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Safeguards for a Sustainable Forest Economy

Part II: Efficient and Effective Safeguards Assessment and Implementation for a Climate-Smart Forest Economy

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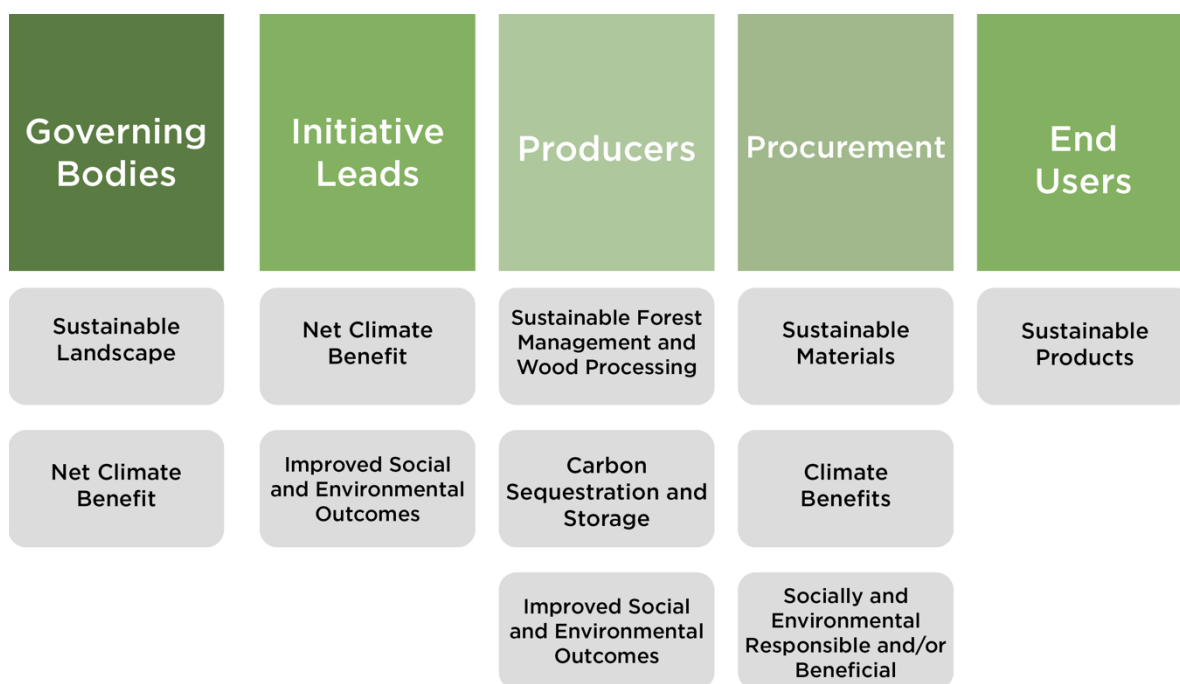


Introduction

Interventions that lead to a climate-smart forest economy (CSFE) span a range of actor types and capacities, global landscapes, and project types. This diversity of actor and intervention types leads to a host of challenges for efficient and effective safeguards assessment and implementation.¹ This report builds on the foundation laid out in Part I, in which challenges and safeguards Issue Areas are explored and Global Guiding Principles for impactful and equitable CSFE safeguards assessment and implementation are developed. Part II links theory with practical application to help diverse actors make appropriate claims regarding CSFE safeguards assurances (Figure 1).

Figure 1

Actor-Level Claims to Social and Economic Safeguards Assurances in a CSFE



In this report, the applicability of traditional risk-based approaches for Issue Area prioritization is examined. We then develop a risk assessment matrix to accommodate the needs of CSFE safeguards risk classifications. Next, we explore the role of proxy data for more efficient Issue Area assessment, presenting a series of geographic indicators of relevance to many CSFE interventions. Last, we discuss strategies for

¹ Interventions that contribute to CSFEs may include private initiatives, development or conservation projects, larger-scale systems change at a national or regional level, and a variety of other interventions. Accordingly, actors include those involved in forest production, processing, and procurement, as well as policy, conservation, architecture, and design, among other activities.

navigating existing tools and guidance. We develop two templates to test the methods and guidance developed here on CSFE case studies.

Strategic Issue Area Prioritization

CSFE implementers need to prioritize across Issue Areas in their social and environmental (S&E) assessments and implementation, considering resource limitations and potential tradeoffs. Because Issue Areas are not equally important for all project scales, types, and geographies, identifying which are high priority and in need of more thorough assessment or consistent monitoring is key for streamlined and efficient safeguards application in any given intervention.² A strategic risk-based assessment employing inclusive processes³ can facilitate Issue Area screening and prioritization.

Existing S&E safeguards guidelines generally entail some method of identifying potential project and program risks.⁴ However, a safeguards risk assessment framework for CSFEs does not yet exist. Due in part to the diversity of actor and project types, project implementers may need to rely on a combination of resources and tools to engage in Issue Area prioritization.

Terms and definitions used in Part II

<i>Issue Area</i>	Detailed sub-topics of the CSFE S&E safeguards Key Pillars which move towards measurement and assessment
<i>Proxy data</i>	Indirect indicators that inform Issue Area assessments and risk analyses for a CSFE
<i>Enabling Conditions</i>	Conditions facilitating and serving as signals for CSFE safeguards assurances
<i>Interventions</i>	CSFE projects, programs, and investments that aim to pursue climate benefits with forests and/or wood products
<i>Criteria</i>	Dimensions along which the identified Issue Areas can be measured
<i>Indicator</i>	A measurable variable that can be assessed tracked over time
<i>Initiative</i>	Refers specifically to the Breakthrough Initiatives of the CSFEP
<i>Baseline Scenario</i>	A counterfactual scenario against which intervention impacts should be assessed
<i>Negative Externalities</i>	Negative social and environmental impacts that interventions should strive to safeguard against
<i>Co-Benefits</i>	Positive social and environmental impacts associated with a CSFE intervention
<i>Safeguards Assurances</i>	Evidence obtained, analyzed, and tracked through indicators that show sources of risks are minimized and harm avoided

² See Appendix II for proposed templates to facilitate Issue Area risk identification and impact assessment.

³ Due to some degree of subjectivity inherent in any risk assessment of social and environmental safeguards, inclusive processes will ensure results are both more reliable and equitable. See *Strong Voices, Active Choices* (The Nature Conservancy, 2018) for helpful guidance on stakeholder engagement.

⁴ For example, a stated purpose of *Environmental and Social Management Guidelines* (FAO, 2015) and associated tools is to guide the “management of environmental and social risks in its strategies, policies and field projects”. These guidelines define risk management as comprising “a structured, methodical approach to identifying, scoring, and reducing exposure to risks for the achievement of objectives”.



This section explores how CSFE project implementers might use a risk assessment to assign risk, while identifying and incorporating potential opportunities to bolster environmental and social co-benefits.

Risk-Based Approach

Risk-based approaches to identify and determine relative risk are semi-quantitative, semi-subjective tools, typically based on historical data (Ni et al., 2010). CSFE risk assessments might also incorporate relevant data from nearby or neighboring locations.

Risk assessments identify key project or program hazards, or risk areas, where “risk” can be considered the combination of consequences of an event (both positive and negative) and their likelihood of occurrence (ISO, 2009). In CSFE S&E safeguards assessments, this may entail identifying Issue Areas with the greatest potential risks of harm as well as those that may have positive synergies (i.e., those that bolster social and environmental co-benefits, per GGP4).

Figure 2 represents a typical risk assessment matrix, a version of which is used by many corporations, NGOs, and government agencies.⁵ Before using the matrix, one must first identify CSFE S&E safeguards Issue Areas on which to assess risk, as previously identified and discussed in Part I.

To complete the matrix, implementers and relevant stakeholders first identify a level of potential *consequence* in terms of severity (along the x-axis) and then assign a degree of *likelihood* (along the y-axis) to all potential hazards based on existing data. This navigates the assessor to a specific square in the matrix with an assigned risk level classification, ranging from Low Risk to High Risk.

⁵ The concept was first developed by the US Department of Defense in the 1970s to identify high risk occupational safety and health concerns. It has since been adopted and improved upon by those looking to determine both high risk as well as high potential profit areas.



For example, if a potential hazard is deemed to have a “low severity” consequence and be “very unlikely” to occur, it would fall in the green category of “low risk” (see “A” in green section, **Figure 2**). Conversely, if a hazard is considered “likely” and its potential consequences “highly severe”, it would fall into the red “high risk” category (see “D” in red section, **Figure 2**). Per this risk rating system, a “C” hazard will be seen as posing greater risk than a “B” hazard, a distinction which may not have been clear in the absence of the risk assessment.

Risk identification and ranking allows for systematic risk assessment across diverse potential hazards, facilitating organizational decision-making when resources are limited.

Figure 2

Risk assessment matrix example to assess issue-specific risk levels

		Consequence				
		Low Severity	Low-Med	Medium Severity	Med-High	High Severity
Likelihood	Very Unlikely	A				B
	Unlikely	Low Risk		Low-Medium Risk		
	Moderly Likely		Low-Medium Risk	Medium Risk		
	Likely			C	High Risk	
	Very Likely					D

S&E Safeguards Risk Assessments within a CSFE

A typical risk assessment matrix is limited in its application to CSFE safeguards for three reasons:

1. Matrix scoring schemes do not allow for Issue Areas that are very unlikely but with high consequence severity to be categorized as “high risk” (see “B” in Figure 2). While this may be appropriate for some risk considerations, it will often be inappropriate for S&E safeguards assessments, where harm associated with social and economic impacts is not standardized across Issue Areas (e.g., impacts cannot easily be converted to dollar amounts) and so are not directly comparable. While imperfect, adding a column of “extreme” severity to the CSFE risk assessment matrix, wherein any degree of likelihood merits “high risk” classification, helps to address this concern.⁶
2. Per GGP4, *seek positive synergies between Issue Areas and intervention objectives (e.g., identifying co-benefits)*, actors should strive to identify potential co-benefits in Issue Areas when possible, and this could be incorporated into the matrix. Potential co-benefits should not be limited to

⁶ For example, an actor may decide that, in accordance with stakeholder priorities, any negative impact on forest biodiversity should serve as grounds to cease intervention activities; in such a case, biodiversity consequences should be marked “extreme”, and biodiversity categorized as a high risk Issue Area. These subjective components of the risk assignment (e.g., in determining intervention red lines) represent, again, why inclusive engagement in the decision-making process is paramount.

- those organizations which have already met minimum safeguards standards of no undue harm; all actors can identify potential Issue Area co-benefits.
- Adequate assignment of likelihood and severity cannot be determined without reliable data. As discussed in Part I (see Challenge 2), data uncertainty is, and will continue to be, an obstacle in CSFE safeguards assessments. This is in part due to logistical challenges and resource limitations for data collection and in part due to legal proprietary concerns, insufficient transparency, and the persistence of forest sector corruption.⁷ Because data unreliability persists, CSFE risk assessment matrices need to provide an approach to manage uncertainty within actor capacity.⁸

Figure 3 shows an amended risk assessment matrix with modifications to accommodate CSFE-specific safeguard assessment needs. The approach: 1) includes “extreme” severity, allowing for “high risk” categorization for any degree of likelihood, 2) incorporates “positive impacts” to visualize Issue Areas that present potential co-benefits, and 3) includes uncertainty along either perceived likelihood or consequence severity.⁹

Conducting CSFE risk assessments

Assignment of Issue Area

“likelihood of impact” and expected “consequence severity” will be intervention-specific (e.g., depending on geography, project scope, and scale) and will depend on stakeholder preferences. As Mallet et al. (2019) note, risk assessments, which seek to capture both the expected likelihood and severity of harm, are subjective. Stakeholders may differ in what they perceive as falling along certain dimensions, and what is an acceptable or unacceptable harm. Before engaging in a risk assessment, implementers first need to determine actor contributions. Those actors then, collectively, decide how to handle uncertainties and tradeoffs. Per GGP12, actors should be transparent about both risk assessment results and processes, including processes for stakeholder inclusion and decision-making.

Figure 3

Risk Assessment Matrix for CSFE Social and Environmental Safeguards

		Consequence Severity							
		Positive Impact	Low Severity	Low-Med	Medium Severity	Med-High	High Severity	Extreme	Unknown
Likelihood of Impact	Very Unlikely	Possible Co-Benefit	Low Risk	Low-Medium Risk	Medium Risk	High Risk	High Risk	High Risk	High Risk
	Unlikely								
	Moderly Likely		High Risk	High Risk	High Risk	High Risk	High Risk	High Risk	High Risk
	Likely								
	Very Likely		High Risk	High Risk	High Risk	High Risk	High Risk	High Risk	High Risk
	Unknown								

⁷ While new technologies and platforms for data sharing will improve data reliability and accessibility, questions of Issue Area uncertainty in CSFE safeguards implementation remain, particularly for lower-capacity actors and actors sourcing from or engaging with communities across geographic distances.

⁸ Note that uncertainty is not a binary consideration; actors can and should do what they can to minimize uncertainty with improved data and additional safeguards monitoring, when possible.

⁹ This matrix uses an approach by Mallet et al. (2019).

To maximize equity, reliability, and accountability, risk assessments should be undertaken in an inclusive and participatory manner. First, as Issue Area prioritization may stem from stakeholder priorities as well as identified high risk areas, participation among diverse interests is paramount. Second, obtaining alignment among diverse actors on potential risks and challenges of a project or program will provide greater reliability assurances. Third, including actors at multiple intervention levels in a risk-assessment process will ensure greater accountability regarding expected challenges and the measures needed to address them (FAO, 2015).

Assigning Likelihood and Consequence Severity

Measures of consequence severity will inevitably look different across interventions and Issue Areas. For example, an Issue Area may be considered to have “extreme” consequence severity if the impact will be devastating (e.g., loss of human life, species extinction), but what is considered “devastating” will be Issue Area specific and user defined. Actors and stakeholders need to align on how to best approach any given Issue Area, particularly when different approaches may lead to different risk level classifications.

To identify Issue Area likelihood and consequence severity, actors should draw from existing resources that are sufficiently reliable. In the subsequent two sections, this report discusses how proxy data and existing safeguards guidance might help inform this process. The purpose of the risk assessment will be to identify which Issue Areas may need greater attention and regular monitoring, to efficiently employ actor resources in CSFE safeguards assessment. This does not contradict GGP10; rather, it recognizes that, in the absence of unlimited resources for regular assessment of all Issue Areas, a preferred course of action may be to divert resources to those Issue Areas of greatest concern.

Addressing Uncertainty

Data uncertainty may be found in: 1) uncertainty stemming from nonexistent or unattainable data and 2) uncertainty stemming from “fuzzy” or imprecise data. A lack of data necessitates matrix structure adjustment. Mallet et al. (2019) include assignments of “uncertainty” along both axes, a simple addition which suits S&E safeguard assessment. Operating CSFEs in the face of uncertainties can be addressed with actor and stakeholder-informed decisions.¹⁰ All Issue Area assessments will have some degree of uncertainty (Ni et al., 2010); most important will be to determine whether the degree of uncertainty results in Issue Areas that could be assigned more than one risk classification (e.g., both “medium risk” and “high risk”).¹¹ Where this

¹⁰ Survey respondents report mixed results on how actors should handle data uncertainties, perhaps in part because the question of uncertainties cannot reasonably be assessed without having a picture of the scale and scope of the potential harm alongside the intervention’s potential benefits. Most survey respondents show a hesitancy to proceed with interventions leading to a CSFE in the face of uncertainty on either social or environmental dimensions. Of those surveyed, 67% report that they would reject projects associated with either projected forest biodiversity benefits but unknown economic impacts on local communities or projected economic benefits but unknown biodiversity impacts. On the other hand, 54% of respondents say that actors assessing S&E safeguards should handle an absence of information on a particular Issue Area by proceeding with the intervention, assuming no concern.

¹¹ Others have sought to incorporate “fuzziness” in risk assessments with mathematical models (Markowski & Sam Mannan, 2008) which require some degree of precision about one’s imprecision (e.g., ability to report likelihood as falling between 17% and 55%). While such high degrees of precision may help to assign more precise risk rankings,



occurs, actors will need to determine how to address such uncertainty on an Issue Area-specific basis.¹²

The nuances of intervention design and potential impacts will necessitate careful consideration of how to approach uncertainty. Degrees of uncertainty and how implementers decide to proceed in the face of uncertainty should be documented and made broadly available (per GGP12, which advocates for transparency in safeguards assessment and implementation).

Implementing Risk Assessment Results

Actors must determine how they intend to advance the intervention considering CSFE safeguards risk assessment results. As one approach, the UN Food and Agriculture Organization has a risk assessment process whereby projects can fall into low, moderate, and high risk categories. Low risk projects are not subject to further review before receiving full endorsement, while moderate risk projects must undergo a further safeguards analysis. High risk projects must undergo an independent Environmental & Social impact assessment, alongside other additional requirements (FAO, 2015). Importantly, in line with GGP8, risk assessments should be regularly conducted throughout the life of an intervention. An Issue Area falling into a low risk category at one point in time does not secure low risk status throughout intervention duration.

In all cases, actors should understand that the results are only as reliable as the data and process will allow. Given the high degree of subjectivity and diversity of outcome variables involved, the exercise is better suited for determining which Issue Areas fall into different risk tiers than determining relative rankings between Issue Areas.¹³

Relevant Proxy Data

This section introduces proxy data to facilitate efficient Issue Area safeguards and risk assessment.¹⁴ Without reliable proxies to streamline assessment, effective or efficient consideration of safeguards will be unduly onerous for some actors and thus less likely to be implemented at any level. In this way, proxy data in safeguards assessments may encourage efficiency and inclusivity in a CSFE. However, data will inevitably be less tailored to the intervention, and so less reliable. On the other hand, full reliance on proxy data may have the negative unintended consequence of excluding actors and projects in more challenging areas. Without a stepwise approach

these are unlikely to be particularly useful in the case of CSFE safeguards assessments, where the exercise is more intended to determine which Issue Areas should fall into different risk tiers than to determine relative rankings between Issue Areas (given the high degree of subjectivity and diversity of outcome variables involved).

¹² While assigning an Issue Area its highest possible score may appear to be the most conservative approach, and is recommended by Mallet et al. (2019) per the precautionary principle, actors may need to acknowledge limited resources and operate strategically on Issue Area uncertainty, which will generally follow a normal distribution. For example, if the possible range of tenure security consequences is determined to span from “low severity” to “high severity”, this does not mean that all severities therein are equally likely. Some actors may choose to assume the mid-point (in this example, “medium severity”), while others may choose to assume the highest point (“high severity”); still others may employ a more nuanced approach, data permitting, and attempt to determine the highest range of possibility within a particular percent likelihood.

¹³ Ni et al. (2010) compare diverse risk matrices (original, a rezoned matrix, and a Borda method for risk assessment) and demonstrate that matrix structure and scoring mechanisms impact the measured risk independent from assigned levels of likelihood and consequence.

¹⁴ Per GGP10, actors should use the best available data available, in accordance with actor capacity and responsibility. Proxy data should be used only in the absence of more reliable intervention-specific data.



to safeguards implementation (GGP8), a risk-based approach might lead many actors to avoid high risk areas altogether. This would be undesirable for equity reasons and would stifle the ability of a CSFE to be a catalyst for global change.

Proxy data may be most usefully applied in identifying which Issue Areas need less regular and precise monitoring. What may be referred to as “red flags” according to proxy data (e.g., high deforestation rates, human rights violations, low governance rating), would suggest a need for more intervention-specific information. How to proceed with identified “red flags” depends on actor capacity and preferences. For example, high-capacity actors may devote additional resources to obtaining more project-specific data, while lower-capacity actors may opt to abandon an intervention out of precaution.

Geographic or jurisdictional indicators can serve to identify the presence of “red flags” in an area where an intervention is engaged (e.g., procurement, policy, or production). The next sections introduce eight country or region-level indicators that may inform CSFE safeguards assessments including: net deforestation, illegal timber, formal forestry and climate policies, biodiversity indices, endangered species habitats, property rights indices, corruption indices, human rights and labor legislation, and food insecurity. Together, they present an illustrative, though not exhaustive, list of how proxy data might inform CSFE risk assessments.

Net Deforestation

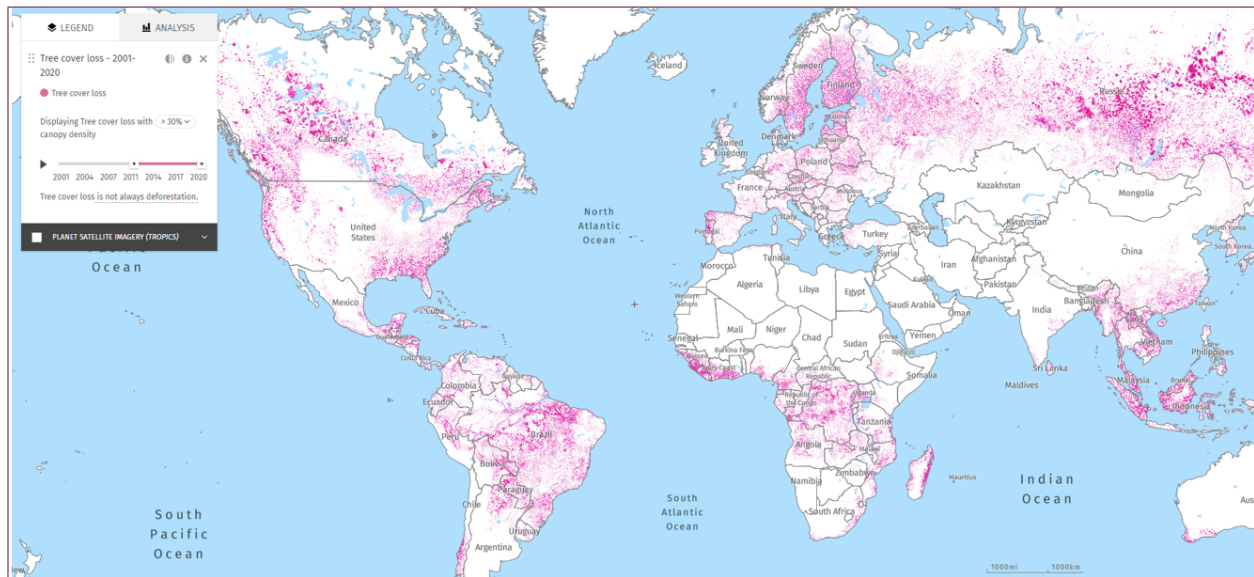
Chief among CSFE S&E safeguard concerns is further conversion of forest ecosystems for other land uses. One potential source of proxy data to assess level of concern is the Global Forest Watch (GFW), which identifies areas of tree cover loss and gain at a 30 x 30-meter resolution (**Figure 4**).¹⁵ While the GFW can be helpful to assess forest trends over time, GFW does not distinguish between permanent deforestation and other causes of tree cover loss such as natural disturbances or sustainable harvest practices. Further, forest degradation is not captured in GFW assessments of tree cover loss (though some information in the tool, e.g., on aboveground biomass, can provide insight). Thus, while GFW forest loss indicators can be an important tool for approximating initial risk of net forest loss in a geographic area, actors with the ability to perform more nuanced, community-specific analyses should do so.

¹⁵ GFW is a World Resources Institute (WRI) initiative established in 1997. Source: Hansen/UMD/Google/USGS/NASA, accessed through Global Forest Watch.



Figure 4

Global Tree Cover Loss (2011–2020)



Note. Image from Global Forest Watch, 2020.

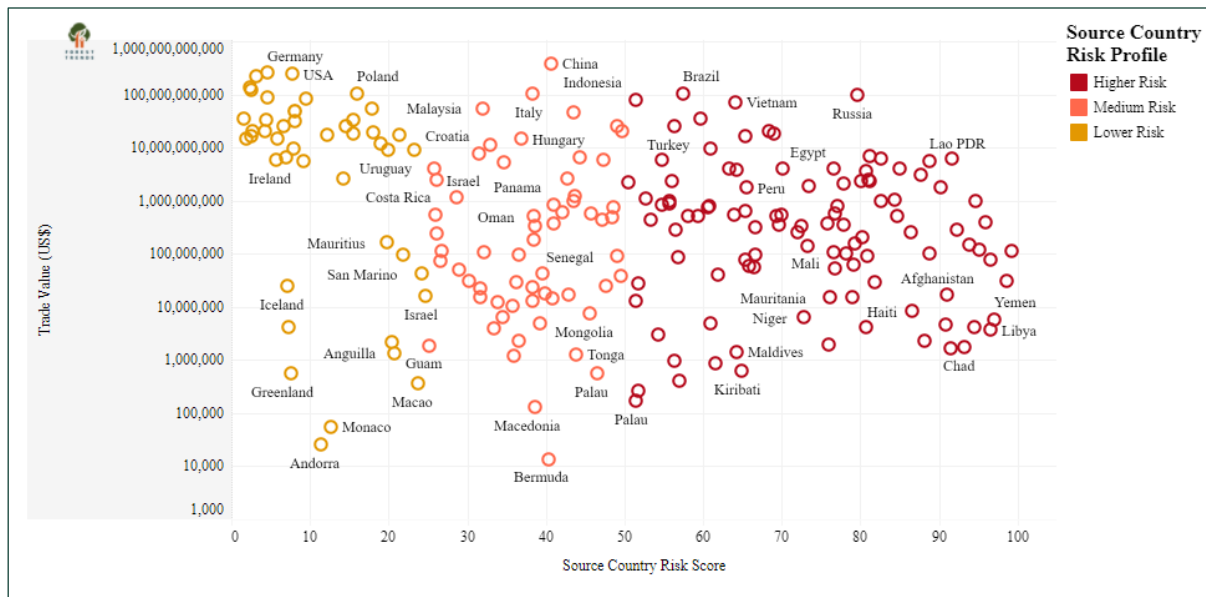
Illegal Timber

Many producer countries face high rates of illegal logging, compromising jurisdictional approaches to sustainable timber sourcing as well as assessments of social and environmental impact. This can compromise sustainable harvest and procurement claims and, even where sophisticated tracing systems exist (e.g., Brazil), contribute to inconsistency in monitoring, enforcement, or auditing systems (Lawson & MacFaul, 2010). High levels of country-level illegal logging may be a concern for initiatives looking to promote or contribute to a CSFE, necessitating more detailed assurances, and so dedicated resources. Forest Trends has developed a Global Illegal Logging and Associated Trade Risk Assessment Tool (ILAT Risk) that provides publicly available data on global timber sales as well as key indicators of risk at the country-level (including governance and harvest risk, conflict risk, and illegal forest product export risk based on national export restrictions). For example, **Figure 5** shows all countries by: 1) total value of wood product exports and 2) risk categorization.¹⁶

¹⁶ <https://www.forest-trends.org/fptf-ilat-home/>

Figure 5

Risk of Illegal Timber by Country



Note. Image from Forest Trends, 2020.

Biodiversity

CSFE actors need to ensure that interventions do not diminish abundance and diversity of natural ecosystems. One indicator to assess biodiversity impact might be the presence of biodiversity “hotspots” in the intervention area.¹⁷ Biodiversity proxy data can communicate complexity, endemic nature of species, endangered species, and other metrics. Integrated Biodiversity Assessment Tool (IBAT) maintains global biodiversity datasets on International Union for Conservation of Nature (IUCN) “Red List of Threatened Species”, Protected Planet “World Database on Protected Areas”, and Key Biodiversity Areas (KBA) “World Database of Key Biodiversity Areas”. The tool details and maps 142,577 Red List species, 265,883 protected areas, and 16,343 key biodiversity areas.¹⁸

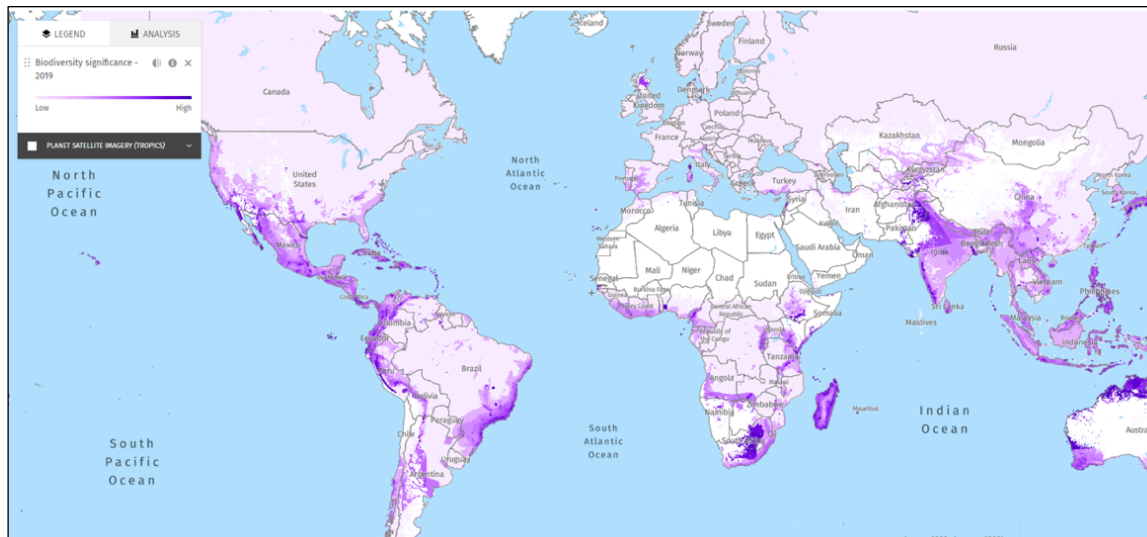
Global Forest Watch provides geographic visualizations of IUCN biodiversity data (**Figure 6**), which show relative biodiversity significance in terms of total forest-dependent mammals, birds, amphibians, and conifer species. Biodiversity significance of each species represents its “range rarity”, or how important that area is for species survival.

¹⁷ One definition of a biodiversity “hotspot” dictates that an area must contain at least 1500 species of endemic vascular plants and have lost 70% of its primary native vegetation. These areas often have high human population densities and together, are home to around 2 billion people who rely on their ecosystem services for their livelihoods and well-being (Critical Ecosystem Partnership Fund, 2021).

¹⁸ Data are available at different degrees of detail according to subscription plans, ranging from freely available to USD 25,000 for full data access. More information can be found here: <https://www.ibat-alliance.org/>

Figure 6

IUCN Biodiversity Significance



Note. Image from Global Forest Watch, 2019.

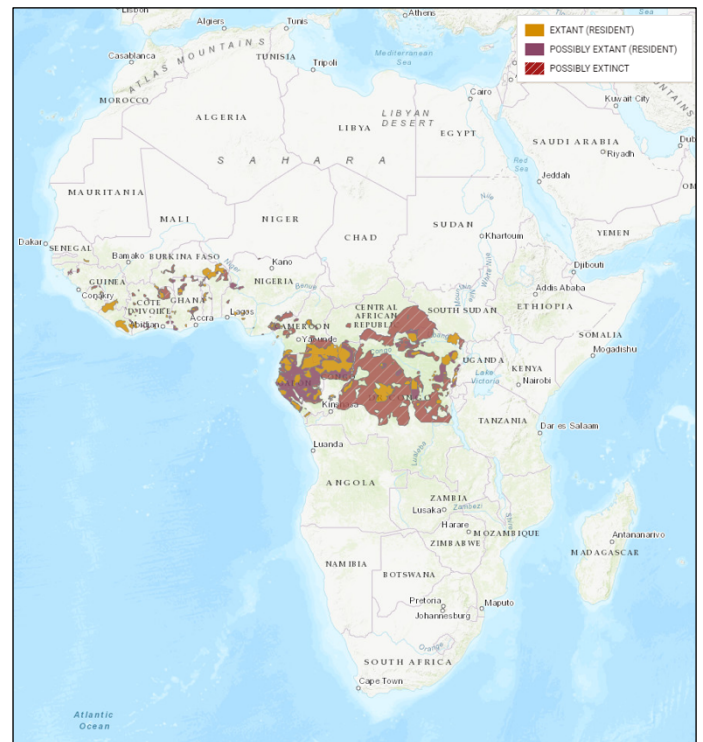
Endangered Species

If current trends of habitat loss continue, scientists predict between one third and one half of all species may face extinction by 2100, with their disappearance destabilizing global ecosystems and society (Thomas et al., 2004). According to the IUCN, more than 40,000 species (or 28% of all assessed species) are threatened. CSFE interventions should strive to minimize harm and provide benefits, where possible, to wildlife habitats and endangered species.

The IUCN Red List of Threatened Species provides location-specific and freely accessible information on the global extinction risk of wildlife, fungi, and plant species (www.iucnredlist.org). This information can be used to ensure that interventions do not infringe on important habitats of endangered species. The IUCN webpage allows actors to search for¹⁹ and download²⁰ data on endangered species by geographic area, habitat type, species, threats, as well as use (including species

Figure 7

Geographic Range and Status of the Critically Endangered African Forest Elephant



Note. Image from IUCN Red List map, 2021.

19 <https://www.iucnredlist.org/search/map>

20 <https://www.iucnredlist.org/resources/spatial-data-download>

important for human dietary and medicinal needs). For example, this resource shows that there are 86 critically endangered species in the Democratic Republic of Congo (DRC), including 41 critically endangered forest animals, five of which are threatened by “human intrusions and disturbance” (e.g., the African Forest Elephant, see **Figure 7**).

Property Rights

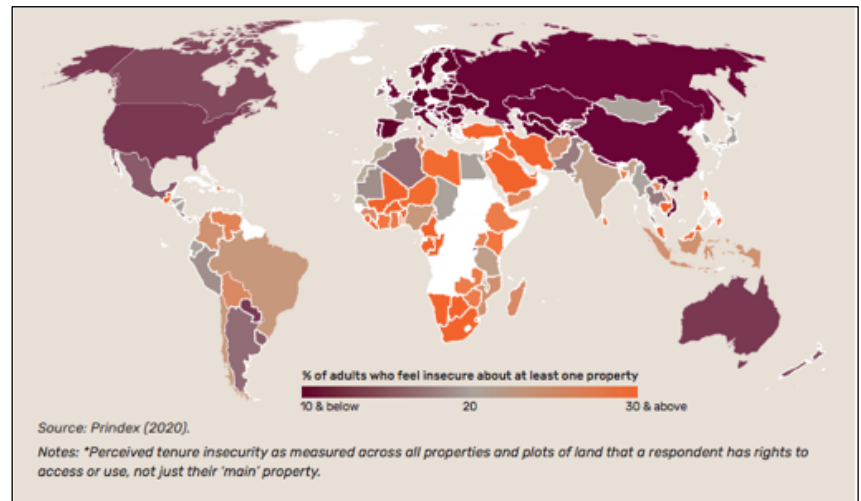
Clear land rights may limit the potential for negative impacts on local tenure security by a CSFE. For example, where tenure security is strong, there is less concern that land grabs or forced resettlement could occur. Where tenure security is weak, interventions resulting in increased land values may leave landowners vulnerable to expropriation. The Prindex Comparative Report (Prindex, 2020) provides country-level assessments of perceived²¹ tenure security (**Figure 8**) as well as assessments by landowner type. The Global Open Data Index provides additional country-level property rights assessments, focusing on the formal rules and processes of property rights (Global Open Data Index, 2016).

Corruption

Country-level corruption may help indicate the likelihood that a project will be linked with or lead to illegal behavior. Transparency International publishes a Corruption Perception Index (CPI)²², which merges data on nine global measures of corruption (**Figure 9**). Depending on the CSFE intervention, the index or one of its component corruption analyses may be relevant. As with other indicators, a poor CPI ranking should not lead actors to abandon a project in a particular area. Rather, it can compel actors to seek more information about their intervention, the role corruption may play in their intervention’s operating landscape, and what to monitor going forward to assure corruption is avoided. For example, two of the CPI measures of corruption are measures related to democracy. If these scores result in a country ranking poorly on the CPI, actors may want to determine whether and which aspects of the political regime are relevant to their CSFE safeguards.

Figure 8

Global Levels of Perceived Tenure Insecurity by Country

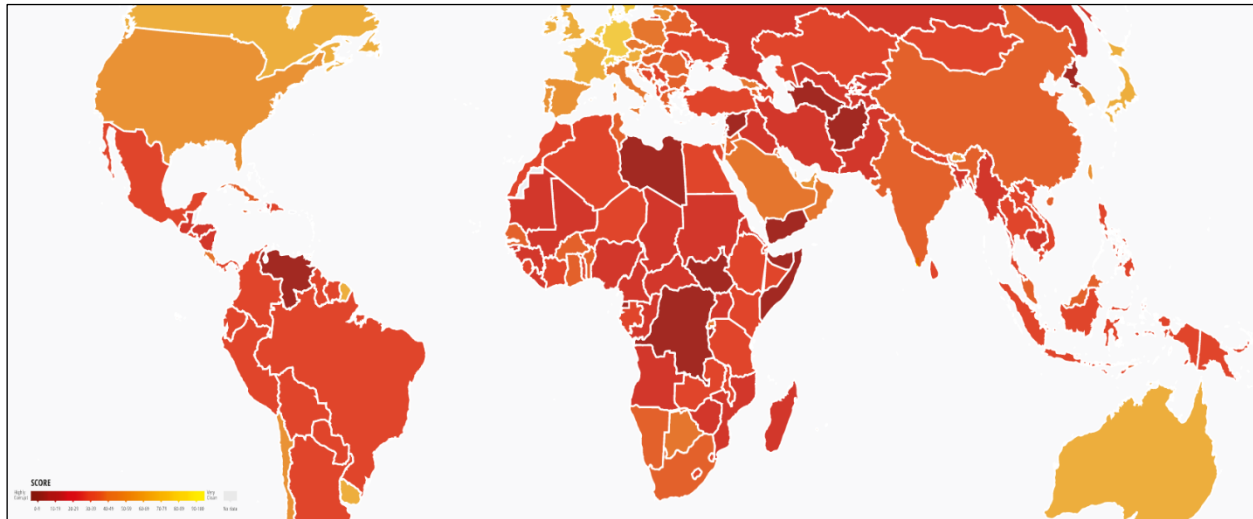


²¹ Importantly, perceived tenure security may serve as a better indicator for tenure security assurances than formal property rights institutions. Where formal property rights exist but are not enforced, real tenure security will be low and the threats of expropriation and land grabs high.

²² <https://www.transparency.org/en/cpi/2020/index/>

Figure 9

Country-Level Corruption Assessments per the Corruption Perceptions Index (CPI)



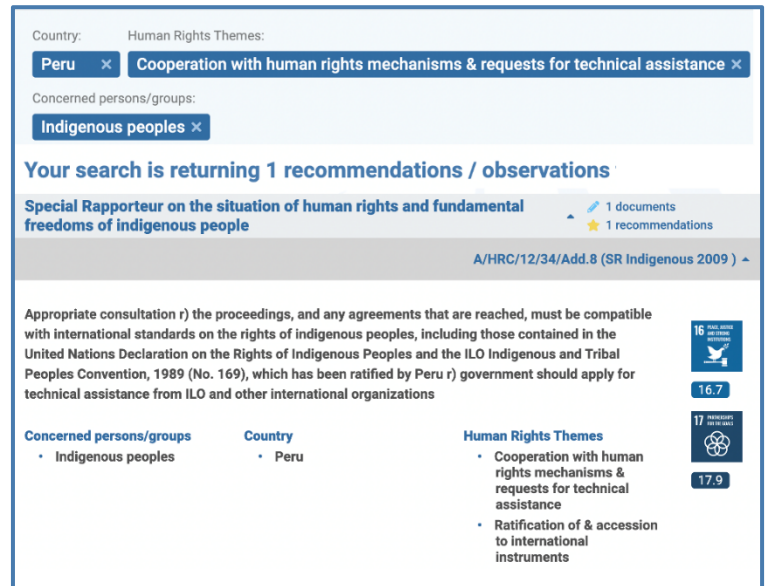
Note. A country's CIP score falls on a 0-100 scale and is represented by a warm toned gradient on the map, 0 is "very clean" (yellow) and 100 is "highly corrupt" (dark red). Image from Transparency International, 2020.

Human Rights, Labor Treaties, & Legislation

Some safeguard Issue Areas (e.g., cultural heritage and alignment, equity and inclusion, gendered impacts) may be informed by country-level recognition and enforcement of human rights. While formal human rights recognition does not necessarily entail enforcement, its absence may be a cause for concern or further investigation. The Universal Human Rights Index²³, assembles legal country-level and international observations and recommendations by international United Nations human rights mechanisms, including Treaty Bodies, Universal Periodic Review, and Special Procedures. For any given country, actors can access all documentation containing human rights legal recommendations (**Figure 10**). This resource may provide more comprehensive assurances for

Figure 10

United Nations Universal Human Rights Index Results for Peru, Indigenous Rights



Note. Image from United Nations Human Rights Index, 2021.

²³ This index was developed by the United Nations Human Rights Office of the High Commissioner (<https://uhri.ohchr.org/en/>).

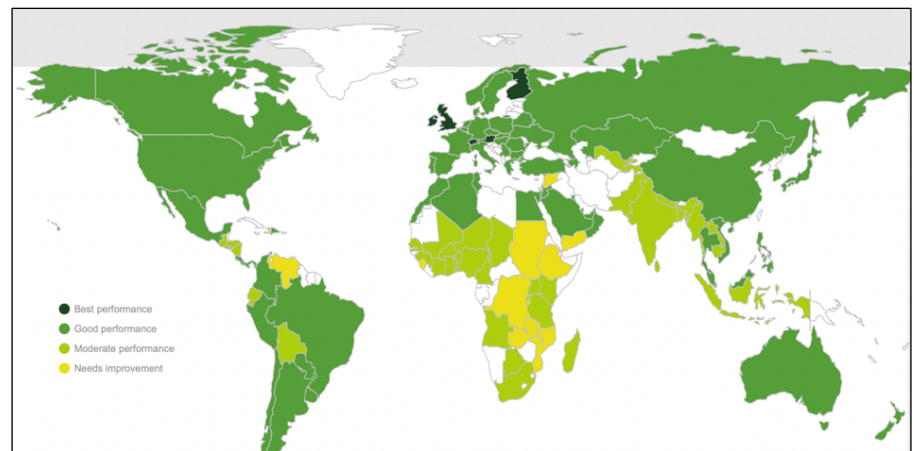
country-level human rights adherence as well as indicate areas of weakness or concern to inform risk analysis, stakeholder engagement, and monitoring plans.

Food Insecurity

Approximately 2.5 billion people rely on or benefit from forest ecosystems for their livelihoods (IFAD & UNEP, 2013) and nearly 2.4 billion people use wood-based energy for cooking (FAO, 2014). Any intervention that shifts forest use practices in areas of food insecurity will risk exacerbating insecurity. *The Economist* publishes a Global Food Security Index (GFSI)²⁴ which provides country-level information on food security (The Economist, 2021). Scores are based on affordability, availability, quality, safety, natural resources, and resilience (**Figure 11**). Using and understanding the ranking for a given country can provide insight into: 1) challenges of vulnerable populations, 2) level of dependence on the current system, and 3) how a given intervention may positively or negatively affect local or national well-being.

Figure 11

Global Food Security Index (GFSI)



Note. Image from *The Economist*, 2021.

Assessment and Monitoring

A CSFE intervention implementor can look to various sources of guidance to identify a suite of relevant and applicable criteria appropriate to intervention type, scale, and actor constraints. Generally, a CSFE intervention falls into one of the following categories: National and International, Investment, Project/Operational Level, or Procurement. These categories are helpful as starting points in determining the types of guidance and potential claims that can be made when monitoring the implementation of safeguards.

Assessment of National and International Interventions: There are several sets of criteria and indicators (C&I) for sustainable forest management (SFM), usually designed at the international level and implemented at the national level. These include efforts under the Montreal Process²⁵, International Tropical Timber Organization (ITTO), and other initiatives of the United Nations Convention on

²⁴ <https://impact.economist.com/sustainability/project/food-security-index/Country>

²⁵ https://unece.org/fileadmin/DAM/timber/meetings/4.1_MP_C_nad_I_revised.pdf

Environment and Development in the United Nations Forest Instrument²⁶ (FAO, 2015). These are important for CSFEs due to the level of wood materials needed to support economic transformational change alongside the need to avoid landscape-level carbon losses.

Assessment of Investment Interventions: Investment metrics are specifically designed to support the needs of investors and project developers assessing impacts and outcomes from an economic perspective alongside safeguard indicators. These can include a range of tools, such as the Impact Monitoring and Measurement (IMM), related indicators and metrics, as well as a range of disclosure requirements to boost transparency. Some examples include the Global Reporting Initiative (GRI), the International Integrated Reporting Council (IIRC), the Sustainability Accounting Standards Board (SASB), and Global Impact Investor Network's (GIIN) Impact Reporting Investment Standards (IRIS) (Brand, Bullen, & Kuppalli, 2020). Though not developed to specifically address CSFE investments, they support safeguarding by establishing "reporting systems that encompass not only financial reporting, but also environmental and social outcomes as part of a holistic assessment of investment performance" (Brand, Bullen, & Kuppalli, 2020, p. 342).

Assessment of Project/Operational Level Interventions:

This includes individual, grouped, or cooperative on-the-ground decision-makers. These actors can provide detailed, locally relevant information but are not knowledgeable or able to speak to larger economic and landscape-level impacts. Forest certification is an example of a tool with operational-level principles and criteria. For example, FSC International Generic Indicators (IGIs) provide a globally applicable framework to inform national FSC standards that are then applied at the parcel or landowner level with consideration of local operating and legal contexts.

Assessment of Procurement Interventions: Governments, development organizations, and major companies are increasingly looking to align sustainability commitments with climate mitigation goals by assessing materials used (e.g., in public buildings) and, in some cases, offsetting emissions. In assessment of procurement interventions, various sources of development guidance are used to ensure that material use aligns with organizational policies or other stated targets.

Procurement Guidance Example from United Nations Development Program (UNDP)

Primary Suppliers: When purchasing natural resource commodities, where possible, UNDP limits procurement to primary suppliers that can demonstrate that they are not contributing to significant conversion or degradation of natural or critical habitats and, within a reasonable period, shifts to primary suppliers that can demonstrate that they are not significantly and adversely impacting these areas. UNDP encourages eco-labels and Environmental Product Descriptions (EPDs).

Navigating Existing Frameworks and Guidelines

Disciplines of sustainable forest management (Wang, 2004), land use planning (Albert et al., 2014), ecosystem service metrics, and third-party assurances (Moore et al., 2012) are well documented and have informed safeguard guidance currently in use for forested lands. The range of needed applications has resulted in a proliferation of

²⁶ https://www.un.org/esa/forests/wp-content/uploads/2018/08/UN_Forest_Instrument.pdf



guidance documents and scales, creating a challenge in assessing *which* guidance is relevant, efficient, transparent, or sufficient for diverse actor types and under various types of interventions (unless funding or governance dictates this).

Alongside disagreements on whether various assurances are effective, including in both required and voluntary contexts (Blackman et al., 2017), there can also be a lack of clarity on mandatory components and who bears responsibility to collect and report data.²⁷ Because of this challenge, the next section explores how different, existing safeguard frameworks may adequately cover CSFE safeguards.

Existing guidance covers a range of considerations such as actor type, scale, audience, point in value chain, type of guidance, and whether third-party verification is required, among other attributes. These standards, frameworks, and guidelines both stand to overwhelm and provide great insight (**Table 1**). Depending on the standard, they generally provide *principles* and *best practices*. Many, but not all, apply specific *criteria* to these broad components of aims or goals (e.g., maintaining ecosystem services of forested lands, inclusive dialogue with stakeholders). Within such criteria, many standards and guidance documents offer specific *indicators* that can inform a baseline and monitor changes over time. Such indicators may consist of either quantitative or qualitative data.

Table 1

Sample of Existing Guidance on Social and Environmental Safeguards

Program	Coded Document	Host/Devolpers	Type	Scale
MSCI ESGs	MSCI ESG Ratings Methodology	Morgan Stanley	Bank	Private Corporation
UNREDD+	REDD+ S&E Standards	UNFCCC	UN organization	National
Climate, Community, and Biodiversity Alliance (CCBA)	Climate, Community, and Biodiversity Standards	Verra	Carbon registry	Project
International Tropical Timber Organization (ITTO)	E&S Management Guidelines	ITTO	UN organization	National/ Project
UNDP Social and Environmental Standards	UNDP Social and Environmental Standards	UNDP	UN organization	Project
Verra Sustainable Development	Sustainable Development Verified Impact Standard	Verra	Carbon Registry	Project
WWF Environmental and Social Safeguards	WWF Environmental and Social Safeguards Framework	WWF	NGO	Project
FAO Environmental and Social Management (ESSs)	Environmental and Social Management Guidelines	FAO	UN organization	Project
FSC Free, Prior, and Informed Consent	FSC Guidelines for the Implementation of the Right to FPIC	FSC	Certification body	Project
FSC International Standard	FSC Principles and Criteria For Forest Stewardship	FSC	Certification body	Project
Gold Standard for the Global Goals	Safeguarding Principles & Requirements	Gold Standard	Carbon Registry	Project
IFC Environmental and Social Management System	E&S Management System Handbook	IFC	Finance - under the WB	Project
IFC Environmental and Social Sustainability	Performance Standards on E&S Sustainability	IFC	Finance - under the WB	Project
BioCarbon Fund Initiative (ISFL)	ISFL Emission Reductions (ER) Program Requirements	World Bank	Development Bank	Sub-national
Accountability Framework Initiative (AFI)	Core Principles	AFI	NGO	Supply chain
Accountability Framework Initiative (AFI)	Operational Guidance on Achieving Commitments	AFI	NGO	Supply chain
Accountability Framework Initiative (AFI)	Operational Guidance on Cutoff Dates	AFI	NGO	Supply chain
EU Public Procurement	Buying Green! - A Handbook on green public procurement	European Commission	Governmental body	Supply chain

²⁷ For example, this report concludes it is unlikely that certification standards alone can adequately cover all CFSE safeguard needs across intervention types.

Safeguards Crosswalk

To facilitate navigation of existing tools and guidance for different project and actor types, existing standards were assessed and coded along each of the identified CSFE Issue Areas (**Figure 13**). Collectively, existing guidance provide a series of criteria, indicators, and tools relevant to many CSFE Issue Areas. As mentioned, guidance documents address Issue Areas in multiple ways, from high-level principles to detailed indicators and metrics. Some standards include guidance for an initial assessment using a qualitative approach for a self-assessment (**Figure 12**).

Figure 12

Gold Standard Qualitative Self-Assessment

- 2.1.4 A non-exhaustive list of assessment questions set out against each Principle is provided in the table below. The Project shall provide responses to these questions, including justifications for responses following the below guidance:
- (a) 'Yes' – Meaning that the risk or expected issue identified in the assessment question is relevant to the Project and context. The Requirements apply and adherence shall be demonstrated. All information must be included in the Monitoring & Reporting Plan and future Monitoring Reports.
 - (b) 'Potentially' – Meaning that the risk or expected issue may be relevant at some point in the Project's cycle but is not necessarily relevant now and/or may never arise. The Requirements apply but the Project Developer may justify why these Requirements do not need to be demonstrated as being met.
 - (c) 'No' – Meaning that the risk or expected issue is not relevant to the Project. Justification shall be provided to support this conclusion, with evidence provided where required.

Note. Image from Gold Standard, 2019.

Figure 13

Existing Guidance Crosswalk Detailing Issue Area Coverage by Document and Project Scale

Pillar	Issue Area	Project-Level										National & Sub-national		Corp.	Supply Chain		
		CCBA	FAO E&S Management	FSC FPIC	FSC International Standard	Gold Standard	IFC E&S Management System	IFC E&S Performance Standards	UNDP	Verra	WWF	UNREDD+ ISFL	ITTO	MSCI	AFI, Core Principles	EU Public Procurement	
Ecosystem Health and Function	Biodiversity	x	x		x	x	x	x			x	x	x	x	x		
	Endangered species	x			x	x						x					
	Habitat protection	x	x		x		x	x	x								
	Ecological resilience/ climate change adaptation	x			x			x						x	x		
	Conversion/ loss in areas of high conservation value	x	x		x	x	x			x	x	x	x		x		
	Ecosystem function and service provisioning	x	x	x	x	x	x	x	x	x		x	x	x			
Society and Economy	Resource efficiency and pollution prevention		x		x	x	x					x	x	x	x		
	Tenure security	x	x		x	x	x		x	x		x		x			
	Risks and accidents	x			x	x	x	x	x	x	x	x	x	x	x		
	Economic livelihood impacts	x	x		x	x	x		x	x		x					
	Well-being (non-economic)	x			x		x		x	x				x			
	Labor and working conditions	x	x		x	x	x	x	x	x		x	x	x			
	Food security	x	x		x									x			
	Illicit activities	x							x								
	Equity and inclusion	x	x	x		x	x		x	x		x		x			
	Community involvement/ participation/ leadership	x	x	x	x	x	x	x	x	x	x	x	x	x	x		
	Cultural heritage alignment	x	x	x	x	x	x		x	x	x		x		x		
	Indirect impacts (other stakeholders)	x	x	x		x			x					x	x		
	Climate	Net GHG emissions	x	x		x			x	x		x		x	x		
		Net forest loss	x							x		x			x		

However, it should be noted that existing standards and safeguard frameworks explored here do not necessarily use the same definitions or may not be as comprehensive as the CFSE Issue Areas defined in this report.²⁸ Thus, cross-checking definitions is an important initial step to determine alignment or misalignment in criteria. Adjusting or expanding interpretation of the indicator or looking to a different source of guidance that can provide more appropriate criteria may be required.

Considering the full scope of topics included in safeguard assessments, tackling a complete checklist of safeguards may not be efficient or even feasible due to knowledge, cost, time, and data constraints. With a mix of potential assurances (e.g.,

²⁸ See **Error! Reference source not found.** for definitions.

internal, regulatory, third-party), how to assess these diverse CSFE initiatives in a comparable, realistic way is not yet well understood.

Safeguards Unique to a CSFE

Some S&E safeguards Issue Areas may be unique to or of particular concern for CSFE interventions. These may be difficult to assess and measure, not least because it may be challenging to find recommended criteria, indicator, and measurement tools in existing guidance documents (see Part I: Needs and Principles for CSFE Safeguards). Interviews, surveys, and expert engagement highlighted the following S&E topics of concern for CSFE interventions, none of which are addressed by existing safeguards guidance and so are not reflected in the coding for Figure 13. These include the following:

- Ensuring against economic exploitation of developing countries for natural resources (includes adequate benefit sharing)
- Ensuring local leadership, community engagement, and long-term economic sustainability
- Avoiding exports in the case of local needs
- Avoiding overall losses in landscape-level carbon
- Avoiding double-counting of carbon credits
- Avoiding leakage at not only parcel and sub-national levels but also international levels and regarding global markets

Applying Guidance: Key Considerations

Drawing from the Issue Areas and leveraging appropriate guides and tools, CFSE implementors can then undertake the following steps:

- 1) Begin with the full list of Issue Areas and identify potential criteria based on intervention scale and actor type, engaging with known and potential stakeholders.
- 2) Take stock of existing data and information at the intervention level, including relevant information from proxy data.
- 3) Identify potential or likely risk level and consider potential adverse outcomes within each Issue Area (see Figure 12 for an example from the Gold Standard and Template I: Issue Area Risk Identification in Appendix II).
- 4) Assess potential for tradeoffs between Issue Areas with stakeholders.
- 5) Develop and adopt strategies to avoid adverse outcomes and to minimize and mitigate consequences.
- 6) Fulfill associated requirements for third-party verification.
- 7) Follow recommendations and act as a sector leader by sharing information openly and providing insight on decision-making methodologies.

Making Claims on CSFE Safeguards

As demonstrated in this report, there are various sources of guidance (both voluntary and mandatory) for safeguards, including criteria, tools, methods, and reporting guidance. While a risk-based approach (as presented earlier) can be an effective tool



to determine appropriate starting points for analysis, there are different types of potential claims and assurances related to CSFE interventions, as listed below.

Product level assurances: There are multiple sources of information for product-level assurances that can be pursued in alignment with CSFE S&E safeguards. These assurances will likely continue to evolve in a manner that makes them more robust, stringent, and requiring additional metrics. CSFE actors can leverage these tools while also pushing to increase and strengthen them.

- An *Environmental Product Declaration (EPD)* is an independently verified and registered document that communicates transparent and comparable information about the life-cycle environmental impact of products.
- *Product Category Rules (PCR)* are documents that provide rules, requirements, and guidelines for developing an EPD for a specific product category. ISO 14025 provides the standard for determining EPDs (referred to as “type III environmental declarations”) and aims to enable transparency and comparability between products.
- *Life Cycle Analyses (LCA)* aim to be holistic analyses of the impact of a given material or product and reflect analysis techniques that assess environmental impacts across multiple stages of product life and can include raw material procurement, materials processing, manufacture, distribution, and end use (Rashid et al., 2015).
- *Product certifications* are largely voluntary and provide assurance for specific materials and end products, attempting to demonstrate commitment to good environmental, social, ethical, and safety practices. In forests, example indicators include forest management, harvest activities, habitat protection, and processing efficiency.
- *Procurement guides* aim to inform purchasing that considers economic, environmental, and socially responsible procurement of goods and services and examines costs as well as societal, economic, and environmental impacts.

Verified Sustainable Forest Management: Forest management certification is a well-recognized tool to support transparency and responsible forest management. Third-party auditing and verification provide an independent review of management and ensure conformity to international performance standards. In forest management, certification has increased in recent years, driven by consumer demand, legal requirements, and import markets (Brand, Bullen, & Kuppalli, 2020). Forest carbon projects also rely on third-party verifiers (in the “verification” step) that review climate benefit claims, undertake site visits, and assess forest management plans. Many private sector actors also deploy third-party verification for major projects and investments, though the resulting reports are not always publicly available. By leveraging experience from certification, carbon project, and investment sectors, third-party verification is a tool that can be readily adapted to meet CSFE safeguard needs.

Landscape approaches: Landscape, in the term “Landscape Approach”, generally refers to large geographical areas that may have geopolitical or biophysical boundaries (e.g., state lines or a watershed) and in which ecological functions like carbon storage, freshwater supply, and biodiversity conservation, can be managed



and monitored alongside socioeconomic and political objectives. Landscape assessments can include production activities like agriculture, timber, and renewable energy siting as well as conservation, biodiversity connectivity, and habitat planning. As such, landscape management seeks to integrate criteria and indicators into plans that consider conservation, production, and societal well-being—many have direct parallels to CSFE Issue Areas. Often, CSFE Issue Areas warrant collaboration across scales of decision-makers to ensure harm avoidance. For example, while production of woody material and carbon sequestration may increase in a particular unit area, the net benefit may be undermined if there is an overall loss of forest structure and species complexity, carbon storage, or habitat at the landscape level. There are emerging tactics and frameworks for CSFE actors to engage in to ensure activities are part of a landscape approach to reduce negative outcomes.

Reducing waste and limiting uptick in demand: The central challenge in a CSFE is the need to meet the demands of a growing population alongside increased demands for low-emissions materials. Pathways to address climate change without compromising sustainable development will need an expanded forestry (including forest products) sector operating under a long-term planning horizon and appropriate land-use practices (Brand, Bullen, & Kuppalli, 2020). Leveraging common wasted woody materials (e.g., slash from forest management, urban tree biomass, downed wood from major storm events, and deconstructed wood, among other sources) could help fill a growing demand for construction materials. This need could also be filled through active reforestation of degraded landscapes, which is a central CSFE tactic strongly supported in the interview and survey data collected for this analysis.

Principles of equity and inclusion: Recognizing the increasing importance of land, carbon, and forests in a climate-threatened future, a CSFE can actively strive to avoid contributing to wealth concentration and limiting access to natural capital (e.g., land-grabbing, mergers, major acquisitions, taking or dividing a bundle of land rights). While the private sector may use language about “shared prosperity” (Brand, Bullen, & Kuppalli, 2020), there are opportunities to do more in terms of addressing equity gaps, distributing returns to rural actors who provide labor and care for the land, and avoiding pushing out smaller actors. Such actors can contribute centrally to CSFEs and their smaller contributions should be respected and included, despite perceived inefficiencies.

Holistic and tailored planning: CSFE intervention implementors can develop a tailored reporting framework that supports monitoring and review of material impacts across space and over time. This requires intervention managers to assess potential impacts to stakeholders, understand what sustainability issues they seek to address, and select or design metrics that can report on these aspects in a consistent and objective manner. Instead of making prioritization decisions behind closed doors, managers must engage with experts to define and determine risk.

Mainstreaming: Considering multi-scaled and multi-actor potential for CSFE participation, there is a need to balance ambitious action with potential for grave and large-scale unintended negative consequences. Mainstreaming the Global Guiding Principles would ensure that a wide range of actors understand and can implement best practices at multiple scales. Additional research, and the development of case



studies will increase evidence and improve communicability. Further, increased transparency, consistent peer learning, and publicly available data and decision-making information will help a broad range of actors understand and implement CSFE safeguarding efforts. Clear, consistent communication from sector leaders can drive motivation by increasing understanding of safeguard assurance, encourage pursuit of net benefits, reduce uncertainty and confusion, and boost adoption through leveraging technology and data.

Monitoring Safeguards

Safeguards must be part of a holistic review of the intervention and the indicators used for monitoring over time. This requires significant, safeguards-specific supervision that includes intervention-specific due diligence, site visits and, in some cases, third-party verification. This should be carried out by an independent expert whenever possible, even if not required.

Focal indicators may shift over time depending on the central activities of the project. For example, a timber harvest may trigger intensive post-harvest forest monitoring to ensure invasive species limitation and adequate recovery of focal species. Some Issue Areas are important to assess even when expected impacts are positive (e.g., projects that affect natural habitats, forestry, or Indigenous Peoples). While implementing projects according to safeguard policies incur costs, these costs may be justified when compared to the costs associated with reputational risk, legal responsibility violation, or failure in the event of an intervention-related grievance (**Figure 14**), environmental damage, or loss of social license.

Figure 14

Example of Grievance Mechanism Guidance from IFC ESMF Handbook

TIP
<p>A Grievance Mechanism is</p> <p>UNDERSTANDABLE AND TRUSTED when:</p> <ul style="list-style-type: none"> • affected communities understand the procedure to handle a complaint; • people are aware of the expected response time; • confidentiality of the person raising the complaint is protected. <p>CULTURALLY APPROPRIATE AND ACCESSIBLE when:</p> <ul style="list-style-type: none"> • claims can be presented in the local language; • technology required to present a claim is commonly used (e.g., paper, text messaging, internet); • illiterate persons can present verbal complaints. <p>AT NO COST when:</p> <ul style="list-style-type: none"> • people don't need to travel long distances to present a claim; • the company covers the costs of third party facilitation.

Practical Examples from the CSFEP

This section provides a practical look at applying CSFE safeguard criteria with examples from the Climate-Smart Forest Economy Program (CSFEP) collected in **Table 2**.

Table 2

CSFEP Breakthrough Initiatives selected for implementation (December 2021)

Characteristic	CASSA Country: Guatemala	BuildX Country: Kenya	AKAH Country: India	Glasgow City Region Country: UK	Stora Enso Country: Finland
Relationship with forest products and production	Community-level construction—DIY bamboo house construction for migrant communities in Central America	Promoting a regional CSFE—through initial support to catalyze the market, building towards a regional investment facility in later phases	Community-level construction—working to develop hybrid houses for low-income communities in Gujarat by linking AKAH's housing and reforestation programs	National-level economy—capturing the regional (i.e., Glasgow City Region) economic and carbon value of forest economy supply chains to support national (i.e., Scottish) climate neutrality	Project-level construction—company headquarters
Breakthrough Initiative lead type	Central America sustainable construction that facilitates production by activating market demand for products	Sustainable construction company in the region that facilitates production through activating demand for mass timber in construction	Producer of wood products through reforestation program and procurer through the housing program activating demand	Regional authority market-shaping—Glasgow City Region through the Green Economy Manager of Glasgow City Council	Producer and procurement
Initial primary safeguard concerns	Environmental concerns of bamboo as an invasive species, previous concerns from abandonment of plantations	Social and environmental concerns when sourcing from a different country (plan is to source from Uganda for use in Kenya)	Environmental concerns given nascent industry, recent legislation changes, and tree species relevance varies across a region with climatic differences	Environmental concerns from forest management (i.e., diversity and climate adaptability of native species) and social concern over risk to local businesses	Biodiversity in Scandinavian forests
Existing assurances	Identifying and implementing best practices for community managed bamboo plantations, including social and environmental indicators	Uganda has national FSC forest stewardship standard and this is being applied here	Forest certification system introduced in 2019, supplemented by additional regulations	Glasgow Sustainable Procurement Strategy (2021) mandates procurement, addresses inequalities and climate change, benefits local communities, and more	Third-party traceability systems (e.g., FSC and PEFC Chain of Custody, and ISO 14001 Environmental Management Standard)

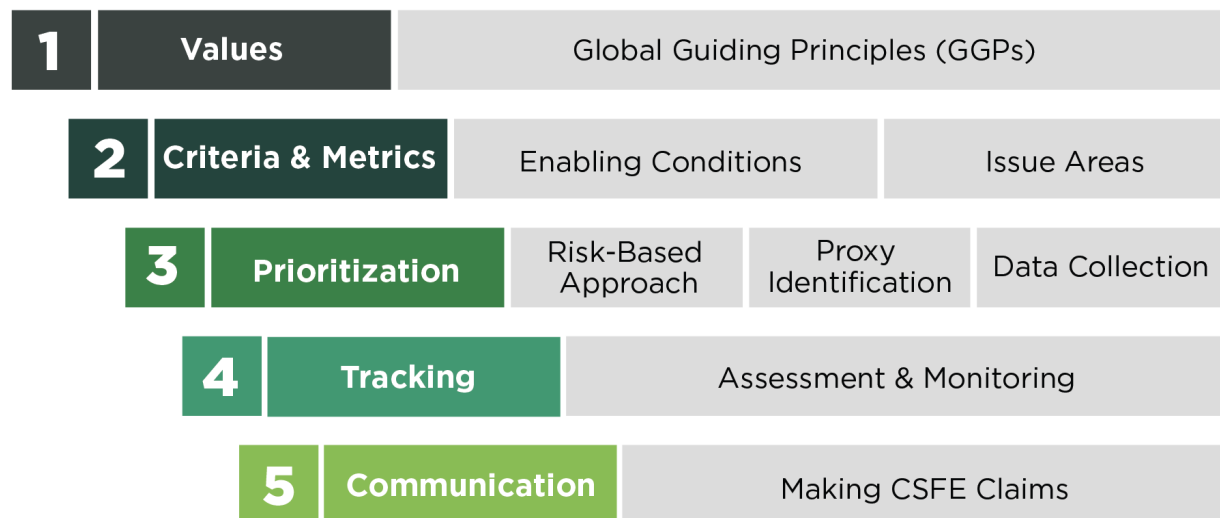
Conclusions and Recommendations

A climate-smart forest economy (CSFE) aims to bolster sequestration, storage, and substitution (“the 3Ss”) by moving beyond product-specific considerations to address the climate crisis by catalyzing broader systemic change. However, failure to minimize negative externalities will have implications for equity, project longevity, and climate benefits. This report demonstrates that 1) climate benefits in a CSFE are incontrovertible (i.e., a required component of any intervention seeking to claim CSFE contributions) and 2) that S&E safeguards are a central tool with which to ensure climate benefits and long-term intervention viability. Safeguards should not be an afterthought to avoid harm out of a sense of kindness or obligation. If safeguards are not adequately implemented, interventions risk failure in terms of climate (e.g., net emissions), environment (e.g., biodiversity loss), and society (e.g., conflict).

This report laid out and explored: 1) **Values** underpinning CSFE safeguards with the Global Guiding Principles (GGPs); 2) **Criteria and Metrics** in Enabling Conditions and Issue Areas; and 3) **Prioritization** with Data Collection, a Risk-Based Approach, and Proxy Data Identification and use. The report touches on 4) **Tracking** and 5) **Communication**, recognizing these are areas for future analysis that would benefit from identification of best practices (**Figure 15**). The GGPs apply to all CSFE actors and interventions. While necessary to apply and interpret GGPs at different scales, the fundamental components are the same. Along with advancing guidance for 4) Tracking and 5) Communication, piloting these methods with operational interventions is the next step in this iterative process to test and improve novel components.

Figure 15

Cascading Themes in CSFE Safeguards



Parts I and II of this report have sought to bridge expert perspectives and come to a shared understanding regarding 1) what CSFE social and environmental safeguards are and 2) how to employ existing resources reliably and credibly. Future focus on CSFE safeguards should continue to identify points of synergy, best practices for data-sharing, and adoption of enhanced sector guidance and sources of assurances.

In conclusion, CSFE interventions provide opportunities to increase landscape carbon storage (e.g., restoration, improved forest management) and curb emissions (e.g., keeping forests as forests, replacing carbon-intensive materials). Proper assessment, implementation, and monitoring of safeguards ensure that CSFE intervention leads to positive impacts on forests, rural economies, and human well-being. Importantly, failure to adequately safeguard against harm and achieve support from relevant communities will compromise intervention objectives. To ensure no undue social and environmental harm and to promote positive co-benefits wherever possible, thorough assessment and implementation of social and environmental safeguards are crucial for an effective CSFE.



Appendix I: Reviewed Standards and Registries

Program	Coded Document	Host/Developers	Type	Scale	Audience
MSCI ESGs	MSCI ESG Ratings Methodology	Morgan Stanley	Bank	Private Corporation	Private
UNREDD+	REDD+ S&E Standards	UNFCCC	UN organization	National	Nations
Climate, Community, and Biodiversity Alliance (CCBA)	Climate, Community, and Biodiversity Standards	Verra	Carbon registry	Project	Nations, NGOs, Private
International Tropical Timber Organization (ITTO)	E&S Management Guidelines	ITTO	UN organization	National/Project	Nations
UNDP Social and Environmental Standards	UNDP Social and Environmental Standards	UNDP	UN organization	Project	Nations
Verra Sustainable Development	Sustainable Development Verified Impact Standard	Verra	Carbon Registry	Project	Nations, NGOs, Private
WWF Environmental and Social Safeguards	WWF Environmental and Social Safeguards Framework	WWF	NGO	Project	Nations, NGOs, Private
FAO Environmental and Social Management (ESSs)	Environmental and Social Management Guidelines	FAO	UN organization	Project	Nations and major actors receiving funding
FSC Free, Prior, and Informed Consent	FSC Guidelines for the Implementation of the Right to FPIC	FSC	Certification body	Project	Private
FSC International Standard	FSC Principles and Criteria for Forest Stewardship	FSC	Certification body	Project	Private
Gold Standard for the Global Goals	Safeguarding Principles & Requirements	Gold Standard	Carbon Registry	Project	Private
IFC Environmental and Social Management System	E&S Management System Handbook	IFC	Finance - under the WB	Project	Nations and major actors receiving funding
IFC Environmental and Social Sustainability	Performance Standards on E&S Sustainability	IFC	Finance - under the WB	Project	Nations and major actors receiving funding
BioCarbon Fund Initiative (ISFL)	ISFL Emission Reductions (ER) Program Requirements	World Bank	Development Bank	Sub-national	Sub-national Governments
Accountability Framework Initiative (AFi)	Core Principles	AFi	NGO	Supply chain	Private
Accountability Framework Initiative (AFi)	Operational Guidance on Achieving Commitments	AFi	NGO	Supply chain	Private
Accountability Framework Initiative (AFi)	Operational Guidance on Cutoff Dates	AFi	NGO	Supply chain	Private
EU Public Procurement	Buying Green! - A Handbook on green public procurement	European Commission	Governmental body	Supply chain	Nations, NGOs, Private
IDB Environment and Safeguards Compliance Policy	Environment and Safeguards Compliance Policy	IDB	Development Bank	National	Nations and major actors receiving funding
FSC	FSC Forest Certifications	FSC	Certification body	Supply chain	Private Companies
FSC	FSC Chain of custody	FSC	Certification body	Supply chain	Private Companies
FSC	FSC Forest management	FSC	Certification body	Supply chain	Private Companies
IFAD	IFAD	IFAD	International Organization	National	Rural/developing nations

Appendix II: Templates for Issue Area Assessment

Template I: Issue Area Risk Identification

This document aims to guide risk categorization for CSFE safeguards Issue Areas to facilitate Issue Area prioritization. The following template should be completed for each Issue Area, listed below from Part I (see Appendix I) with reference to the CSFE Risk Assessment Matrix from Part II (see Figure 3).

Part I (Appendix I)

CSFE Safeguard Issue Areas

Key Pillars	Issue Areas
Ecosystem Health and Function	Biodiversity
	Endangered species
	Habitat protection
	Ecological resilience/ climate change adaptation
	Conversion/ loss in areas of high conservation value (e.g., conservation of natural forests/primary forests)
	Ecosystem function and service provisioning
	Resource efficiency and pollution prevention
Society and Economy	Tenure security
	Risks and accidents
	Economic livelihood impacts
	Well-being (non-economic)
	Labor and working conditions
	Food security
	Illicit activities
	Equity and inclusion
	Community involvement/ participation/ leadership
	Cultural heritage alignment
Indirect impacts (other stakeholders)	
Climate	Net GHG emissions
	Net forest loss

CSFE Safeguards Risk Matrix

Below is the Risk Assessment Matrix for CSFE social and environmental safeguards that should be referenced in completion of Issue Area risk classification. See the report for more detailed explanation of the history and rationale of the risk matrix. It will be used here as a reference for Issue Area risk classification (**Table 1**). The following template will guide users first through the identification of Issue Area ‘Consequence Severity’ (horizontal axis) and then Issue Area ‘Likelihood of Impact’ (vertical axis); this matrix will be referred to in Question 7, specifically, when users are asked to identify the risk classification(s) associated with their determined levels of consequence severity and likelihood of impact.

Part II (Figure 1)

Risk Assessment Matrix for CSFE social and environmental safeguards

		Consequence Severity								
		Positive Impact	Low Severity	Low-Med	Medium Severity	Med-High	High Severity	Extreme	Unknown	
Likelihood of Impact	Very Unlikely	Possible Co-Benefit	Low Risk			Low-Medium Risk		High Risk	Extreme	Unknown
	Unlikely		Low-Medium Risk		Medium Risk	High Risk	Extreme	Unknown		
	Moderly Likely		Low-Medium Risk	Medium Risk	High Risk	Extreme	Unknown			
	Likely		Medium Risk	High Risk	Extreme	Unknown				
	Very Likely		High Risk	Extreme	Unknown					
	Unknown		Extreme	Unknown						

Table 1

Risk classifications to be identified with the CSFE Safeguards Risk Matrix

Possible Risk Classifications
Possible Co-Benefit
Low Risk
Low-Medium Risk
Medium Risk
High Risk

Risk Assessment Template

The below template should be completed for each Issue Area, from Part I (Appendix I) above.

Issue Area																	
<p>Q1: How might risk associated with this Issue Area manifest with the intervention?</p> <p><i>e.g., focus species, sectors, stakeholders that stand to be affected and in what ways, at project outset or at end</i></p>																	
<p>Q2: What data/ information sources have you used to make the above (Q1 assessment)?</p> <p><i>Project-specific data, geographic indicators/ proxy data (see 'Relevant Proxy Data' in the report for more guidance)</i></p>																	
<p>I. DETERMINE CONSEQUENCE SEVERITY (matrix horizontal axis)</p>																	
<p>Q3: What is reasonable consequence severity associated with this Issue Area?</p> <p><i>May be informed by likelihood of consequence severity (e.g., while any degree of severity may be possible, some actors may choose to select only those degrees of severity with greatest likelihood).</i></p>	<table border="1"> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Positive Impact</td> <td>Low-Severity</td> <td>Low-Med Severity</td> <td>Medium Severity</td> <td>Med-High Severity</td> <td>High Severity</td> <td>Extreme Severity</td> <td>Unknown</td> </tr> </table>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Positive Impact	Low-Severity	Low-Med Severity	Medium Severity	Med-High Severity	High Severity	Extreme Severity	Unknown
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
Positive Impact	Low-Severity	Low-Med Severity	Medium Severity	Med-High Severity	High Severity	Extreme Severity	Unknown										
<p>Q4: Data/ information sources have used to make the above judgements about Issue Area consequence severity (Q3)?</p> <p><i>Project-specific data, geographic indicators/ proxy data (see 'Relevant Proxy Data' in the report for more guidance)</i></p>																	

II. DETERMINE IMPACT LIKELIHOOD (matrix vertical axis)

Q5: What is reasonable impact *likelihood* associated with the assigned Issue Area consequence severity selected above (Q3)?

Using information organized from the previous sections, choose one level of likelihood. Select 'unknown', if there is inadequate data or information.

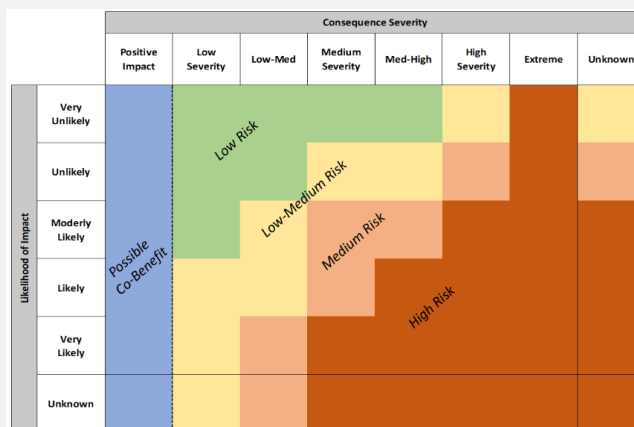
- Very Unlikely
- Unlikely
- Moderately Likely
- Likely
- Very Likely
- Unknown

Q6: What data/ information sources have you used to make the above assessment of impact likelihood (Q5)?

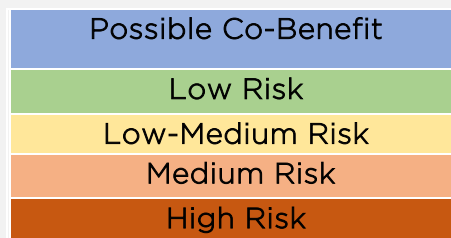
Project-specific data, geographic indicators/ proxy data (see report for more guidance)

RISK CLASSIFICATION

Q7: Using the CSFE Risk Assessment Matrix (Part II, Figure 3), into which risk categorization does the identified likelihood (Q3) and identified consequence severity of (Q6) fall?



Q8: Using the CSFE Risk Assessment Matrix, confirm final overall Risk Classification by erasing all rows except final selection.



Risk Classification and Scoring

This section seeks to guide actors in assessing any CSFE intervention along the safeguards Issue Areas collectively and across key pillars. This table can be used in part two of the CSFE safeguard assessment.

1. First, complete the above template for each Issue Area and insert the results from **Q7** in the 'Risk Classification' in Table 3.
2. Next, for easier intervention-wide assessment of collective safeguards impact, actors may wish to assign scoring for identified risk classifications. Complete Table 2 with preferred scoring to accompany each risk classification, assigning higher scores to higher levels of risk. Because this scoring is inherently subjective and not necessarily linear (e.g., actors may seek to give additional weight to 'possible co-benefit' or 'high risk' classifications), actors should use an inclusive approach to determining appropriate scoring.
3. Using Table 2, complete the 'Risk Score' column in Table 3. Apply the assigned scoring to each identified risk classification.
4. After each Issue Area's risk score has been determined, add all values in the 'Risk Score' column to determine the Collective Safeguards Risk. Future refinements could include weighting of Issue Areas.

Table 2

Scoring of Risk Classifications

Risk Classification	Assigned Scoring
Possible Co-Benefit	
Low Risk	
Low-Medium Risk	
Medium Risk	
High Risk	

Table 3

Assigned Risk Classification

Key Pillars	Issue Areas	Risk Classification	Risk Score
Ecosystem Health and Function	Biodiversity		
	Endangered species		
	Habitat protection		
	Ecological resilience/ climate change adaptation		
	Conversion/ loss in areas of high conservation value (e.g., conservation of natural forests/primary forests)		
	Ecosystem function and service provisioning		
	Resource efficiency and pollution prevention		
Society and Economy	Tenure security		
	Risks and accidents		
	Economic livelihood impacts		
	Well-being (non-economic)		
	Labor and working conditions		
	Food security		
	Illicit activities		
	Equity and inclusion		
	Community involvement/ participation/ leadership		
	Cultural heritage alignment		
Indirect impacts (other stakeholders)			
Climate	Net GHG emissions		
	Net forest loss		
COLLECTIVE RISK SCORE:			



Template II: Issue Area Impact Assessment

This document will guide development of a CSFE Safeguard assessment plan.

ISSUE AREA CHECKLIST

Using the Risk Assessment from Template 1, bring forward the risk level assessment results for each Issue Area.

Key Pillars	Issue Areas	Risk Score
Ecosystem Health and Function	Biodiversity	
	Endangered species	
	Habitat protection	
	Ecological resilience/ climate change adaptation	
	Conversion/ loss in areas of high conservation value (e.g., conservation of natural forests/primary forests)	
	Ecosystem function and service provisioning	
	Resource efficiency and pollution prevention	
Society and Economy	Tenure security	
	Risks and accidents	
	Economic livelihood impacts	
	Well-being (non-economic)	
	Labor and working conditions	
	Food security	
	Illicit activities	
	Equity and inclusion	
	Community involvement/ participation/ leadership	
	Cultural heritage alignment	
	Indirect impacts (other stakeholders)	
Climate	Net GHG emissions	
	Net forest loss	

INSTRUCTIONS

For this section, duplicate the table below for each Issue Area identified in Template 1. Enter the Issue Area and Risk level from the table above. Note that it may be necessary to create two tables for an individual Issue Area, depending on the source and type of safeguard risk. The document will then form the basis of the safeguard monitoring plan.

Description of needed detailed information:

- **Initial risk level:** Drawing from Template 1, add a brief description of risk and rationale.
- **Criteria and guidance source:** Using relevant guidance for scale and actor type, identify the source of guidance used and relevant criteria selected.
- **Data sources:** Primary data sources used in this analysis, including internal/project data as well as external data sources.
- **Stakeholder engagement:** Describe plans for stakeholder engagement, including stakeholder types, communication, engagement, and plans for information sharing on the specific Issue Area.
- **Risk Mitigation Plan:** Include ambition to move down risk level when possible.

ISSUE AREA	
Initial risk level	
Criteria and guidance source	
Data sources	
Stakeholder engagement	
Risk Mitigation Plan	

ISSUE AREA	
Initial risk level	
Criteria and guidance source	
Data sources	
Stakeholder engagement	
Risk Mitigation Plan	

ISSUE AREA	
Initial risk level	
Criteria and guidance source	
Data sources	
Stakeholder engagement	
Risk Mitigation Plan	



COMPLETE SAFEGUARD CHECKLIST

While completing the tables above for each safeguard, populate the following table by 1) copying initial Risk Level from above and 2) adding a checkmark for each Issue Area addressed.

KEY PILLARS	ISSUE AREAS	RISK LEVEL	ADDRESSED (add check)
Ecosystem Health and Function	Biodiversity		
	Endangered species		
	Habitat protection		
	Ecological resilience/ climate change adaptation		
	Conversion/ loss in areas of high conservation value (e.g., conservation of natural forests/primary forests)		
	Ecosystem function and service provisioning		
	Resource efficiency and pollution prevention		
Society and Economy	Tenure security		
	Risks and accidents		
	Economic livelihood impacts		
	Well-being (non-economic)		
	Labor and working conditions		
	Food security		
	Illicit activities		
	Equity and inclusion		
	Community involvement/ participation/ leadership		
	Cultural heritage alignment		
Indirect impacts (other stakeholders)			
Climate	Net GHG emissions		
	Net forest loss		

GGP ASSESSMENT AND CHECKLIST

Complete the following table of the full set of GGPs for the CSFE Intervention. This should be assessed comprehensively (i.e., with all Issue Areas in mind, not for each Issue Area individually).

CATEGORY	GUIDING PRINCIPLE	ACTIVELY PURSUED (Y/Unsure/N)
Issue Areas	1. Ensure GHG benefits (via mitigation and/or adaptation) in ‘climate-smart’ interventions are adequately measured and monitored	
	2. Avoid net loss of forest ecosystems	
	3. Ensure environmental and social safeguards are met to support long-term intervention and climate objectives	
	4. Look for positive synergies between issue areas and intervention objectives (e.g., identifying possible co-benefits)	
Stakeholders & Project Development	5. All scales and types of actors have a role, responsibility, and capability to pursue climate benefits and safeguard against harm	
	6. Commit to responsible activity, being aware of capacity and information limitations	
	7. Aim for inclusive engagement across multiple scales of actors, including those in low-capacity settings	
	8. Minimize physical distances between wood procurement and utilization to reduce emissions, facilitate local/community benefit, and increase transparency	
	9. Institute processes for continuous, stepwise improvements when appropriate	
	10. Explicitly recognize tradeoffs and prioritizations across issue areas	

Assessment and Implementation	11. Apply best practices (including best available data) in assessment and monitoring (aligned with actor capacity, responsibility, and resources)	
	12. Establish mechanisms for information updating, assessment, reassessment, dispute resolution, and results sharing at initiative onset	
	13. Be transparent about safeguards assessments and implementation (including data sources, decision-making, and participation processes), making information broadly available	

