

# Risk Assessment and Monitoring Tools

to address supply chain impacts on deforestation,  
conversion, and human rights

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Accountability  
Framework

Together, making  
ethical supply chains  
the new normal

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This user guide is provided by the Accountability Framework initiative (AFi) to help companies and other users apply the Accountability Framework. Its contents are informed by the full Accountability Framework version 1.0 (released in June 2019), which was created through a consultative process following applicable good practices for multi-stakeholder initiatives and which represents the consensus of the AFi Steering Group members that participated in its development. Current AFi Steering Group members (as of the publication date) include:

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### Steering Group:

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Independent experts  
Gita Syahrani – Indonesia  
Silas Siakor – Liberia

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### The AFi is funded by:

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For more information on the AFi's governance and a full list of partners, please visit [www.accountability-framework.org](http://www.accountability-framework.org).

## The Accountability Framework

The Accountability Framework is a common approach to achieve supply chains that are protective of forests, other natural ecosystems, and human rights. Its principles, definitions, and guidance reflect the consensus of the coalition of leading environmental and social NGOs that is behind the Accountability Framework initiative (AFi). Companies can apply the Accountability Framework as a guide in setting strong supply chain commitments, developing effective implementation systems, and credibly monitoring and reporting on progress in accordance with best practice.

## Risk assessment and monitoring tools

Guidance on selecting appropriate tools can be found in the Framework's [Operational Guidance on Supply Chain Management](#), Operational Guidance on [Monitoring and Verification](#), and on the [AFi's website](#). Further guidance on community-based monitoring tools and approaches can be found in Annex 2 of the Operational Guidance on Monitoring and Verification. Tools and other resources to support identification and monitoring of impacts to workers' rights can be found in the [Operational Guidance on Workers' Rights](#). Section 3 of that guidance also includes resources for assessing risk as part of broader due diligence processes.

This document provides a list of tools that companies may use for off-site assessment of risk or monitoring of performance related to deforestation, ecosystem conversion, and human rights abuses associated with commodity production. Most of these tools are free to use; though some fee-based products are also included and indicated as such. This list was generated based on those tools known to the AFi coalition at the current time, is not exhaustive, and will be updated regularly. Please contact us with suggestions for tools that should be added to this list.

[Contact us](#) >

### Core Principle 5

#### Supply chain assessment and traceability



Supplies of raw or processed materials are assessed for non-compliance or risk of non-compliance with company commitments and applicable law. If risk assessments are used to prioritize further traceability and supply chain management activities, they follow good practices for credibility, transparency, and accurate risk characterizations.

[Learn More](#) >

### Core Principle 11

#### Monitoring and verification



Regular monitoring is conducted relative to the time-bound targets associated with each commitment. Monitoring follows suitable methods for assessing social, environmental, and land-use outcomes related to the commitment scope.

[Learn More](#) >

## Deforestation and ecosystem conversion risk assessment and monitoring tools

Resource Name	Geography	Resolution	Description	
<b>GLAD Alerts</b>	Global	30-meter	Weekly tree cover loss alert dataset from the GLAD Lab at the University of Maryland. Hosted on all Global Forest Watch web applications including GFW Pro.	<a href="#">Visit &gt;</a>
<b>Global Forest Watch</b>	Global	30-meter	Hosted by the World Resources Institute (WRI), provides global tree cover data in combination with data on protected areas, peatlands, and other key landscape features.	<a href="#">Visit &gt;</a>
<b>Global Forest Watch Pro</b>	Global	30-meter	Online platform enables companies to securely upload the location of farms, processing facilities, or jurisdictions in their supply chains or investment portfolios and analyse them in relation to tree cover change and land use data to assess deforestation risk, monitor historic and ongoing trends in deforestation, and access tree cover loss and fire alerts. Draws on the Global Forest Watch data infrastructure.	<a href="#">Visit &gt;</a>
<b>Starling</b>	Global	1.5-meter	High-resolution maps of forest cover and forest change in real-time (6-12 day frequency), developed in partnership between Earthworm and Airbus. <i>Fee for service</i>	<a href="#">Visit &gt;</a>
<b>TRASE</b>	Global	30-meter; Jurisdiction level	Combines trade data with land-use change data, including data from GFW, PRODES, and other sources, to assess the deforestation and conversion footprint or risk of commodity traders and financial institutions. Currently provides coverage for high-risk regions for several commodities, including South American beef and soy and Indonesian palm oil.	<a href="#">Visit &gt;</a>

Resource Name	Geography	Resolution	Description	
<b>CIAT: Terra-i Alerts</b>	Tropics	250-meter	Produces alerts that detect likely tree cover loss every 16 days.	<a href="#">Visit &gt;</a>
<b>MapBiomas (Brazilian Annual Land Use and Land Cover Mapping Project)</b>	Brazil, Amazon, Chaco	30-meter	Uses the Google Earth Engine to produce annual maps and calculations of land use change across all of Brazil. In 2017, the project expanded to cover all parts of the Amazon (the Mapbiomas Amazonia project) and Chaco (Mapbiomas Chaco project) biomes in surrounding countries.	<a href="#">Visit &gt;</a>
<b>DETER (Sistema de Detecção do Desmatamento em Tempo Real na Amazônia)</b>	Brazil	250-meter	Identifies and maps deforested areas and degraded areas in real-time (2-week and monthly intervals).	<a href="#">Visit &gt;</a>
<b>PRODES</b>	Brazil	250-meter	Brazilian government's satellite monitoring program for deforestation in the Legal Amazon.	<a href="#">Visit &gt;</a>
<b>PRODES Cerrado</b>	Brazil	100-meter	Brazilian government's satellite monitoring program for ecosystem conversion in the Cerrado biome.	<a href="#">Visit &gt;</a>
<b>Imazon: SAD Alerts</b>	Brazil	250-meter	Monthly deforestation alert dataset for the Brazilian Amazon, hosted on Global Forest Watch web applications.	<a href="#">Visit &gt;</a>
<b>Terras</b>	Brazil	Property boundaries	Repository of national rural registry data repository, including data on environmental and production characteristics of rural properties.	<a href="#">Visit &gt;</a>
<b>Visipec</b>	Brazil	Multiple	Cloud-based tool traceability for meatpackers that uses information from public databases to track cattle between ranches and suppliers, allowing for more effective monitoring of indirect suppliers.	<a href="#">Visit &gt;</a>

Resource Name	Geography	Resolution	Description	
<b>Eyes on the Forest: Sumatra</b>	Indonesia	Multiple	Mapping tool that draws on a database of land cover, land use, and biodiversity data in the Riau Province of Sumatra, Indonesia.	<a href="#">Visit &gt;</a>
<b>Mighty Earth Cocoa Accountability Map</b>	Côte d'Ivoire	Farm; multiple	Uses Vivid Economics's IMAGES platform to assess real-time deforestation, overlaid with locations of cocoa farms and co-ops provided by certification organizations and companies that source cocoa products.	<a href="#">Visit &gt;</a>
<b>Forest Atlases - Central Africa and Liberia</b>	Central Africa and Liberia	Multiple	Interactive web mapping application hosted by WRI and co-developed with national agencies using Global Forest Watch data on tree cover together with data on land use allocation (forest concessions, protected areas, mining permits, etc.) within national forest estates. Atlases are currently available for nine countries.	<a href="#">Visit &gt;</a>

## Human rights risk assessment tools

Resource Name	Geography	Topic	Description	
<b>New Earth B Social Hotspots Database</b>	Global	Human rights	Database of indices to assess risk associated with the rights of indigenous peoples and local communities and labour rights. The website also supports implementation of a broader human rights due diligence approach.	<a href="#">Visit &gt;</a>
<b>UNDP Human Development Reports</b>	Global	Human development	Reports that provide country-level statistical data on five indices addressing development and human rights: human development index, inequality-adjusted human development index, gender development index, gender inequality index, multi-dimensional poverty index.	<a href="#">Visit &gt;</a>
<b>Land Matrix</b>	Global	Land acquisition	Database of large-scale land acquisitions in low- and middle-income countries that includes information on location, deal size, nature of deal, intention of investment, investor, year, and status.	<a href="#">Visit &gt;</a>
<b>Landmark</b>	Global	Land tenure	Provides maps and other information on lands that are collectively held and used by indigenous peoples and local communities. Designed for use by indigenous peoples and communities.	<a href="#">Visit &gt;</a>
<b>Landscape by TMP Public</b>	Global	Land tenure	Assesses tenure risk using multiple indices (e.g., corruption, armed conflict, social conflict, water quality/quantity, poverty) based on user-provided location data.	<a href="#">Visit &gt;</a>

Resource Name	Geography	Topic	Description	
<b>Prindex</b>	Global	Land tenure	National level data on public perceptions of land tenure security around the world. Developed as a joint initiative of the Global Land Alliance and Overseas Development Institute.	<a href="#">Visit &gt;</a>
<b>Childrens' Rights Atlas</b>	Global	Child labour	Provides risk profiles and guidance to inform due diligence on a range of aspects of childrens' rights, including children in the workplace. Developed by the Global Child Forum and UNICEF.	<a href="#">Visit &gt;</a>
<b>United States Dept of Labor Child Labor and Forced Labor Reports</b>	Global	Child and forced labour	Provides country-level information and risk ratings on the prevalence and sectoral distribution of the worst forms of child labour and on goods believed to be linked to child labour or forced labour.	<a href="#">Visit &gt;</a>
<b>Verite Commodities Atlas</b>	Global	Child and forced labour	Categorized by commodity, provides information on country-level risk for use of forced and/or child labour.	<a href="#">Visit &gt;</a>
<b>Walk Free Foundation Global Slavery Index</b>	Global	Forced labour	Provides country-level information on the number of people in modern slavery, indicators of vulnerability, and the actions being taken by governments to respond.	<a href="#">Visit &gt;</a>
<b>International Trade Union Confederation Global Rights Index</b>	Global	Freedom of association; collective bargaining	Provides country-level information and ratings laws related to freedom of association and collective bargaining rights.	<a href="#">Visit &gt;</a>
<b>World Bank Worldwide Governance Indicators</b>	Global	Governance	Provides aggregate and individual governance indicators for six dimensions of governance: voice and accountability; political stability and absence of violence; government effectiveness; regulatory quality; rule of law; control and corruption.	<a href="#">Visit &gt;</a>



## Tools for risk assessment across multiple issue areas

Resource Name	Geography	Description	
<b>Global Risk Assessment Services (GRAS)</b>	Global	Incorporates a range of tools and data sets to support environmental and social risk assessment and monitoring of supply chains and commodity origins at user-defined scales. <i>Basic online platform is free; customized analysis is fee for service</i>	<a href="#">Visit &gt;</a>
<b>MVO Nederland CSR Risk Check</b>	Global	Provides national-level risk profiles across a number of environmental, social, and governance topics, categorized by commodity.	<a href="#">Visit &gt;</a>
<b>FSC Controlled Wood National Risk Assessments</b>	Global	National risk assessment maps for timber/pulp and paper, including ecosystem conversion, High Conservation Value areas, indigenous peoples' rights, ILO core conventions, and social conflict.	<a href="#">Visit &gt;</a>
<b>Maplecroft Risk Calculators and Dashboards</b>	Global	Provides contextualized risk analyses incorporating a wide range of political, human rights, and environmental variables, including indexes for deforestation, forced labour, and other topics. <i>Fee for service</i>	<a href="#">Visit &gt;</a>
<b>Preferred by Nature Due Diligence Toolkit</b>	Global	National risk assessments of social, environmental, and business risks by commodity (for timber, beef, palm oil, and soy) by commodity.	<a href="#">Visit &gt;</a>
<b>Agroideal</b>	Brazil, Argentina	Overlays economic, environmental and social risk data to generate a map of risk exposure in areas where current or potential suppliers are located based on user-defined areas or regions (e.g farms, municipalities, states or biomes).	<a href="#">Visit &gt;</a>



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