

Process to develop AFF Working Paper

Objective

- 1 This paper provides a detailed overview of the process and tasks completed as part of the development process for the [draft] ESRS working paper on the Agriculture, Farming and Fishing Sector. The process was aimed at implementing the methodology agreed by SR TEG and SRB in August/September 2022.
- 2 There are no specific questions for SR TEG in this paper.

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Process to develop working paper including General Approach

Work completed as part of Cluster 7 (2022)

3 The work of Cluster 7 of the PTF-ESRS formed the basis of the work on this working paper.

Stakeholder workshop: June 2022

4 The first Agriculture, Farming and Fishing ('AFF') sector stakeholder engagement workshop was attended by both experts from the sector and NGOs. There were concerns that the focus was too negative and ignoring positive effects and opportunities of the sector. Inputs were received during the session from attendees on sustainability matters and topics via polling which has been included in Agenda paper 03-04.

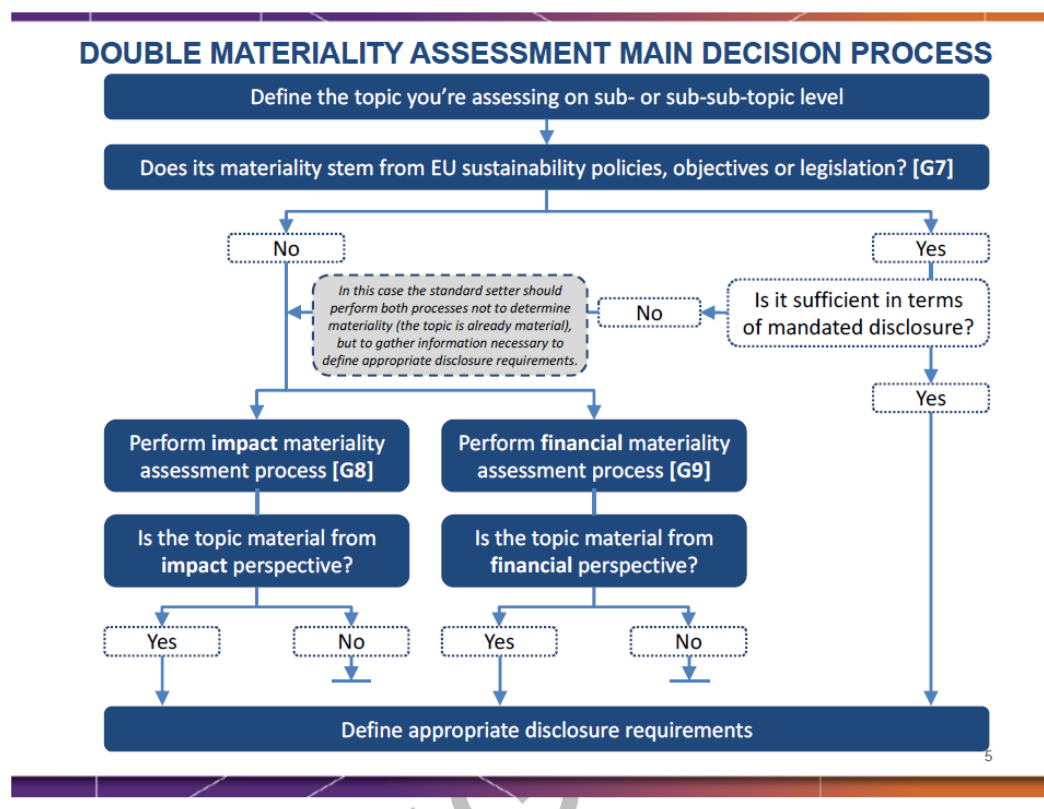
5 An important recommendation was to add land use change with a special focus on deforestation.

6 Workshop recordings, notes and polling inputs were analysed and reviewed for relevant updates to the [draft] working papers with the main feedback and review. GRI (Agriculture, Aquaculture and Fishing Sector Standard published in June 2022) and other regulatory and reporting standard information were incorporated to the review of sustainability matters and topics and an overall regulatory review.

Proposed methodology for determining material topics in sector-specific ESRS

7 In August and September 2022 a paper was approved by EFRAG SR TEG and SRB outlining a proposed methodology for determining material topics in sector-specific ESRS. The process and methodology outlined in this paper follows the decision-making process and tasks completed for AFF in developing the working paper.

Double materiality assessment and main decision process:



AFF sustainability matters

Preliminary analysis

8 An initial list of sustainability matters was based on the relevant industry topics identified in the SASB standards and a draft prepared, but ultimately not included in SEC 1.

AFF stakeholder workshop 1 feedback

- 9 Following the initial workshop an analysis was completed on the main sustainability matters and topics covered by the aforementioned standards and defined by Cluster 7.
- 10 In addition to this, the matters and topics disclosed by the largest undertakings in the sector (both in Europe and globally) were identified. An overview of companies reviewed during this process is still under finalisation, could be delivered in next steps of the process. The updated list of matters and topics was mapped to sustainability matters included within [draft] agnostic standards.
- 11 This resulted in an updated and more complete list of sustainability matters and topics relevant to AFF and has been included in the working paper.
- 12 Descriptions of each sustainability matter were created post the above process based on the impacts, risks and opportunities.
- 13 In addition, the updated list of sustainability matters was mapped to the different topics from GRI, SASB and other Standards/Frameworks as outlined later in this document under Legislative, Regulatory Review and Policy Alignment.

AFF stakeholder workshop 2: Discussions on sustainability matters

- 14 In October 2022, the list of sustainability matters developed above and their descriptions were included in a questionnaire for workshop participants subscribers and the results of which were presented during the workshop (sustainability matters and regulatory review).
- 15 Feedback and inputs on prioritisation of sustainability matters were incorporated into the list of matters included in the [draft] working paper.
- 16 In addition to this when [draft] ESRS 1 was published in November 2022, the final list of sustainability matters covered by the sector agnostics standard was used to map the sustainability matters identified in AFF.

AFF Disclosure Requirements

Preliminary Analysis

- 17 SASB DRs formed the starting point for [draft] DRs included in Agriculture, Farming and Fishing which was completed as part of Cluster 7 work. Based on this and feedback from initial workshops, relevant DRs from the GRI AFF standard were developed.
- 18 DRs already covered by the agnostic standards were removed and any that were purely for the AFF were amended where necessary to reflect specificities. Additional and new DRs were also included incorporating feedback received at workshops (most notably regarding carbon sequestration). For this similar disclosures by companies were adapted by using the structure but changing the topics.

AFF stakeholder workshop 3: November 2022

- 19 During the third and final workshop the EFRAG Secretariat presented the main topics/shortened versions of proposed DRs to the sector communities. They were requested to rank the importance of the DRs, to prioritise the long list of potential DRs.
- 20 Significant amount of feedback was received and incorporated in the working paper. This feedback was also summarised in the public session of the workshop.

AFF sector descriptions

Preliminary Analysis

- 21 The initial sector description that was included in [draft] SEC1 was based the SASB sector descriptions and the NACE code sector descriptions and presented at the first AFF workshop in June 2022.

AFF stakeholder workshop 2: 25 October 2022

- 22 Manufacturing of prepared animal feed (NACE Code 15.7) was added to the sector description and scope of the standard.

EU Legislation and regulatory review:

CSRD

23 The CSRD formed the basis for the development of the AFF working paper.

Preliminary analysis of other relevant legislation

24 Cluster 7 identified international and EU legislation and divided into ESG topics. Additional desk research and review was completed presented at Workshop 2. The writing team's approach was to focus primarily on EU legislation and used Eur-lex to identify relevant legislation.

25 Additional items noted by stakeholders was the EU Single Use Plastics Directive (2019/904), Biodiversity Strategy (2020/380), Soil Health Strategy (2021/669), Chemical Strategy for Sustainability (2020/667), Sustainable Use of Pesticides Regulation (2202/0196) and Water Framework Directive (200/60/EC).

26 The writing team has endeavoured to consider all relevant legislation and regulation in their review but additional work may be required. Currently, no additional DRs have been added to the [draft] Working paper based on this legislation.

Sustainability reporting in AFF

Existing Standards

Sustainability Accounting Standards Board ("SASB")

27 The SASB standards are the most developed in regard to comprehensive sector specific sustainability reporting and will be important on an ongoing basis.

28 However, [SASB standards](#) have been developed for the USA and are therefore not necessarily relevant to European or global circumstances. The standards have not been recently updated over the past 10 years and may lack requirements with respect to technological advances. Furthermore, these do not use double materiality as required by CSRD.

Global Reporting Initiative ("GRI")

29 The most updated and comprehensive sector specific sustainability standards are those developed by [GRI](#) and the Agriculture, Aquaculture and Fishing Standard was published in June 2022.

30 However, GRI has a global perspective and therefore is not EU specific. It also focuses on impact materiality rather than double materiality. As GRI is a voluntary framework, managing an appropriate balance between the burden on preparers and the requirements of ESRS remains important.

Sustainability Reporting: Large agriculture, farming and fishing organisations

31 The drafting team considered the disclosures of several large companies in the AFF sector (in the EU) to evaluate the topics reported and other sustainability reporting practices. Most of the companies used general, universal reporting standards such as GRI.

Known issues in the AFF sector

32 Based on work performed, the following issues have been noted as follows:

1. Emissions

GRI identifies the following as significant issues:

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

land use change, including the conversion of land from a natural ecosystem for use by the sectors [46] (see also topic 13.4 Natural ecosystem conversion). Forests contribute to the reduction of CO₂ by absorbing more carbon than they release, making them a carbon sink. Clearing forests or grasslands results in large amounts of CO₂ being released. Soils can also absorb greenhouse gas emissions. Soil and pasture management practices can contribute to the capacity of soil to store carbon or adversely accelerate the release of carbon from the soil into the atmosphere (see topic 13.5 Soil health). Restoring and preserving carbon sinks, such as natural ecosystems and soils, plays an integral role in mitigating climate change (see also topic 13.2 Climate adaptation and resilience). Land management for crop production produces GHG emissions through soil cultivation, including tillage, crop residue decomposition, and burning vegetation and crop residues. This results in the production of CO₂, N₂O, and particulate matter. Fertilizers, pesticides, and fuels used to power machinery and vehicles also release GHG emissions. Ruminant livestock produce GHG emissions during respiration and digestion. Animal manure also emits gases, such as CH₄, N₂O, and CO₂. Livestock on managed pastures and rangelands was estimated accounted for over half of total anthropogenic N₂O emissions from agriculture [46]. CH₄ and N₂O emissions have a higher global warming potential than CO₂.

- 34 In animal production and aquaculture, emissions are also associated with animal and fish feed sourcing. These emissions can be caused by natural ecosystem conversion and the feed's production, processing, and transportation. In aquaculture land-based farms, emissions are also released from the combustion of fuel to generate the energy needed to regulate water temperature and circulation. Fishing activities produce emissions from burning fuels, such as diesel, marine fuel oils, and intermediate fuel oils. These fuels provide the power to fishing vessels to access marine stocks and power onboard fish processing facilities, including freezing or refrigerating fish. Fishing vessels are not necessarily optimized for fuel efficiency, further contributing to emissions. The combustion of fuels also produces localized air pollution, while the use of refrigerants to store fish products can result in the emission of ozone-depleting substances. The goal of the Paris Agreement to limit global warming to well below 2°C requires organizations to set emissions targets consistent with the cumulative carbon budgets that set a cap for the total allowed CO₂ emissions [42]. Reducing emissions for the sectors includes measures that help mitigate the main sources of GHGs, for example, measures to reduce methane (CH₄) emitted by ruminants through better management of feed and manure, or in crop production, using culture-specific production practices, such as growing rice using alternate wetting and drying methods that reduce methane production.

2. Biodiversity

GRI identifies the following as significant issues:

- 35 Agriculture, aquaculture, and fishing operations pose threats to biodiversity through air, soil, and water contamination, deforestation, soil erosion, sedimentation of waterways, and species extraction. Biodiversity generally declines as agriculture, aquaculture, or fishing activities intensify. This is largely driven by natural ecosystem conversion and habitat change (see also topic 13.4 Natural ecosystem conversion). Biodiversity impacts result in increased mortality rates of species, habitat fragmentation, and can lead to species loss or extinction. Biodiversity can be adversely impacted by monoculture. Growing the same crops or rearing the same animal species year after year may increase production but it also decreases agrobiodiversity on farms and plantations and can compromise biodiversity in adjacent environments. In crop production, continuous monocropping can result in a build-up of pests and diseases, usually requiring higher volumes of pesticides, which can be toxic to many non-target species, including pollinators. About 40% of invertebrate pollinator species, particularly bees and butterflies, face extinction [71]. Animal production can be a major source of surplus nitrogen and phosphorous pollution, leading to eutrophication in adjacent lakes and rivers, rendering them uninhabitable for aquatic organisms (see also topic 13.7 Water and effluents). Aquaculture activities have similar impacts due to a build-up of fish excrement in waterbodies. These impacts can adversely affect the availability of fishery resources and food for local communities. Aquaculture can also result in impacts on local biodiversity through escapes from aquaculture farms, which in turn can compete with the area's native species. Poor feeding practices can result in excess or insufficient feed for fish, adding to disease outbreaks and

aquatic pollution. The presence of extra feed can attract wild fish and predators to the water column.

- 36 Fishing is one of the most significant drivers of declining ocean biodiversity. This is largely due to overfishing, by-catch, and illegal, unreported, and unregulated fishing (IUU). From 1974 to 2017, the proportion of the world's fish stocks classified as overfished increased to 34.2%, with only about two-thirds of global fish stocks deemed as biologically sustainable (see references [65] and [68]). Overfishing leads to impacts on the biodiversity of marine ecosystems by altering the composition of species. These alterations result in impacts on predator-prey relationships and cause shifts in trophic structures. Overfishing can be harder to prevent in international waters, where efforts to manage stock sustainably are further complicated when fish move across country borders. Fishmeal and fish oil are rich in protein and are typically used as fish and animal feed ingredients. Fishing products used for feed can be derived from forage fish or fishing by-products, including trimmings and offcuts. Overfishing forage fish stocks used for feed increases pressure on the wild trophic structures. In aquaculture, further pressure on fish stocks can also be driven by using juvenile seeds captured in the wild. Certain fishing practices, for example, bottom trawling in areas of high biodiversity value, can damage the seabed's physical structure, affecting bottom plants, corals, sponges, fish, and other aquatic animals. This practice can profoundly change how natural benthic ecosystems function or lead to their destruction. Seabed damage can also result in carbon dioxide (CO₂) emissions. A phenomenon known as 'ghost fishing' can threaten both target and non-target species, potentially killing endangered and protected species and damaging underwater habitats. This phenomenon occurs when fishing gear is lost or discarded and can continue to trap species indiscriminately. Lost or discarded fishing gear also contributes to marine plastic pollution (see also topic 13.8 Waste). About 80% of terrestrial biodiversity is found in indigenous peoples' lands and forests [76]; respecting indigenous peoples' rights to land and natural resources can also make a profound contribution to biodiversity conservation (see topic 13.14 Rights of indigenous peoples and topic 13.13 Land and resource rights).

3. Natural Ecosystem conversion

GRI identifies the following as significant issues:

- 37 In agriculture and aquaculture sectors, natural ecosystem conversion can occur through the use of land and aquatic environments for animal breeding, grazing, crop production, aquaculture production, and ancillary activities. This can occur rapidly, with a significant change taking place in a short time, or gradually, with incremental changes over a long time. Terrestrial ecosystem conversion can include the conversion of forests through deforestation and the conversion of other ecosystems, such as grasslands, woodlands, or savannas. Deforestation occurs when primary and secondary forests are cleared, often by burning. Deforestation in tropical rainforests can have a particularly severe impact because they are habitat to much of the world's biodiversity. Aquaculture operations can result in clearing mangroves, salt marshes, and wetlands or produce sustained changes to the coastal, lake, and river ecosystems to make them fit for aquatic farming sites. Aquaculture also relies heavily on crops, such as soy, for fish feed which can contribute to the conversion of terrestrial ecosystems. Feed ingredients need to be traceable to identify and prevent the potential negative impacts associated with conversion (see topic 13.23 Supply chain traceability).
- 38 The rate of deforestation and conversion in the agriculture sector has been increasing to give way to plantations and pastures [91]. Deforestation and conversion occur in the supply chains of beef, soy, palm oil, cocoa, coffee, rubber, and other products. To be deemed deforestation- and conversion-free, products must be assessed as not causing or contributing to natural ecosystem conversion after an appropriate cut-off date. People can be displaced due to physical changes to the landscapes surrounding their communities or degradation or depletion of natural resources or ecosystem services that the community relies on (see also topic 13.12 Local communities and topic 13.13 Land and resource rights). Loss of natural ecosystems and resources can also cause food insecurity. For indigenous peoples, natural ecosystem conversion can result in the loss of cultural and spiritual heritage and livelihoods and impact the rights to self-determination and self-governance (see also topic 13.14 Rights of indigenous peoples).

4. Pesticides Use

GRI identifies the following as significant issues:

- 39 If not handled properly pesticides can induce adverse health effects in humans by interfering with reproduction, immune, and nervous systems. Pesticides can also have negative impacts on biodiversity because of their toxicological effects. For example, pesticides that target insects or weeds can be toxic to birds, fish, and nontarget plants and insects. These impacts can threaten ecosystem services, such as pollination, and adversely impact food security and people's livelihoods (see also topic 13.3 Biodiversity). Each pesticide has different properties and toxicological effects. The World Health Organization (WHO) classifies the toxicity hazard levels for pesticides as either extremely hazardous, highly hazardous, moderately hazardous, slightly hazardous, or unlikely to present an acute hazard. Toxicity depends on the pesticide's function and other factors, such as its use and disposal. The regulation of pesticides is not always consistent across the world. Some pesticides, usually those classified as extremely and highly hazardous, are unregistered or banned in some countries but may remain available in others.
- 40 Workers and other people in the immediate area have the potential to be most affected during or right after pesticides are applied. Pesticides can also stay in soil and water for years and have long-term negative impacts on local communities and the local environment (see also topic 13.8 Waste). Women and children can be particularly vulnerable to negative health effects caused by exposure to pesticides (see topic 13.12 Local communities and also topic 13.19 Occupational health and safety). Exposure to pesticide residue is also possible through food and water (see also topic 13.7 Water and effluents and topic 13.10 Food safety). The Food and Agriculture Organization (FAO) estimates that in developing countries, 80% of the increase in food production needed to keep pace with population growth is projected to come from greater crop yields. This could trigger a further intensification of pesticide use to generate higher yields. The intensive use of pesticides sometimes leads to resistance and outbreaks of secondary pests. Integrated pest management in agriculture seeking to optimize pest control and mitigate negative impacts is a widely recognized approach that considers biological, chemical, physical, and crop-specific pest control practices. When pest control through the application of chemicals cannot be avoided, organizations are expected to manage pesticide use to minimize negative impacts and the application of extremely and highly hazardous pesticides [105].

5. Water and effluents

GRI identifies the following as significant issues:

- 41 Water is a critical input for crop and animal production, as well as aquaculture. The agriculture sector accounts for an estimated 70% of total water withdrawn globally [120]. In crop production, withdrawn water is primarily used to irrigate land, apply pesticides and fertilizers, and control crop cooling and frost. Water has critical importance to agricultural productivity. On average, irrigated land is twice as productive per unit as non-irrigated land. Irrigation can be achieved through different methods, including surface irrigation or subsurface irrigation. Water can be withdrawn from groundwater or surface water, such as lakes and reservoirs, or come in the form of treated wastewater or desalinated water. Intensive water withdrawal can decrease aquifer levels, which reduces the long-term sustainability of water resources and increases access costs for all users (see also topic 13.12 Local communities). In animal production, water is used for animal hydration and cleaning. It is also used for the washing and sanitization of milking and slaughter equipment used to process animal products. Effluents containing waste from terrestrial animals, fertilizers, and pesticides can contribute to the pollution of surface and groundwater.
- 42 Aquaculture water use is associated with raising aquatic organisms in water and can require significant amount of surface water. Aquaculture production occurs in ponds, artificial channels, and, to a lesser extent, closed-recirculation tanks. Because aquaculture operations take place in controlled environments, much of the water withdrawn can be returned to the source after use. Nutrient build up from discharges in water bodies near fish farms is a typical water impact from aquaculture production. This issue is exacerbated in high-density farms when fish feces discharged into water potentially deplete oxygen

levels and create algal blooms that lead to eutrophication. The eutrophication and acidification of water results in negative impacts on biodiversity. Water quality affects habitat and food sources for animals. Contaminated water can also adversely affect people's access to clean water, compromising their health and livelihoods. In fishing operations, wastewater can be discharged to the sea from fishing vessels. This includes water used to store fish aboard the vessel, which can contain fish waste from gutting and bleeding, as well as materials and coating from the hold and onboard refrigeration systems. Wastewater could also come from cleaning holds and machinery containing detergents, disinfectants and oily mixtures. Discharges can cause oxygen depletion in sea water and pollution in coastal areas.¹⁷

6. Food Security

GRI identifies the following as significant issues:

- 43 Agriculture, aquaculture, and fishing organizations have impacts on food supply and affordability. Quantity, quality, and accessibility of food also depend on farming and fishing practices. Globally, land used for agriculture is estimated at 38% of the total land surface [142]. Some regions are already constrained, limiting further land use expansion for food production (see also topic 13.4 Natural ecosystem conversion). Almost half of the world's calorie supply is derived from essential crops, such as maize, rice, and wheat. Competing demands for land, cultivation costs, and low margins may affect the supply and affordability of these crops. Climate change and adverse weather events can also cause impacts on yields, potentially increasing food losses (see also topic 13.2 Climate adaptation and resilience).
- 44 Achieving food security is likely to involve trade-offs in terms of how land and products are used. For example, utilizing human-edible products for other uses means they are not available as food. Intensive crop and animal production can result in increased availability of food. However, intensive production can also be associated with negative impacts on the environment and yields in the longer-term. Many agricultural practices deplete soil nutrients more quickly than can be formed, undermining the sustainability dimension of food security (see also topic 13.5 Soil health). Regenerative and organic practices, such as rotating crops or planting at optimal times, are considered to have the potential to contribute to greater soil health and productivity, and resilience of food production.

7. Animal health and welfare

GRI identifies the following as significant issues:

- 45 Globally, over 60 billion terrestrial animals are reared each year, a figure set to double by 2050 due to increases in animal protein consumption. Aquaculture farms produce 52 million tons of aquatic animals, representing half of all seafood consumed by humans worldwide [171]. Animal health and welfare is crucial because it concerns productivity, the safety of animal-derived products, and the humane treatment of animals. Animal health management focuses on controlling potential impacts on health and preventing disease. This can include the use of antibiotics, anti-inflammatory, and hormone treatments. Overuse or misuse of antibiotics can contribute to antimicrobial resistance. Undesired residues of chemical substances in animal products can negatively impact food safety, creating public health risks (see topic 13.10 Food safety). Inadequate animal health and welfare practices can also increase the spread of zoonotic diseases, such as salmonellosis, swine flu, and bird flu, which can occur through the movement and trade of terrestrial and aquatic animals and animal products without proper biosecurity controls. The conditions that animals are kept in can cause negative impacts on animal health and welfare. For example, terrestrial animals can be confined to small spaces, cages, or crates, preventing their movement and inhibiting normal behavior. Highly confined spaces can also lead animals to be left untreated for disease or injuries.
- 46 On-farm husbandry practices such as dehorning, hot-iron branding, castration, tail docking, and debeaking are associated with pain and distress. Similarly, slaughter practices can be a major source of suffering and fear. Therefore, many countries require pre-slaughter stunning to render an animal unconscious. In aquaculture and fishing, commonly used slaughter methods include asphyxiation, carbon dioxide stunning, and ice chilling (see references [173] and [174]). According to the World Organisation for Animal Health (OIE),

these methods fail to meet the standards set out in the Aquatic Animal Health Code. Water quality, stock density, and rearing environment in aquaculture operations have major impacts on aquatic organisms' health and welfare. Sea lice and diseases are among major health concerns for farmed fish and can reduce survival. Substances used to treat pests, such as lice, are usually administered via fish feed and water. When treatment is not managed properly, these substances can negatively impact non-target species, such as crustaceans, resulting in biodiversity loss (see topic 13.3 Biodiversity). Genetic modification performed on terrestrial and aquatic animals to increase growth and productivity may also be a source of negative impacts on animal health and welfare.

8. Land and resource rights

GRI identifies the following as significant issues:

- 47 Acquiring legal rights to land and natural resources is often a complex process. In addition, forms of land and resource tenure vary and can include public, private, communal, collective, indigenous, and customary tenure. Lack of recognition of customary claim to lands, fisheries, forests, and other natural resources – whether or not they are formally titled or legally registered – is a common cause of land and natural resource conflicts and negative impacts on human rights. Human rights, including people's civil, political, economic, social, and cultural rights, can all be affected by the sectors' use of land, fisheries, and forests [193]. Agriculture, aquaculture, and fishing organizations can be granted land and fishing concessions over territories and fishing resources. Informal tenure in some countries reaches from 80 to 90% of total land, and those living on this land might lack legal protection [204]. Organizations may infringe on land and resource rights if they fail to undertake prior consultation and an assessment of the impacts with rightsholders. Fencing, landscape engineering, roads, and drainage works that block or divert routes may also restrict people's rights. Rightsholders whose rights are most commonly affected by resource rights conflicts include farmers and fishers and their organizations, forest users, pastoralists, indigenous peoples, and local communities (see also topic 13.14 Rights of indigenous peoples and topic 13.12 Local communities)
- 48 Fish captured in the wild is usually a common property resource. Therefore, fishing communities are important stakeholders concerned with the use of fishery resources and the entire ecosystem. This includes access to ports, waters, high seas, and catch quotas. Fishery resources rights can be granted to organizations without due consideration for local fishers. Commercial fishing vessels accessing fishing zones reserved for or used by small-scale fishers and fishing in coastal areas can change fishery resources by disrupting fish breeding habitats. Agriculture, aquaculture, and fishing organizations are expected to identify legitimate rightsholders through their own assessments and ensure independent verification of assessment results. Organizations can contribute to securing land tenure and access to natural resources for rightsholders by requiring their suppliers to respect such rights.

9. Forced or compulsory labour

GRI identifies the following as significant issues:

- 49 The International Labour Organization (ILO) has identified the agriculture, aquaculture, and fishing sectors as highly susceptible to forced or compulsory labour. Workers face non-payment or late payment of wages, restrictions on freedom of movement, violence, threats, human trafficking, and other forms of modern slavery. Instances of forced labour have been documented in the supply chains of most products in the sectors (see references [251], [256] and [257]). Agriculture, aquaculture, and fishing workers are unlikely to be unionized, often earn less, and have fewer skills than workers in other sectors. The sectors are labour-intensive and have a high demand for workers, often filled by employment agencies. National labour laws do not always provide labour protection to smallholder farmers, small-scale fishers, or seasonal and casual workers (see topic 13.20 Employment practices). Work is often undertaken in remote or low-income rural areas. This can exacerbate the likelihood of abusive labour practices and cause workers to become indebted to their employers due to fees owed for job access or accommodation. In some cases, employers may use debt bondage to prevent workers from leaving.

50 Migrant workers in the sectors are more likely to work under conditions of coercion. They may not have valid work permits or be unaware of their legal status and even have their passports or identification documents taken away. Undocumented migrant workers can also be forced or coerced into illegal farming or fishing operations, carrying higher risks for their health and safety. Migrant fishing workers are a particularly vulnerable group. They often come from lower-income countries and can be trafficked or unaware of having crossed multiple borders, putting their human rights and even their lives at risk. In fishing operations, the continued pressure to deliver higher product volumes while keeping labour costs low can contribute to instances of abusive labour practices. Eliminating forced labour aboard fishing vessels and enforcing workers' rights can require additional effort because fishing vessels regularly operate offshore or under the flag of a country far removed from the fishing location. International standards largely rely on flag states to enforce labour laws on board fishing vessels. Identifying and preventing forced labour also requires understanding supply chains, where traceability plays a key role (see topic 13.23 Supply chain traceability).

10. Child labour

GRI identifies the following as significant issues:

51 The agriculture, aquaculture, and fishing sectors have the highest share of child labour compared to all other sectors and instances of child labour have been documented in the supply chains of many products in the sectors (see references [266] and [272]). More than 70% of all children in child labour are engaged in agriculture, aquaculture, and fishing. This is even higher among those aged five to 11 [266]. In some contexts, children's participation in non-hazardous agriculture, aquaculture, and fishing work can contribute to a child's skill-building and personal development. However, work defined as child labour is not associated with positive impacts and is considered inappropriate for a child based on hazards, hours, conditions of work, and interference with schooling. In some parts of the world, child labour may be socially acceptable, contributing to the propagation of the practice. Children working in agriculture, aquaculture, and fishing may perform tasks suited only for adult workers. These tasks are likely to have negative impacts on their health or development. For example, children can be tasked with applying pesticides in the agriculture sector. Exposure to pesticides can be particularly hazardous for children, as their bodies are more vulnerable to toxins, leading to increased risks of childhood cancers and impaired cognitive processes. Children are often designated to take care of animals. Because animal production activities are intensive, involving cleaning animals and their housing, collecting water, feeding, and milking, children can drop out of schooling, unable to combine it with this type of work.

52 In fishing, children work throughout the supply chain, performing tasks such as catching, processing, and selling fish and other aquatic products. Fishing communities may have few sources of income, and child labour is frequently used to supplement income or in subsistence activities. Long hours and nightshifts in these sectors can also subject children to hazardous working conditions (see topic 13.19 Occupational Health and Safety). Large parts of the agriculture, aquaculture, and fishing sectors involve informal work, increasing the likelihood of child labour. Seasonal work presents additional risks and raises the likelihood of school absence. Missing school for work negatively affects children's right to education. Less than one-third of children undertaking work receive payment. In many cases this is because children are working in family-run operations. Children also typically earn less than adults and, in some cases, they are also more productive, which employers may find advantageous. The International Labour Organization (ILO) identifies forced child labour and hazardous child labour as the worst forms of child labour [259]. A quarter of children in child labour fall victim to forced labour (see topic 13.16 Forced or compulsory labour). This can happen when, for example, labour brokers recruit and force children to travel far from home. In cases of debt bondage to an employer, parents might have their children work alongside them. Young workers are also recognized as a vulnerable group under child labour standards and are subject to protection from hazardous work, which they may be exposed to in the sectors.

11. Occupational health and safety

GRI identifies the following as significant issues:

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- 53 Agriculture, aquaculture, and fishing are listed among the most hazardous sectors, with high numbers of work-related injuries and ill health each year (see references [304] and [309]). Work-related hazards associated with agriculture, aquaculture, and fishing include:
- handling dangerous machinery, tools, vessels, and vehicles;
 - exposure to excessive noise and vibration, causing hearing and other sensory problems;
 - slips, trips, falls from heights, falls overboard, and drowning;
 - working with animals considerably heavier than the worker, lifting heavy weights, and other work giving rise to musculoskeletal disorders;
 - working near people or animals, increasing the risk of exposure to infectious diseases;
 - attacks by wild animals;
 - exposure to dust and potentially harmful organic substances and chemicals;
 - exposure to extreme temperatures and severe weather.
- 54 Because workers in agriculture, aquaculture, and fishing sectors often live where they work, occupational health and safety impacts can also be associated with workers' living conditions. Adequate working and living conditions provide access to potable drinking water, quantity and quality of food, hygiene, sanitation, and appropriate accommodation. Workers are entitled to safe, hygienic, and socially acceptable access to sanitation, a lack thereof can increase the risk of contracting infectious diseases. Workers may work long hours and many consecutive days in the agriculture sector, especially when harvesting crops. They can be exposed to pesticides and other chemical substances used. Children living with workers on farms and plantations can also be exposed to hazardous substances (see also topic 13.6 Pesticides use and topic 13.17 Child labour). Fishing is associated with many risks, such as ill health, work-related injuries, and death. Fishing far offshore is considered one of the most dangerous occupations. Vessel disasters and falls overboard pose the greatest safety risks and are the sector's leading causes of fatalities. Vessel safety risks are linked to weather, lack of weather warning systems, power loss, engine failure, or inadequate maintenance levels. At-sea crew transfers between fishing vessels and support vessels can pose additional safety risks, especially in rough seas. Most fishing vessels fall outside of size parameters regulated by international maritime safety standards. Small-scale fishers operate millions of fishing vessels that vary in degree of sophistication. Frequently, these vessels prove unsuitable for the conditions in which they may be used, such as carrying considerable amounts of fish or sailing far offshore. Vessel safety standards address risks related to general safety, such as fire safety, lighting, ventilation, personal safety, vessel stability, and survival at sea. Vessel safety training serves to prevent vessel disasters and ensure compliance with the safety standards. Insurance schemes can further provide income security for fishers and, in case of death or injury, to their families.
- 55 Fisheries may be abandoned by vessel owners without the prospect of payment or repatriation. There have been documented cases showing some abandonment lasting for many months. Abandonment can have health and safety impacts, including lack of medical care and regular food provision and harm to mental health caused by keeping people in a state of high uncertainty. Due to a lack of safety norms enforcement and inspection, illegal fishing operations and operations in contested waters can negatively impact the health and safety of workers. Addressing illegal, unreported, and unregulated (IUU) fishing in supply chains can help eliminate factors leading to compromised health and safety standards (see also topic 13.23 Supply chain traceability). The often isolated and transboundary movement of vessels means consistent access for labour inspection, and occupational health and safety policy enforcement remains difficult.

Sector description

- 56 As set out in SEC 1, the scope of the sector is determined with the aid of the NACE classification system and includes the following activities:
- A.01.11 Growing of cereals (except rice), leguminous crops and oil

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- A.01.12 Growing of rice
 - A.01.13 Growing of vegetables and melons, roots and tubers
 - A.01.14 Growing of sugar cane
 - A.01.16 Growing of fibre crops
 - A.01.19 Growing of other non-perennial crops
 - A.01.21 Growing of grapes
 - A.01.22 Growing of tropical and subtropical fruits
 - A.01.23 Growing of citrus fruits
 - A.01.24 Growing of pome fruits and stone fruits
 - A.01.25 Growing of other tree and bush fruits and nuts
 - A.01.26 Growing of oleaginous fruits
 - A.01.27 Growing of beverage crops
 - A.01.28 Growing of spices, aromatic, drug and pharmaceutical crops
 - A.01.29 Growing of other perennial crops
 - A.01.30 Plant propagation
 - A.01.41 Raising of dairy cattle
 - A.01.42 Raising of other cattle and buffaloes
 - A.01.43 Raising of horses and other equines
 - A.01.44 Raising of camels and camelids
 - A.01.45 Raising of sheep and goats
 - A.01.46 Raising of swine/pigs
 - A.01.47 Raising of poultry
 - A.01.49 Raising of other animals
 - A.01.50 Mixed farming
 - A.01.61 Support activities for crop production
 - A.01.62 Support activities for animal production
 - A.01.63 Post-harvest crop activities
 - A.01.64 Seed processing for propagation
 - A.01.70 Hunting, trapping and related service activities
 - A.03.11 Marine fishing
 - A.03.12 Freshwater fishing
 - A.03.21 Marine aquaculture
 - A.03.22 Freshwater aquaculture
 - 15.7 Manufacture of prepared animal feeds
- 57 During the development of the draft, it was suggested to focus equally on upstream and downstream undertakings. As mentioned above, NACE Code 15.7 Manufacture of prepared animal feed was added.
- 58 In contrast to GRI the AFF working paper does not include the following as already covered by the agnostic standard:
- (a) Waste,
 - (b) Local communities, Rights of Indigenous peoples,
 - (c) Non-discrimination and equal opportunity,
 - (d) Freedom of association and collective bargaining,
 - (e) Living income and living wage,
 - (f) Public policy, and
 - (g) Anti-corruption.