



Safeguarding human and environmental rights in agricultural supply chains – A risk management toolkit



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INTRODUCTION

There is growing agreement that companies at the head of global agricultural supply chains should take greater responsibility for addressing the negative effects of their commercial activities at origin, for example on human and labor rights or environmental degradation. Yet how to do this in a practical but rigorous way, that generates timely and actionable information is not simple.

Negative behaviors (i.e. labor violations) are often hidden, and hard to quantify. Companies have limited capacity for data collection and analysis. To respond to these challenges, the Alliance, **FMO** and **Mercon Coffee Group** developed a **Supply Chain Risk Assessment and Management Toolkit**, which takes a root causes approach to understanding environmental and social risks in supply chains. We used the toolkit to assess country-level risks for nine coffee origins.

OBJECTIVE

Assess the country (macro) level risks within coffee supply chains in 9 countries using the **Macro Risk Assessment Tool**.

METHODOLOGY

- The Macro Tool assesses risks in 3 areas: Labor, Human Rights and Environment, and draws on the PESTEL framework.
- Through a desk review using public secondary data including global indicator sets, relevant global reports and systematic google searches, the tool assesses country conditions favorable to the presence of target risk behaviors (i.e. risk factors).
- The tool uses the data to generate a relative risk score of low (1-1.6), medium (1.61 – 2.3) or high (2.31 to 3) for eleven criteria related to labor rights, human rights and environment in each country.

Factors	Examples of indicators used
Presence of risk behavior	Official reports on risk behaviors
Political and legal	International conventions, relevant legislation, governance and rule of law, freedom of speech.
Economic	Poverty, employment, informality, % of Ag-GDP
Sociodemographic	Migration, internal displacement, literacy rate, children out of school, group grievances, inequality.
Technological	Agricultural innovations, type of agricultural systems, level of technification
Environmental	Threatened species and ecosystems, deforestation hotspots, emissions by sector, water use.

RESULTS AND DISCUSSION

- Brazil, Ethiopia, Laos, Nicaragua and Vietnam have high risk likelihoods for at least one area of risk.
- Brazil and Vietnam show the highest values due to labor rights violations and environmental risks, respectively.
- Most countries present a high risk of child labor, driven by informality, unemployment, low levels of mechanization, and high labor demand at harvesting.
- Higher risk of human rights violations in Laos, Ethiopia, Guatemala and Nicaragua, related to freedom of expression and association, and a lack of remediation mechanisms.
- Risk of water pollution due to poor wastewater management in post-harvest is present across all countries. Monoculture and robusta production systems in Vietnam and Brazil drive higher environmental risks. Higher deforestation risks are present in Honduras, Perú and Vietnam.

Criteria	Brazil	Colombia	Ethiopia	Guatemala	Honduras	Laos	Nicaragua	Peru	Vietnam
LABOR RIGHTS	2.45	2.09	2.21	2.26	2.25	2.09	2.11	1.83	2.17
HUMAN RIGHTS	1.88	1.86	2.31	2.27	2.21	2.38	2.32	1.81	2.17
ENVIRONMENT	2.05	1.71	1.88	2.03	2.15	2.04	1.95	1.99	2.37
LABOR RIGHTS									
Child labor	2.37	2.39	2.82	2.47	2.82	2.44	2.82	2.01	2.27
Working conditions	2.64	2.10	1.72	2.00	1.93	1.79	1.72	1.81	2.35
Forced labor	2.34	1.79	2.1	2.31	1.99	2.04	1.78	1.69	1.88
HUMAN RIGHTS									
Life	2.08	1.97	2.47	2.24	2.50	2.21	2.36	1.76	2.07
Safety & health	2.02	2.23	2.48	2.40	2.61	2.30	2.22	1.94	2.26
Equality	1.58	1.68	2.42	2.18	2.14	2.08	1.89	1.58	1.89
Expression & association	1.83	2.09	2.64	2.34	2.31	2.58	2.69	1.97	2.39
Remediation	1.91	1.34	1.53	2.18	1.47	2.74	2.44	1.8	2.22
ENVIRONMENT									
Ecosystem services	2.25	1.58	1.90	1.96	2.17	2.28	2.01	1.94	2.47
Climate change	2.03	1.67	1.67	2.00	1.67	1.81	1.75	1.86	2.42
Biodiversity	1.87	1.87	2.07	2.13	2.63	2.04	2.08	2.17	2.23

CONCLUSIONS

- Risks of child labor and freedom of expression violations may require further data collection in company supply chains at origin to assess the extent and nature of these risks.
- Understanding the country context and root causes of environmental and social risks in supply chains is critical for efficiently mitigating potential adverse effects of procurement practices at origin.
- This tool allows companies to identify and prioritize across risk areas and origins. This information can inform investments in additional data collection for risk areas and origins with higher risk profiles.
- This tool has been successfully adapted and used for additional commodities and origins with FMO and their clients.
- The tool has also been combined with a tool for supply chain mapping (using company data), micro (supply chain) level assessment (using interviews and field observation), and risk mitigation planning (with team at origin).
- The toolkit has been published and is currently being used by FMO with additional clients, countries and commodities.

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SUGGESTED RESOURCES

- Link to the toolkit: <https://alliancebioversityciat.org/tools-innovations/supply-chain-risk-assessment-management-toolkit>
- [How research supports sustainable business \(alliancebioversityciat.org\)](https://alliancebioversityciat.org)
- [Addressing Human Rights Abuses and Deforestation in Supply Chains: A Holistic Approach \(with a personal touch\) | LinkedIn](#)
- Wiegel, J.; Siles, P.; Claros Trujillo, L.M.; Angulo, J.; Charry, A.; Mai Vu, N.P.; Nguyen, T.T.; Talsma, T.; Celi, G. (2023) Supply chain risk assessment and management toolkit. <https://hdl.handle.net/10568/134877>