

Impact assessment of the value chain

Value Chain Impact Assessment

Bio Bulgaria AD | September 2026, Version 2.0

This is an updated version 2.0 from September 2026.

Purpose

The purpose of this assessment is to identify potential and actual risks to human rights and partially to the environment across the value chain of Bio Bulgaria AD's operations. The company's business involves the development and trade of food products produced from organic agricultural and livestock ingredients, as well as building a new model of food production based on a partner network of farmers, producers, and distributors. The assessment is based on 2025 data and aims to cover all people and communities affected by the company's activities and its value chain.

Methodology

The assessment consists of detailing the value chain and identifying risks related to human rights, as well as environmental risks, based on various sources. Potential risks are identified using various online platforms Responsible Sourcing Tool, Fairtrade Risk Map, CSR Risk Check, while the B Corp Risk Tool (FR3.1) was used in conjunction with these databases to identify and validate sector risks for key raw materials and processors.

Actual risks can be identified through direct contact with stakeholders. Our current practice is to engage stakeholders continuously and build a system of trust, using diverse engagement methods. We make regular visits to the local farms we work with to discuss the issues and difficulties they face. We also visit local processors, with the goal of discussing difficulties and finding joint solutions.

Once a year, we conduct an employee survey to understand their perceptions of the working environment, as well as their daily difficulties and obstacles. Informal conversations take place on a daily basis as cases arise. We also conduct market research among our consumers to understand their attitudes. Additionally, feedback regarding our products is received through our social media communication channels. Our commercial partners have the opportunity to communicate with our sales

representatives on a daily basis to submit feedback, express opinions, and suggest ideas for improvement.

First, we outlined the value chain of our products and selected the stages where we believe risks are possible. Next, the selected stages were examined in detail, and risks were identified according to various sources. We used several criteria to narrow down the scope of the study, including origin and type of raw material, location and type of work during processing, and risks to end consumers.

Additionally, we identified our three most material purchases, which are raw materials, and specifically identified human rights and environmental risks for them. Environmental risks along the rest of the value chain have not been identified at this stage. We decided to limit this scope to raw materials, as we believe we have the greatest impact there.

Risk identification is divided into several stages:

1. **Raw Material Origin Risks:** Each identified risk is linked to a country of origin and, where possible, to a specific raw material (when such information was available in our sources).
2. **Manufacturing Partner Risks:** Risks identified regarding our partners, primarily related to the manufacturing of our products.
3. **End-Consumer Risks:** Risks associated with our end consumers.

We then prioritized the risks based on severity and likelihood and discussed what final rating to assign. This resulted in a matrix where we defined the most critical risks according to our specific business model.

We detailed the measures we already have in place and how they address the identified risks. Finally, we outlined the potential next steps to address these risks.

Fig. 1. Stages of the Risk Assessment Process

- **01** Description of the company's value chain
 - **02** Review of raw material suppliers for the products
 - **03** Identification of potential risks in raw materials
 - **04** Identification of potential risks in manufacturing partners
 - **05** Identification of potential risks in end consumers
 - **06** Prioritization: severity and likelihood degrees
 - **07** Applied measures
 - **08** Next steps and improvements
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The Value Chain

The company's value chain consists of the following stakeholder groups:

- Organic raw material producers and suppliers (crop or livestock production)
- Processing partners
- Bio Bulgaria AD as the trader and intellectual property holder of the food products
- Grocery stores, which represent the largest percentage of direct customers
- End consumers (product consumers)
- Waste management companies (packaging and organic waste)

Following internal discussions, we decided to focus on three main areas for risk identification. In our assessment, the highest number and most significant risks can be identified among raw material producers and suppliers. Next, our local partners are also subject to assessment. Lastly, we identified possible risks for our end consumers.

Identified Potential Risks

Raw Material Risks

For over 98% of raw materials, we have information on the country of origin. Here is the list of origins for Bio Bulgaria's organic raw materials:

- **South America:** Colombia, Mexico, Peru, Dominican Republic, Bolivia
- **Africa:** Madagascar, São Tomé, Uganda, Egypt
- **Asia:** China, Pakistan, Turkey, Iran, Sri Lanka, Philippines, Kazakhstan, Laos
- **Europe:** Germany, Bulgaria, Spain, Italy, Greece, Poland, Belgium, Czech Republic, Ukraine, Serbia, Romania, Cyprus, Austria, Netherlands, Hungary

84% of purchased raw materials originate from Europe. Using the cited sources, we identified risks in the respective countries, taking into account specific raw materials where possible. Where this was not possible, we focused on the general agricultural sector.

Table 1 in Annex 1 outlines all potential risks identified based on the sources cited above. Key conclusions include:

- **Discrimination** is the most frequent risk across almost all countries.
- **Forced Labor** is the second most common risk. In Asian and South American countries, it is often flagged alongside Child Labor and Human Trafficking.
- **Workers' Rights and Working Conditions** is the third most common risk, prevalent in South America, Asia, and Eastern Europe.
- **Civil Rights and Fundamental Human Rights & Freedoms** frequently co-occur in Middle Eastern, Central Asian, and Latin American countries.

Manufacturing Partner Risks

Over 90% of our manufacturing partner network is concentrated in Bulgaria. Therefore, we focused on potential risks in Bulgaria using the same sources. The risks identified here match those listed for Bulgaria in Annex 1, Table 1:

- Forced labor and Discrimination

Using a UN tool to identify other potential risks related to the manufacturing sector, we identified one additional risk:

- Occupational health and safety risks

End-Consumer Risks

Here, we primarily identified risks related to end-consumer health. This potential health risk was identified using the B Corp Risk Tool (FR3.1):

- 21% of our products have a sugar content exceeding 22.5%.

Risk Prioritization Based on Severity and Likelihood

Through internal discussions and source evaluations, we established the following risk matrix:

Risk	Severity	Likelihood	Status	Category	Details / Rationale
Discrimination	Medium	High	High risk	Potential	This is the most common risk in our analysis, hence its high priority despite medium severity. Consequences can be mitigated through communication, training, and grievance mechanisms.
Forced Labor	High	Medium	High risk	Potential	Highly prioritized as we enforce a zero-tolerance policy against such practices.

Child Labor	High	Medium	High risk	Potential	Highly prioritized as we enforce a zero-tolerance policy against such practices.
Human Trafficking	High	Medium	High risk	Potential	Highly prioritized as we enforce a zero-tolerance policy against such practices.
Workers' Rights (Processing Partners)	Medium	Medium	Medium risk	Potential	Most partners are in Bulgaria, governed by EU labor protection laws. We also maintain direct oversight over partner selection.
Fundamental Rights and Freedoms	High	Medium	Medium risk	Potential	Rated as medium risk due to the small volumes of raw materials sourced from high-risk countries.
Occupational Health & Safety Risks	Medium	Low	Low risk	Potential	Regular preventive training is standard practice in Bulgaria.
Consumer Health Risks	Low	High	High risk	Potential	According to the WHO, a 22.5% sugar content poses a health risk. Since consumers are a core stakeholder group, this risk is rated high overall.

Identified Actual Risks

To date, Bio Bulgaria has not identified any actual human rights risks within its value chain.

Our Three Most Material Purchases

To determine our most material purchases, we conducted an internal analysis of all cost items, including raw materials, finished goods, and services. This analysis covered all supplier tiers (from primary producers to processors and traders) and is updated annually to track changes in our risk profile.

The analysis was based on potential human rights risks, with potential environmental risks additionally integrated for the top purchases. Based on financial volume and the severity/likelihood of potential human rights impact, three raw materials were classified as most material: **Fresh Milk**, **Sugar**, and **Cocoa Butter**.

Milk

The most material raw material used in numerous products. Sourced from Bulgaria and Hungary. Both countries share similar EU-aligned legislation, but potential human rights risks relate to discrimination, forced labor, and poor working conditions. Potential environmental risks involve air and soil contamination with nitrogen from cattle. No actual human rights or environmental risks have been identified among our suppliers.

Sugar

Sourced in 2025 from Colombia and Laos. According to the Fairtrade Risk Map, main potential human rights risks include fair pay, healthy working conditions, child/forced labor, and discrimination. The CSR Risk Check notes that sugar cultivation can lead to forced displacement of indigenous populations and land grabbing for plantation expansion. No actual human rights risks were identified. Potential environmental risks include heavy water use, pesticide reliance, and monoculture expansion. Actual environmental risks relate to transport emissions.

Cocoa Butter

Associated with risks of child labor, forced labor, and unfair pay. Supplier data indicates origin in the Dominican Republic, where a sustainable development plan for cocoa production exists. Database sources do not flag the country as high risk. No actual human rights risks were identified. Cocoa production carries risks of large monoculture plantations threatening biodiversity and deforestation. Actual environmental risks stem from transport greenhouse gas emissions.

Our Actions

To mitigate identified risks, we implemented the following measures:

- **Supplier Code of Conduct:** Covers professional, ethical, and environmental practices, ensuring fair competition, safe working conditions, and environmental stewardship. Suppliers agree to this document through their business relationship with us.
- **Public Statement on Human Rights:** A public commitment to respect and protect human rights across all operations, covering employees, partners, suppliers, clients, and local communities.
- **Long-Term Partnerships:** Production is 100% based in Bulgaria, collaborating with small and medium businesses with average partnership durations exceeding 60 months.
- **Organic Raw Materials:** We focus on clean, simple food made exclusively with organic, natural ingredients, avoiding artificial sweeteners and preservatives. Organic farming mitigates environmental risks by eliminating synthetic pesticides and herbicides while reducing nitrogen saturation in water and soil through rotational pasture use.
- **Grievance and Whistleblowing Mechanism:** Outlines procedures for submitting reports on violations, including human rights issues. Published on our website in both Bulgarian and English.
- **Clear and Non-Misleading Messaging:** Products high in sugar (21% of the portfolio) are traditional confectionery where sugar serves as a natural preservative and essential flavor component. We manage this health risk through complete transparency: nutritional content is clearly listed without misleading health claims, empowering consumers to make informed choices.

Next Steps

We have identified the following measures for implementation:

- Formal integration of the Supplier Code of Conduct into partner contracts.
- Active communication of the Grievance Mechanism to all stakeholders.
- Addressing direct audit and communication limitations with non-EU farmers (as a small company buying via intermediaries) by exploring enhanced supply chain traceability.

Conclusion

This Human Rights Impact Assessment outlines core risks within Bio Bulgaria AD's value chain and serves as a foundation for strategic planning. Identifying these risks is the critical first step toward systematically improving internal standards and product quality.

We recognize that “clean food” is inherently tied to ethical sourcing. Bio Bulgaria AD remains dedicated to ensuring that organic purity is never achieved at the expense of human dignity, worker health, or social inequality. Transparency and accountability to our customers and organic suppliers remain central to our long-term sustainability.

Approval

This Human Rights Risk Assessment was reviewed and approved by the Board of Directors of Bio Bulgaria AD.

Date: September 10, 2026

Annex 1

Table 1. Upstream Value Chain Identified Risks

Country	Raw Material	Responsible Sourcing Tool	Fairtrade Risk Map	CSR Risk Check
Colombia	Sugar	Forced labor and/or child labor	Forced labor Labor rights and conditions Discrimination	Freedom of association Forced labor and human trafficking Child labor Discrimination Health and safety risks in agriculture
Philippines	Coconut oil	—	Labor rights and conditions Discrimination Forced labor	Freedom of association Labor rights and conditions Forced labor and human trafficking Child labor Discrimination Health and

				safety risks in agriculture
Laos	Sugar	—	Labor rights and conditions Civil liberties Gender Equality Child rights Forced labor	Community impact and access to food
China	Mung bean, peanuts, buckwheat, peas, citric acid, garlic powder	Forced and child labor	Labor rights and conditions Forced labor Discrimination Civil Liberties	—
Mexico	Inulin	Forced and child labor Deceptive recruitment practices	Forced labor Discrimination Civil Liberties	Land use and property rights Community impact and dangerous chemicals
Uganda	Sesame	Adults and children in labor trafficking	Child's rights Civil Liberties Discrimination Living Income Labor rights and conditions	Land use and property rights Community impact and access to food
Pakistan	Sesame	Bonded labor	Forced and child labor Self-determination Civil Liberties Discrimination Labor rights and conditions	Liberty rights Freedom rights

Turkey	Chickpeas, semolina, lentils, figs	Forced labor and poor conditions	Civil Liberties Discrimination Labor rights and conditions Forced and child labor Self-determination	Liberty rights Freedom rights Land use and property rights Community impact and access to food
Sri Lanka	Coconut	Forced labor	Self-determination Civil Liberties Discrimination Labor rights and conditions Forced and child labor	Liberty rights Freedom rights Land use and property rights Community impact and access to food
Peru	Quinoa, cocoa butter	Forced labor	Forced labor Discrimination Labor rights and conditions	Liberty rights Freedom rights Land use and property rights
Bolivia	Sesame	Forced labor	Forced labor Discrimination Gender Equality	Liberty rights Freedom rights Land use and property rights
Egypt	Sesame	Forced labor	Civil Liberties Discrimination Labor rights and conditions Self-determination	Liberty rights Freedom rights Land use and property rights
São Tomé	Cocoa beans	—	Discrimination Living income	—
Dominican Republic	Cocoa mass, cocoa butter	—	Forced labor Gender equality Discrimination	Liberty rights Freedom rights

Kazakhstan	Lentils	Forced labor	—	Liberty rights Freedom rights Labor rights Child labor Discrimination
Madagascar	Vanilla	—	Living income Labor rights and conditions Gender equality Child rights	Liberty rights Freedom rights Community impact and access to food Labor rights Child labor Discrimination
Iran	Tarragon	Child labor	Civil Liberties Discrimination Workers Rights Self- determination	Liberty rights Freedom rights Labor rights Child labor Discrimination Health and safety at work
Spain	Onions, almonds	Forced labor	Discrimination	Liberty rights Freedom rights Discrimination
Belgium	Milk powder	Forced labor	—	—
Austria	Wheat starch	—	Discrimination	Discrimination
Bulgaria	Milk, einkorn wheat, sunflower, raspberries, strawberries, sour cherries, rosehip, sunflower oil, honey, milk chocolate, hazelnuts, almonds, flour, onions, elderberry,	—	Forced labor Discrimination	Discrimination

	linden, dwarf elder, hazelnut tahini, Mursalski tea, mint, roses, probiotics			
Germany	Molasses, whey, rosemary antioxidant, blackberries	—	Discrimination	Forced labor Discrimination
Greece	Peppers, dark chocolate, olive oil, onions	—	Workers Rights Forced Labour Discrimination	Labor rights Discrimination
Italy	Tomatoes, white rice flour, lemon juice, couscous, muesli, pasta, hazelnuts	—	Discrimination	Forced labor Discrimination
Netherlands	Butter	—	Discrimination	Discrimination
Poland	Raspberries	—	Discrimination Forced Labour	Labor rights Discrimination
Romania	Sunflower	—	Forced Labour Discrimination	Forced labor Child Labor Discrimination
Serbia	Wheat flour	—	Workers Rights Forced Labour Discrimination	Labor rights Child labor Discrimination
Ukraine	Millet	—	Labor rights and conditions Forced Labour Discrimination Civil liberties	Labor rights Forced labor Child labor Discrimination

Hungary	Fresh milk	—	Workers Rights Forced Labour Discrimination	Labor rights Forced labor Discrimination
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Annex 2

Severity Scale

Severity is determined based on three criteria:

Rating	Description	Example
High	Irreversible harm, systemic violence, death, or widespread forced labor.	Human trafficking, slavery, workplace fatalities, child labor.
Medium	Serious violations requiring a significant period of recovery.	Systemic hiring discrimination.
Low	Reversible violations affecting basic rights.	Wage payment delays, systemic excessive overtime.

Likelihood Scale

Likelihood accounts for how probable the impact is and how frequently it may occur:

Rating	Description	Context
High	Almost certain. Risk is endemic to the country or sector.	Discrimination in countries with low civil liberty indices.
Medium	Common industry occurrence.	Health and safety risks in raw material processing.
Low	Possible; isolated historical incidents reported.	Overtime policy issues.