1. Applicability

This sector profile is designed to help fund managers quickly familiarise themselves with the most frequent and important environmental, social and governance (ESG) aspects of investments in the food and beverages sector. It aims to be a starting point for thinking about ESG risks and opportunities, and not a detailed technical guidance document.

- **Using this sector profile**
  A company can be affected by non-sector specific issues such as impacts on indigenous peoples and cultural heritage. Therefore, each company must be carefully considered based on its specific characteristics and circumstances including scale of operation, location, technology utilised, management capacity, commitment and track record, and supply chains. Additionally, E&S impacts, risks and opportunities in a particular company or sector can change over time for a number of reasons (e.g. changes in the applicable laws, or expansion of a company’s activities or assets). Fund managers should have systems in place to identify such changes and manage any associated risks and impacts and, where possible, capitalise on new opportunities.

This sector profile draws on internationally recognised good practice standards and guidance, particularly the [International Finance Corporation (IFC) Performance Standards](https://www.ifc.org/en/home/about/ifc-performance-standards) and the [World Bank Group EHS Guidelines](https://www.worldbank.org/en/sustainability). The sector profile identifies key standards that are generally applicable to each sector (refer to the ‘Standards, guidelines and other resources’ section below). It is not a substitute for such standards, which should take precedence as authoritative sources and basic technical references. Applicable laws and regulations must be taken into account and compliance with them should be regarded as the minimum acceptable performance standard.

See also [Environmental and social checklist](https://www.cdc.esgtoolkit.com/tools) and [Governance and business integrity checklist](https://www.cdc.esgtoolkit.com/tools) for questions that fund managers should consider when evaluating a food and beverage investment from an ESG perspective.

- **Scope of this sector profile**
  This profile covers the processing of meat, vegetable, fish, shellfish and fruit into value-added food and beverage products for human consumption.

  Business activities that fall within the scope of this sector profile include:
Food and beverages

- Industrial bakeries
- Breweries
- Dairy processing
- Drinks bottling
- Fish/shellfish (‘fish’) processing
- Fruit and vegetable processing
- Meat and poultry processing
- Grain mill products
- Sugar production
- Vegetable oil processing
- Wine making.

For related activities such as crop production, aquaculture, livestock farming, poultry production and slaughterhouses, refer instead to Sector profile: Agriculture and aquaculture. Commercial fishing is addressed in Sector profile: Fisheries.

Unless otherwise stated, the risks, impacts and opportunities outlined below relate to the operational phase of business activities. Generic guidance on ESG risks, impacts and opportunities associated with Project design and construction are discussed in the CDC Project Design and Construction Guide.

2. Key environmental and social aspects

This section outlines some of the specific risks and impacts that emerge from poor ESG practices. Weak management of these aspects may lead to reputational damage, have an impact on a company’s capacity to raise funding (debt and equity) and, more broadly,
negatively impact a company’s financial performance. Conversely, sound E&S practices are likely to improve a company’s reputation, access to investors and overall performance.

- **Management commitment, capacity and track record (CCTR)**
  Companies need management’s commitment and sufficient capacity to ensure that the necessary resources are available for E&S management. Refer to [investment cycle: Assessing companies’ commitment, capacity and track record](#).

- **Environmental and social management system (ESMS)**
  Companies should develop and implement an ESMS commensurate with the level of risks and impacts associated with its activities. For further advice refer to [E&S topic: Environmental and social management systems (company-level)](#).

- **Food safety**

  **Risks for the business**
  - Permanent or temporary loss of licence to operate due to breaches of the applicable food safety regulations.
  - Direct and indirect costs of quality failures (e.g. lost production, fines and reputational impacts).
  - Lack of access to markets where entry requires certification/meeting certain E&S requirements (e.g. international supermarket chains).

  **Opportunities for the business**
  - Operational benefits and sales/margin growth resulting from the attainment of internationally recognised food safety standards and certifications (e.g. ISO 22000, BRC Global Standard, IFS Food).
  - Access to markets can be enhanced where approved supplier or certification programmes include ESG requirements related to ingredient traceability, product attributes (e.g. organic, Fairtrade) or provenance.
  - Sales/margin growth through ability to meet the requirements of trade buyers (e.g. international supermarket chains) whose approved supplier programmes include E&S requirements.

Food safety is of critical importance, as it is paramount to ensure that products are in appropriate condition for human consumption. If significant food safety issues are identified or recognised as being likely to arise in a company, they should be addressed as a matter of priority.

Therefore, a company must implement and maintain a system to ensure appropriate
food safety standards. This system should cover suppliers, contractors and distributors, as well as the production facilities themselves, and include:

- Adherence to international Good Manufacturing Practice (GMP).
- Effective implementation of Hazard Analysis and Critical Control Points (HACCP) systems.
- Product traceability systems and product recall procedures.
- Certification to international standards on food safety management systems, if appropriate.

For further guidance refer to Codex Alimentarius international food standards, guidelines and codes of practice (WHO/FAO) and IFC Food Safety Toolkit.

- **Labour and working conditions**
  Note – Occupational health and safety is covered separately below.

Companies shall operate in accordance with applicable labour laws and regulations and ILO Fundamental Conventions. Refer to E&S topic: Labour standards.

- **Occupational health and safety (OHS)**
  - Companies may face prosecution or fines (or have their licenses revoked in extreme cases) if workers or contractors are injured or killed.
  - Damage to or loss of the company’s assets, loss of production, loss of clients/business, increased insurance premiums and legal claims (both in the short- and long-term) can result from poor OHS practices.
  - Low workforce morale and erosion of trust can lead to higher staff turnover, lower productivity, additional training and recruiting costs, and reputational damage.

**Risks for the business**
Opportunities for the business

- Proactively involving workers and contractors in key decisions can help to identify and maintain good OHS practices, and improve their acceptance if new or significantly different to previous practices.
- Productivity can be improved and insurance premiums for workers’ and compensation payments can be reduced.

OHS is an important consideration for any business, regardless of sector, and all companies must have in place appropriate OHS and emergency preparedness and response management systems, commensurate with level of risks.

If contractors are involved in operation and maintenance activities, companies should implement measures to ensure contractors work in accordance with applicable regulations and GIIP. Such measures should be covered in companies’ OHS and emergency preparedness and response management systems.

Specific OHS risks in the food and beverage industry include:

- Physical hazards (e.g. manual handling, repetitive work, slips on wet or food contaminated floors, falls from height, workplace transport, injuries from sharp knives or processing and packaging machinery).

- Exposure to noise (e.g. in canning plants and from bottling machines, conveyors and blanching applications).

- Biological hazards (e.g. development of infections resulting from exposure to microorganisms present in meat, fish, vegetables and other products involved in the processing process).

- Chemical hazards (e.g. chemicals used in cleaning/disinfection operations and cooling systems such as ammonia).

- Exposure to heat (e.g. from steam peeling, pasteurisation, and canning processes) and cold (e.g. working in refrigerated areas/rooms).

- Fire and explosion hazards such as explosive/combustible dusts (such as grain and flour), fermentation processes and the use of hazardous chemicals such as industrial alcohol.
For further sector-specific guidance refer to World Bank Group Industry Sector EHS Guidelines for **Breweries**, **Dairy Processing**, **Fish Processing**, **Food and Beverage Processing**, **Meat Processing**, **Poultry Processing**, **Sugar Manufacturing** and **Vegetable Oil Processing**.

For further general guidance on GIIP relating to OHS refer to **E&S topic: Occupational health and safety**, **IFC Performance Standard 2: Labour and Working Conditions**, **World Bank Group General EHS Guidelines** and **CDC Good Practice: Preventing Fatalities and Serious Incidents**.

- **Pollution prevention and resource efficiency**

  **Risks for the business**
  - Fines and penalties can be imposed for non-compliance with national pollution prevention and hazardous materials / waste management laws.
  - Excessive expenditure on energy and water supply.
  - Excessive expenditure on the management of emissions, solid waste and wastewater quality.
  - Lower operating costs, reduced environmental footprint and better preparedness for resource shortages or increased price of resources can result from adopting energy efficiency, water efficiency and cleaner production measures.

  **Opportunities for the business**
  - Use and, where possible, re-use of food packaging with lower environmental footprint and reduced transportation costs.
  - Enhanced access to markets where approved supplier programmes include E&S requirements.

**Energy efficiency**: Food and beverage processing activities typically require thermal energy for process heating, cooling and refrigeration — and there are costs associated with this energy consumption. Opportunities to adopt energy efficiency measures should always be explored, as should opportunities for on-site renewable energy generation (e.g. biogas from organic waste).

**Air emissions**: The main air pollutants from food and beverage processing operations are generally particulate matter (PM) and odour. Odour can be a significant concern to local communities. Companies should implement air emissions control and monitoring measures in accordance with applicable regulations and standards.
**Water management:** Food and beverage companies typically require a reliable supply of large quantities of good quality water for washing raw ingredients, cooling and cleaning production lines, and/or for use as an ingredient in their final product. The costs associated with this supply can be significant. High levels of water consumption can also lead to large volumes of wastewater, which can be expensive to treat and may require special permits.

Companies in this sector may face water scarcity and quality risks. Good quality water supplies may be under pressure due to low rainfall, groundwater pollution from agricultural run-off or industrial waste, as well as rising water demand from neighbouring communities and businesses. Food and beverage companies should assess water scarcity and pollution risks and implement measures to reduce water consumption in their production processes.

**Waste management:** This sector can generate significant volumes of organic, putrescible solid waste in the form of inedible materials and rejected products. The handling, storage, treatment and disposal of solid waste can entail significant risks and can be expensive. Hence, a Waste Management Plan should be implemented. Reducing the amount of solid waste produced makes raw material use more efficient.

**Packaging:** Selecting and designing the right packaging can have a positive impact on business including lower production costs and better transport efficiency. It can also help to reduce impacts associated with packaging waste (e.g. Improve packaging re-use or recycling, increase packing biodegradability).

For further sector-specific guidance refer to World Bank Group Industry Sector EHS Guidelines for Breweries, Dairy Processing, Fish Processing, Food and Beverage Processing, Meat Processing, Poultry Processing, Sugar Manufacturing and Vegetable Oil Processing.

For further general guidance on GIIP relating to pollution prevention and resource efficiency **E&S topic: Pollution prevention, E&S topic: Resource efficiency, IFC Performance Standard 3: Resource Efficiency and Pollution Prevention and World Bank Group General EHS Guidelines.**

- **Supply chains**
Risks for the business

- Risks related to weaknesses in supply chain reliability, sustainability and resilience to climate change; lower agricultural productivity and/or natural resource quality or availability due to inadequate E&S management practices (e.g. poor working conditions, violation of human and/or labour rights, unsustainable use of soil and water, illegal and/or inadequate land acquisition practices).

- Reputational risks linked to sourcing ingredients from unsustainable supply chains and/or providers that do not meet basic international standards and conventions (e.g. international conventions on child labour and forced labour).

- Achieve a more reliable, sustainable, resilient and competitive supply chain by collaborating with and, where possible, train suppliers to enhance E&S management measures to (i) improve resource use sustainability (e.g. water and soil); (ii) raise productivity and product quality; and (iii) develop stronger and better relationships with suppliers.

- Enhanced access to markets where buyers’ approved supplier programmes include E&S requirements and/or where customers take into account sustainability factors when buying food and beverage products.

Opportunities for the business

The adequacy and sustainability of supply chains can be a significant business success factor for many food and beverage companies. Challenging issues at the supplier level can include:

- Pollution prevention

- Labour and working conditions (including the use of child labour and/or forced labour)

- Inappropriate or illegal land use or acquisition

- Impacts on water resources

- Ecological and social impacts resulting from the conversion of natural habitats (such as through deforestation)

- Animal welfare
Where the company can reasonably exercise control, its ESMS and supply chain policies should seek to identify and manage such risks and impacts. Where control of risks is not possible due to insufficient influence on its supply chain, companies should seek to gain an understanding of the scale, type and significance of E&S issues and assess the risks associated with continuing the relationship with that supplier. If risks are significant it should explore alternatives.

E&S matters can also be important positive features in the development of more sustainable supply chains in the food and beverage sector. Agricultural extension measures (especially directed towards smallholders) can include advice and education leading to E&S and other benefits from improved labour practices, improved irrigation and resilience to water scarcity, better use and handling of pesticides, more effective use of fertilisers and better soil management, and reduced food wastage resulting from better product quality.

For further sector-specific guidance refer to Sector profile: Agriculture and aquaculture and Sector profile: Fisheries and E&S topic: Supply chains.

For further general guidance on GIIP relating to supply chains refer to E&S topic: Supply Chains, IFC Performance Standards.

3. Business integrity considerations

Fund managers should ascertain and continue to ensure that each company (regardless of sector) complies with the fund’s business integrity requirements. For further information, refer to Business integrity.

- Business integrity issues specific to the food and beverages sector
  The most prominent business integrity risks in the food and beverages sector are around government permits and inspections, i.e., paying off inspectors to ignore health and safety breaches. Companies should have clear processes in place for managing government permits and inspections.
4. Advice for Fund Managers

See also Environmental and social checklist, Governance and business integrity checklist and Investment cycle.

- **Sector risk overview**
  Several ESG issues may be material to the long-term value of food and beverage companies, depending on the specific circumstances and geographies. Fund managers can expect to find that while the ESG risks and impacts issues may be complex, they can usually be readily addressed by applying widely used, proven techniques and management practices (although this will need to be assessed on a case-by-case basis).

  External consultants may be engaged to advise on ESG matters, depending on, inter alia, the nature, scale and location of a company’s operations, its track record and the fund manager’s expertise and capacity to conduct appropriate E&S due diligence.

  Additionally, fund managers should bear in mind that the sector is under increasing scrutiny from regulators, consumers and NGOs in relation to ESG issues, including food safety and traceability and E&S supply chain issues.

- **Scoping considerations**
  In addition to the aspects highlighted above linked to the company’s assets, activities and workers, fund managers should take into account the following during the life of the investment, form screening to exit:
  - **Associated facilities:** Such as any farms and slaughterhouses owned or operated by the company.
  - **Contractors:** Whose operations present significant E&S issues which could have an impact on the business (e.g. transport services).
  - **Supply chains:** That present significant E&S risks and impacts where the company is in a position to exercise management control or influence. Even where a company cannot directly address risks because it lacks leverage or commercial influence, it is important that fund managers are aware of the risks. Refer to E&S topic: Supply chains.
• **Situations requiring extra attention**
  Extra attention, longer timescales, more intensive ESG due diligence, and ongoing company engagement and monitoring may be required in more complex situations. This may involve engaging consultants (see [Investment cycle: Working with consultants](#)) to conduct a gap analysis against the applicable local and international E&S standards (e.g. [IFC Performance Standards](#) and [World Bank Group EHS Guidelines](#)).

Examples of activities or Projects in this sector include:

- New Projects/expansions: Greenfield construction or major expansion Projects where the scale of production has major pollution potential and/or where the site is in a sensitive location (e.g. close to housing or protected natural habitats). See also the CDC Project Design and Construction Guide.

- Water use: Water-intensive businesses (such as large bottling plants) in locations that are subject to significant water scarcity, especially where there is the potential for competition or conflict with other water users such as local communities.

- Supply chains: Food products and intermediates from supply chains involving complex or controversial E&S issues that have attracted international concern, typically leading to the establishment of specific codes and certification schemes. Examples include processing of palm oil (often associated with deforestation and impacts on endangered species); cocoa powder (often associated with child labour, poor labour practices and deforestation); and fisheries (often associated with poor labour conditions and over-fishing).

- Transactions/geographies with high **business integrity** risks.

- Any other activities or Projects involving involuntary economic and/or physical displacement of communities or significant adverse impacts on biodiversity, habitats or ecosystem services, Indigenous Peoples, cultural heritage, or local communities. There are no intrinsic features of the food and beverages industry that predispose the sector to be associated with such impacts and risks (other than through the primary supply chain), but such issues may arise on occasion and should be managed in accordance with the applicable IFC Performance Standards.
5. Standards, guidelines and other resources

For authoritative guidance, fund managers should consult the applicable IFC Performance Standards and World Bank Group EHS Guidelines.

- **Applicable IFC Performance Standards**
  The IFC Performance Standards most commonly applicable to investments in this sector are:
  - IFC 2012 Performance Standard 1: Assessment and Management of Environmental and Social Risks and Impacts.

In addition, **IFC Performance Standard 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources** may be applicable if there are significant adverse impacts related to biodiversity or natural resources in the primary supply chain or as a result of associated facilities such as farms owned or operated by the company.

Other IFC Performance Standards may be applicable depending on the specific characteristics of a company. The screening stage of the fund manager’s ESG due diligence should always include a routine check for the potential presence of significant impacts covered by IFC Performance Standards.

- **Applicable World Bank Group EHS Guidelines**
  The most relevant World Bank Group EHS Guidelines in this sector are:
  - World Bank Group General EHS Guideline
  - World Bank Group EHS for Breweries
  - World Bank Group EHS for Dairy Processing
Food and beverages

- World Bank Group EHS for Fish Processing
- World Bank Group EHS for Food and Beverage Processing
- World Bank Group EHS for Meat Processing
- World Bank Group EHS for Poultry Processing
- World Bank Group EHS for Sugar Manufacturing
- World Bank Group EHS for Vegetable Oil Processing

Food safety is critically important in this sector. Fund managers making investments in this sector should ensure they have an appropriate understanding of GMP for food and beverage production and HACCP.

- **Additional references, standards and guidelines**
  Additional resources that may be valuable are:
  - The European Integrated Pollution Prevention and Control Bureau (IPPC) – BAT reference documents (BREFs).
  - Codex Alimentarius international food standards, guidelines and codes of practice (WHO/FAO).
  - IFC Food Safety Toolkit.
  - Transparency International.