANT WORKERS**

I 393 Migrant workers can be particularly vulnerable to unethical practices and abuse. They are likelier to
I 394 face pay discrimination and worse employment terms because they depend on employers or
I 395 recruitment agencies for job and work permits.

I 396 Migrant workers can be made to pay a fee to access jobs in the agriculture, aquaculture, and fishing
I 397 sectors and to hand over identity documents, which prevents them from leaving employers. Such
I 398 practices make migrant workers fall victim to bonded or forced labor, labor exploitation as well as
I 399 human trafficking (see *Forced labor*).

I 400 Ethical recruitment practices imply a fee-free model of recruitment and reimbursement of fees to
I 401 migrant workers if not employed directly. Transparent employment terms and conditions for migrant
I 402 workers also provide for the accessibility of an employment contract, for example, by translating it into
I 403 a local language understood by workers.

I 404 International labor standards expect workers in the agriculture, aquaculture, and fishing sectors to
I 405 have decent conditions of work, including accommodations, food, transportation to and from
I 406 workplace, and accident insurance, where applicable. For fishers, international labor and maritime

I407 standards specify the right to repatriation in case of abandonment, including an insurance that should
 I408 be part of employment terms.

I409 **What to report**

I410 If the organization has identified employment practices as a material topic, this section lists the
 I411 disclosures that have been identified as relevant for reporting on the topic by the agriculture,
 I412 aquaculture, and fishing sectors.

Standard	Disclosure	Additional sector recommendations
Management of the topic		
GRI 103: Material Topics	Disclosure MT-3 Management of material topics	<ul style="list-style-type: none"> - Describe the policies on ethical recruitment, including if these policies require that no fees or other charges for recruitment or placement be borne directly or indirectly, in whole or in part, by the worker. - Report the recommendations included in clause 1.2 in GRI 401: Employment 2016.

I413 **Resources and references**

I414 [GRI 401: Employment 2016](#) lists authoritative intergovernmental instruments and other sources
 I415 relevant to reporting on this topic.

I416 The additional intergovernmental instruments and references used to develop this topic description,
 I417 as well as further resources that may be helpful for understanding and reporting on the topic by the
 I418 agriculture, aquaculture and fishing sectors are listed in the Bibliography on page 85.

1419 2.21 Living income

1420 **Living income refers to an income sufficient to afford a decent standard of living for all**
1421 **household members, including a nutritious diet, clean water, decent housing, education,**
1422 **healthcare, among other essential needs, plus extra funds for emergencies and saving. This**
1423 **topic covers the organization’s approaches to worker compensation in the context of whether**
1424 **it provides for living income.**

1425 As recognized by the Universal Declaration of Human Rights, all workers have a right to just and
1426 favorable remuneration that ensures, for themselves and their families, an existence worthy of human
1427 dignity. Lack of living income can lead to poverty, malnutrition, limited access to basic services, and
1428 marginalization. Ensuring living income for workers includes paying self-employed farmers and fishers
1429 a fair price for their produce so they can afford a decent standard of living and/or paying a living wage
1430 to workers employed directly.

1431 Workers in agriculture, aquaculture, and fishing are more than four times likelier to be in poverty than
1432 those in other sectors. For wage workers, a legally set minimum wage can sometimes be used as a
1433 proxy for living income, however living income is calculated based on requirements for a decent
1434 standard of living and can be higher than the minimum wage. In many countries, workers in the
1435 agriculture, aquaculture, and fishing sectors fall outside of national minimum wage regulations or are
1436 subject to sector-specific minimum wage rates, lower than those applied to other categories of
1437 workers. A high spread of informal employment in these sectors also poses a major barrier for the
1438 enforcement of wage norms.

1439 Workers in agriculture, aquaculture, and fishing can be compensated in various ways – for example,
1440 in-kind payment of a share of their catch or harvest or through bonuses and piece rates – which can
1441 make them more vulnerable to under-compensation. While international labor standards do not set a
1442 specific threshold for in-kind payments, many national jurisdictions prohibit them above a certain
1443 threshold. The International Labour Organization (ILO) has also questioned the value and fairness of
1444 in-kind payments exceeding 50% of wages, considering this practice to limit workers’ financial
1445 income.⁸

1446 Many fishers and farmers are categorized as self-employed workers because they receive wages but
1447 are compensated according to their supply of production. Protections specifically for this type of
1448 worker might not exist. Their incomes can be contingent on the individuals’ negotiating power,
1449 production levels, and prices, which may be subject to volatile or unfavorable market forces. These
1450 prices can be set without accounting for possible losses in produce due to weather events, plant and
1451 animal diseases, or any other unforeseen circumstances that reduce production. Organizations can
1452 also cause impacts on their suppliers through procurement practices, including the lead times they
1453 specify, which may be overly restrictive.

1454 Lack of living income can lead to numerous environmental and social impacts. For example, farmers
1455 facing economic pressures may apply high levels of fertilizers or pesticides in an attempt to increase
1456 yields. Farmers and fishers can also be pressed to cut production costs by lowering their workers’
1457 wages or relying on poor labor practices such as exploitation, illegal migrant labor, or child labor. Lack
1458 of living income also limits the ability of producers to invest in more efficient or sustainable production
1459 methods, which can further impact their access to markets, income, and livelihoods. In some cases,
1460 this can be conducive to illegal clearing of forests or illicit farming or fishing activities.

1461

⁸ ‘While no conventions or recommendations fix a specific threshold for payments in kind, the ILO Committee of Experts has expressed doubt concerning payment in kind that exceeds 50% of the wage’, [Chapter 1: What is a minimum wage: 1.6 Payment in kind - ILO](#), see also International Labour Conference, 91st Session, 2003, [Protection of Wages](#), 2003.

1462 **What to report**

1463 If the organization has identified living income as a material topic, this section lists the disclosures that
 1464 have been identified as relevant for reporting on the topic by the agriculture, aquaculture, and fishing
 1465 sectors.

Standard	Disclosure	Additional sector recommendations
Management of the topic		
GRI 103: Material Topics	Disclosure MT-3 Management of material topics	<ul style="list-style-type: none"> - Describe the commitments of the organization 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 if this has involved a consultation with and participation of local stakeholders, including trade unions and employer organizations. - Describe the approach to in-kind payments, including the maximum percentage of remuneration paid in kind per location of operation. - Describe how sourcing, pricing, and remuneration policies take living income or living wage into account, including how living income is considered when commodity prices are set by the organization.
Additional sector disclosures		
Report the percentage of <u>employees</u> and other workers covered by collective bargaining agreements in place that have terms related to wage levels and frequency of wage payments at significant locations of operation.		
Report the percentage of employees and other workers paid above living wage, with a breakdown by gender.		
Describe the tools and systems used to monitor wages paid by suppliers.		

1466 **Resources and references**

1467 The intergovernmental instruments and references used to develop this topic description, as well as
 1468 further resources that may be helpful for understanding and reporting on the topic by the agriculture,
 1469 aquaculture and fishing sectors are listed in the Bibliography on page 86.

1470 **2.22 Economic inclusion**

1471 **Economic inclusion concerns an organization’s impacts on the productive potential of**
 1472 **workers and suppliers. By supporting rural workers and suppliers, an organization can**
 1473 **contribute to economic development in rural areas. This topic covers ways that organizations**
 1474 **can contribute to economic inclusion, which can include supporting small or medium-sized**
 1475 **suppliers, their productivity and access to markets.**

1476 The agriculture sector includes 500 million smallholder farmers, producing up to 80% of all agricultural
 1477 products in some regions. Small fishing vessels represent over 80% of the world’s total fishing fleet
 1478 and provide employment to nearly two thirds of the total workforce of the sector in some countries. At
 1479 the same time, as much as 80% of the world’s poor live and work in rural areas because of poor
 1480 infrastructure, lack of knowledge and technology, limited capacity to produce, or limited access to
 1481 markets and financial services.

1482 Agriculture, aquaculture, and fishing organizations can improve the economic inclusion of small
 1483 producers from whom they source their products through creating sustained demand, providing
 1484 capital, building skills and knowledge, and strengthening access to markets. For example, contract
 1485 farming – when an organization enters into forward agreements with farmers to purchase their
 1486 products – can enhance the productive capacity and market access of small producers. In such
 1487 agreements, organizations can commit to providing inputs, such as seeds, fertilizers, capital, and
 1488 knowhow. Contract farming agreements need to be executed in a way that avoids leaving producers
 1489 in debt or dependency.

1490 Agriculture, aquaculture, and fishing organizations can contribute to enabling farmers and fishers to
 1491 access financial services or provide support to rural financial institutions. Organizations can facilitate
 1492 formalizing enterprises by farmers and fishers through arrangements that encourage collective
 1493 benefits, such as developing cooperatives.

1494 Agriculture, aquaculture, and fishing organizations can also contribute to economic inclusion through
 1495 developing infrastructure, building roads, ports, or canals in areas otherwise unserved. The impacts of
 1496 infrastructure investment can extend beyond the organization’s scope and facilitate access to
 1497 transportation, energy, sanitation, and other services for people living and working in rural areas.

1498 **What to report**

1499 If the organization has identified economic inclusion as a material topic, this section lists the
 1500 disclosures that have been identified as relevant for reporting on the topic by the agriculture,
 1501 aquaculture, and fishing sectors.

Standard	Disclosure	Additional sector recommendations
Management of the topic		
GRI 103: Material Topics	Disclosure MT-3 Management of material topics	Describe the actions taken to identify and adjust the procurement practices of the organization that cause or contribute to negative impacts in the <u>supply chain</u> including: <ul style="list-style-type: none"> - how engagement with <u>suppliers</u> is used to identify procurement practices that cause or contribute to negative impacts in the supply chain; - actions taken to adjust payment policies and procedures. Describe policies and practices used to promote economic inclusion when

		<p>selecting and engaging with <u>workers</u> and suppliers.</p> <p><i>Note: These recommendations are based on the guidance to clause 1.1 in GRI 204: Procurement Practices 2016.</i></p>
Topic Standards disclosures		
GRI 203: Indirect Economic Impacts	Disclosure 203-1 Infrastructure investments and services supported	
	Disclosure 203-2 Significant indirect economic impacts	

I 502 Resources and references

I 503 The intergovernmental instruments and references used to develop this topic description, as well as
I 504 further resources that may be helpful for understanding and reporting on the topic by the agriculture,
I 505 aquaculture and fishing sectors are listed in the Bibliography on page 87.

1506 2.23 Supply chain traceability

1507 **Traceability is the ability to trace the source, origin, or production conditions of raw materials**
1508 **and production inputs purchased.⁹ Traceability provides a way to identify and avoid potential**
1509 **negative impacts associated with an organization's products as well as to demonstrate**
1510 **adherence to organizations' sustainability commitments.**

1511 Agriculture, aquaculture, and fishing organizations may source their products and procure animal feed
1512 from multiple farms, mills, plantations, waters, or hatcheries. The sectors' supply chains can be
1513 complex, crossing international borders. Production conditions can differ highly across countries,
1514 causing diverse impacts on the economy, environment, and people, including impacts on their human
1515 rights. Production in the sectors can also involve informal operations, where impacts often go
1516 undocumented. Supply chain mapping allows to identify the actors in an organization's supply chain
1517 and the relationships among them, offering a basis for traceability.

1518 Traceability mechanisms enable organizations to know the origins of their products and identify
1519 impacts they may be involved with via their business relationships. These mechanisms serve to
1520 protect public health and ensure compliance with food safety policies by, for example, mitigating
1521 negative impacts in cases of urgent product recalls over food safety concerns and outbreaks of
1522 disease in animals.

1523 Organizations in animal production and aquaculture can have significant impacts associated with
1524 animal and fish feed they source and are thus expected to trace feed ingredients. Feed in
1525 aquaculture can come from fish caught in the wild, contributing to overfishing. Plant-based feed
1526 includes wheat, rice, and soy; almost 80% of the world's soybean crop is used as animal feed, and in
1527 many areas, it is associated with deforestation and conversion.¹⁰

1528 Eliminating or reducing deforestation or other forms of natural ecosystem conversion in the value
1529 chain requires tracing the origin of products to farms, plantations, or smallholder organizations,
1530 notably in jurisdictions with deforestation or conversion risks and in the absence of other supply chain
1531 control mechanisms, such as audits or certification. In the fishing sector, traceability is required to ensure
1532 sustainability of fishery resources and legality of fishing operations.

1533 **ILLEGAL, UNREPORTED, AND UNREGULATED FISHING**

1534 Some estimates indicate that up to 30% of fish sourced globally comes from illegal, unreported, and
1535 unregulated (IUU) fishing. IUU fishing includes fishing without a license, exceeding fishing quotas,
1536 capturing undersized fish or endangered species, using unauthorized fishing gear, fishing in restricted
1537 or protected marine areas or inshore waters reserved for local artisanal fishers, and unauthorized
1538 transfer of catch from one vessel to another.

1539 IUU fishing is a threat to marine ecosystems and biodiversity because of its potential impacts on the
1540 sustainability of fishing stocks. Traceability is a fundamental tool against IUU fishing. Certified
1541 fisheries, fisheries improvement projects, or robust monitoring, control, and surveillance (MCS)
1542 measures can also provide some level of assurance against IUU fishing.

1543 Traceability also facilitates transparency of value created at each stage of the value chain and how
1544 the value is distributed among producers. Knowing this information is relevant for establishing
1545 purchasing prices for agriculture, aquaculture, and fishing products that provide for living income to
1546 workers, farmers, and fishers (see *Living income*).

⁹ The definition is based on the [GRI 204: Procurement practices 2016](#).

¹⁰ To illustrate, only 19% of the soy consumed in the European Union can be traced to producers who do not increase deforestation; IDH The Sustainable Trade Initiative, [European Soy Monitor](#), 2020.

1547 Tracing the origins of products can be challenging, and traceability across the agriculture, fishing, and
 1548 aquaculture sectors is unevenly implemented. Organizations that source agriculture, aquaculture, or
 1549 fishing products might, depending on the product, be able to trace each to its original source or a
 1550 certain geographic area. Suppliers may also have certifications and assurance schemes that link
 1551 products to production sites with known environmental, economic, and social performance records,
 1552 known as low-risk jurisdictions. While some certification mechanisms might support traceability,
 1553 traceability remains the responsibility of the organization.

1554 **What to report**

1555 If the organization has identified supply chain traceability as a material topic, this section lists the
 1556 disclosures that have been identified as relevant for reporting on the topic by the agriculture,
 1557 aquaculture, and fishing sectors.

Standard	Disclosure	Additional sector recommendations
Management of the topic		
GRI 103: Material Topics	Disclosure MT-3 Management of material topics	<p>Describe the rationale and methodology for tracing the source, origin, or production conditions of raw materials and production inputs purchased.</p> <p><i>Note: These recommendations are based on the guidance to clause 1.1 in GRI 204: Procurement Practices 2016.</i></p> <p>The following additional sector recommendations are for organizations in the fishing sector:</p> <ul style="list-style-type: none"> - Describe the policies, assurance, and risk assessment processes of the organization related to risks of illegal, unreported, and unregulated (IUU) fishing; - List collaborations 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 the organization sources, for example, if the product can be traced to the national, regional, or local level or a specific point of origin.		
Report the percentage of suppliers in the organization’s supply chain that are certified or undergoing improvement projects or assessment.		
<p>Report the percentage of products verified as being in accordance with credible internationally recognized responsible production standards, according to standard or product.</p> <ul style="list-style-type: none"> - For organizations in the fishing sector, describe whether this includes chain of custody certification and complies with the Global Sustainable Seafood Initiative (GSSI); - For organizations in the agriculture and aquaculture sectors, describe whether certification includes farms, hatcheries, and feed mill levels. 		

I558 **Resources and references**

I559 The intergovernmental instruments and references used to develop this topic description, as well as
I560 further resources that may be helpful for understanding and reporting on the topic by the agriculture,
I561 aquaculture and fishing sectors are listed in the Bibliography on page 87.

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1562 **2.24 Public policy and lobbying**

1563 **An organization can participate in public policy development, directly or through an**
 1564 **intermediary organization, by means of lobbying and making financial or in-kind contributions**
 1565 **to political parties, politicians, or causes. This topic covers an organization’s approach to**
 1566 **public policy participation, and the impacts that can result from the influence an organization**
 1567 **exerts in such participation.**

1568 Agriculture, aquaculture, and fishing organizations can be involved in public policy development –
 1569 concerning environmental regulations, access to natural resources, labor laws, food safety, public
 1570 health, and animal welfare on local, national, or international scales – and, in doing so, potentially
 1571 exert significant influence. Transparency around lobbying activities and political contributions is crucial
 1572 for understanding agriculture, aquaculture, and fishing organizations’ impacts related to public policy
 1573 and lobbying.

1574 Agriculture, aquaculture, and fishing products can be subject to government price setting and
 1575 subsidies or be affected by mandatory quotas, which can prompt organizations to lobby. In
 1576 agriculture, documented cases show how large agricultural organizations may lobby to postpone legal
 1577 requirements for rotating crops and to prevent penalties for inadequate use of land. Agriculture lobby
 1578 activities can also target approvals of genetically modified organisms (GMOs) and pesticides.
 1579 Lobbying activities can have an impact on farmers’ access to technology and genetic resources, such
 1580 as seeds from genetically heterogeneous varieties, including traditional crops.

1581 In animal production, lobbying can inhibit public policy development that deals with livestock’s
 1582 negative impacts on the environment. In many countries, livestock products – particularly dairy and
 1583 beef – are heavily subsidized due to the influence that livestock organizations exert. These subsidies
 1584 can facilitate supply of animal products at prices that do not cover costs to the environment but are
 1585 enabled expressly through lobbying. Lobbying can also prevent stricter standards of animal welfare.

1586 In fishing, organizations can influence allowable catch and quota regulations, including international
 1587 trade negotiations and inter-country agreements on fishing quotas. Locally, lobbying can sway
 1588 attempts to limit catch in order to preserve fishing stocks (see *Anti-corruption*).

1589 **What to report**

1590 If the organization has identified public policy and lobbying as a material topic, this section lists the
 1591 disclosures that have been identified as relevant for reporting on the topic by the agriculture,
 1592 aquaculture, and fishing sectors.

Standard	Disclosure	Additional sector recommendations
Management of the topic		
GRI 103: Material Topics	Disclosure MT-3 Management of material topics	
Topic Standards disclosures		
GRI 415: Public Policy 2016	Disclosure 415-1 Political contributions.	

1593 **Resources and references**

1594 [GRI 415: Public Policy 2016](#) lists authoritative intergovernmental instruments and other sources
 1595 relevant to reporting on this topic.

1596 The additional intergovernmental instruments and references used to develop this topic description,
 1597 as well as further resources that may be helpful for understanding and reporting on the topic by the
 1598 agriculture, aquaculture and fishing sectors are listed in the Bibliography on page 88.

1599 **2.25 Anti-competitive behavior**

1600 **Anti-competitive behavior refers to actions that can result in collusion with potential**
 1601 **competitors, with the purpose of limiting the effects of market competition. This can include**
 1602 **fixing prices or coordinating bids, creating market or output restrictions, imposing geographic**
 1603 **quotas, and allocating customers, suppliers, geographic areas, or product lines. This topic**
 1604 **covers impacts as a result of anti-competitive behavior.**

1605 Many agriculture, aquaculture, and fishing products are purchased from producers and traded by only
 1606 a limited number of organizations. In situations of limited market options, traders and buyers can exert
 1607 significant market power.

1608 Anti-competitive agreements between agriculture, aquaculture, and fishing organizations can lead to
 1609 setting purchasing prices for products below those in a competitive market as well as restrictions on
 1610 the product volumes. Many producers in agriculture, aquaculture, and fishing sectors are smallholder
 1611 farmers and small-scale fishers, often working in the informal sector and facing substantial barriers to
 1612 access markets (see *Economic inclusion*). Large organizations that source supplies from small
 1613 producers can take advantage of information asymmetry and market fragmentation to limit their
 1614 choices of whom to supply.

1615 Anti-competitive practices may render small producers in these sectors unable to cover their costs,
 1616 achieve living income, or pay wages to their workers, resulting in economic exclusion and risk to
 1617 livelihoods. Other actions that purposely limit effects of market competition can also cause small
 1618 producers to lose their independence and be pressured into becoming subsidiaries of large
 1619 multinational organizations. In some parts of the sectors, cartels have caused exclusion of small
 1620 producers from international markets.

1621 Cooperatives or organizations with mandatory membership can affect market competition by requiring
 1622 farmers and fishers to sell their products exclusively through them. While such arrangements can
 1623 benefit producers, they can also pose anti-competitive concerns as limiting consumer’s choices, if
 1624 cooperatives represent a major share of the sector’s productive capacity.

1625 **What to report**

1626 If the organization has identified anti-competitive behavior as a material topic, this section lists the
 1627 disclosures that have been identified as relevant for reporting on the topic by the agriculture,
 1628 aquaculture, and fishing sectors.

Standard	Disclosure	Additional sector recommendations
Management of the topic		
GRI 103: Material Topics	Disclosure MT-3 Management of material topics	
Additional sector disclosures		
GRI 206: Anti-competitive Behavior 2016	Disclosure 206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	

1629 **Resources and references**

1630 [GRI 206: Anti-competitive Behavior 2016](#) lists authoritative intergovernmental instruments and other
 1631 sources relevant to reporting on this topic.

1632 The additional intergovernmental instruments and references used to develop this topic description,
 1633 as well as further resources that may be helpful for understanding and reporting on the topic by the
 1634 agriculture, aquaculture and fishing sectors are listed in the Bibliography on page 88.

1635 **2.26 Anti-corruption**

1636 **Anti-corruption refers to how an organization manages the potential of being involved in**
 1637 **corruption. Corruption refers to practices such as bribery, facilitation payments, fraud,**
 1638 **extortion, collusion, money laundering, and the offer or receipt of an inducement to do**
 1639 **something that is dishonest or illegal.**

1640 Corruption in the agriculture, aquaculture, and fishing sectors can erode the capacity of governments
 1641 to limit practices, such as deforestation and overfishing, increase the potential for impacts on workers
 1642 and communities, and reduce government revenues. Organizations that engage in corruption can
 1643 have an unfair advantage in competitive markets.

1644 Corruption in the agriculture, aquaculture, and fishing sector may be related to the use of land and
 1645 other natural resources regulated by government agencies. It can take the form of, for example,
 1646 bribes paid to officials to register land, acquire land information, or obtain permits to establish an
 1647 operation (see *Land and resource rights*). This can affect rights holders and lead to the displacement
 1648 of communities, particularly in areas without secure land tenure.

1649 Corruption can also involve unduly benefiting from political reforms and land transactions, such as
 1650 privatization of state-owned land, approval of zoning plans, and land expropriation, while ignoring
 1651 legal mechanisms and causing impacts on people and ecosystems.

1652 Other examples of corruption in the sectors may include inducing officials to ignore illegal farming or
 1653 fishing operations. Illegal farming operations can lead to loss of natural ecosystems when land is
 1654 cleared. Corrupt practices in fishing can facilitate access agreements between organizations and
 1655 officials of countries rich in fishery resources.

1656 Corrupt practices can also make illegal, unreported, and unregulated fishing (IUU) and exceeding
 1657 quotas possible, which undermines sustainability of stocks. Fishers themselves might be involved in
 1658 corruption in an attempt to get more catch. Records of type or volume of catch may be falsified or
 1659 authorities may be bribed to ignore or certify false records.

1660 Operating fishing vessels under flag of convenience or an unknown flag can also be associated with
 1661 corruption when it is done with a view to bypass countries' legal restrictions.

1662 **What to report**

1663 If the organization has identified anti-corruption as a material topic, this section lists the disclosures
 1664 that have been identified as relevant for reporting on the topic by the agriculture, aquaculture, and
 1665 fishing sectors.

Standard	Disclosure	Additional sector recommendations
Management of the topic		
GRI 103: Material Topics	Disclosure MT-3 Management of material topics	
Topic Standards 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	

1666 **Resources and references**

1667 [GRI 205: Anti-corruption 2016](#) lists authoritative intergovernmental instruments and other sources
1668 relevant to reporting on this topic.

1669 The additional intergovernmental instruments and references used to develop this topic description,
1670 as well as further resources that may be helpful for understanding and reporting on the topic by the
1671 agriculture, aquaculture and fishing sectors are listed in the Bibliography on page 89.

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1672

Glossary

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Note to the GSSB: A number of defined terms are being revised as part of the review of the GRI Universal Standards. To facilitate consistency, this glossary section will be completed prior to public exposure based on the drafts of Universal Standards submitted to the GSSB for approval. No new defined terms are proposed to be added as a result of the development of this Standard.

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

This document does not represent an official position of the GSSB

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