



AN OVERVIEW OF LANDSCAPE APPROACHES

What can we learn from others to develop a landscape approach for FSC certification of management units?

Draft Version v01.1



Title: An overview of LANDSCAPE APPROACHES

Contact for comments: FSC Global Development
Adenauerallee 134
53113 Bonn
Germany

Phone: +49 -(0)228 -36766 -0

Fax: +49 -(0)228 -36766 -30

Email: engagement@fsc.org

This document is developed by Professor Claude Garcia and his team of Bern University of Applied Studies commissioned by the FSC Secretariat, to support the implementation of Motion 23/2020 '*Use landscape-wide approaches adapted to local conditions and strengthen Standard Development Groups (SDGs) to improve protection of Intact Forest Landscapes.*'

© 2023 Forest Stewardship Council, A.C. All Rights Reserved
FSC® F000100

You may not distribute, modify, transmit, reuse, reproduce, re-post or use the copyrighted materials from this document for public or commercial purposes, without the express written consent of the publisher. You are hereby authorized to view, download, print and distribute individual pages from this document subject for informational purposes only.

CONTENTS

Objectives of the guidelines	4
What can we learn from other landscape approaches?	6
Overview and Key principles in landscape approaches	8
Horizon scan – Institutions	10
Details about Landscape Approaches	13
1000 Landscapes for 1 Billion People	13
The Accountability Framework Initiative	14
CIFOR	16
Conservation International (CI)	17
High Conservation Value (HCV) Network	19
International Union for Conservation of Nature	23
Landscape	25
Global Environment Facility (GEF)	25
Proforest	27
Rainforest Alliance	28
Sustainable Trade Initiative (IDH)	29
The Nature Conservancy (TNC)	30
Tropical Forest Alliance - Jurisdictional Action Network	31
United Nations Development Programme (UNDP)	34
World Resources Institute (WRI)	35
World Wildlife Fund (WWF)	36
Yale Forestry Dialogues	37
References	41
Scientific publications	41
Reports	42

This preamble is developed by Professor Claude Garcia and his team of Bern University of Applied Studies commissioned by the FSC Secretariat, to support the implementation of Motion 23/2020 ‘Use landscape-wide approaches adapted to local conditions and strengthen Standard Development Groups (SDGs) to improve protection of Intact Forest Landscapes.’ This document is not a discussion paper, rather an inventory of other relevant landscape approaches to help in the implementation process.

The preamble starts with an explanation of the objectives of the Guidelines to FSC Landscape Approach. Following sections will cover: overview and key principles of landscape approaches, horizon scan with the list of institutions or initiatives included in the overview and finally, details about each one.

OBJECTIVES OF THE GUIDELINES

The Guidelines to FSC Landscape Approach are meant to be used in the framework provided by the implementation of Motion 23/2020 - Use landscape-wide approaches adapted to local conditions and strengthen Standard Development Groups (SDGs) to improve protection of Intact Forest Landscapes.

The objective of the guidelines is to help people decide about how to better manage forests, and in particular FSC certified forests overlapping Intact Forest Landscapes.

This is an output of the Focus Forest project, **about what people say about forests and how they can reach consensus when their values and worldviews differ (Garcia et al 2021).**

The objective of the guidelines requires explanation:

They are meant to help.

“Consider a hammer in a carpenter’s toolbox. The carpenter relies on her hammer to do many things, but it performs some tasks, such as pounding nails, better than others, such as pounding screws. The hammer is useful in many contexts: building a home, fixing a table, or hanging pictures. However, the hammer is simply a device; it is neither an approach nor a methodology. How well the hammer is used and the quality of the construction depend almost entirely on the judgment, skill and planning of the carpenter wielding it.

When we selected the tools for this guide, we looked for the same qualities as a good hammer: tools that help a field practitioner or researcher perform some tasks very well, are not context-specific, are flexible in their application, and have proven themselves in the field. None of these tools is a methodology itself, but each can be integrated into an approach or methodology as needed. Success also depends entirely on the effort and judgment of the facilitator and participants.” (Evans et al 2006).

This text was published as a preamble to the *Guide to participatory tools for forest communities* by Evans et al. in 2006. We have decided to quote it in extenso because it aligns perfectly with the intention behind the design of the present guidelines.

They are meant to help people.

If certificates holders were fully autonomous in their decisions, these guidelines would not be useful. Management decisions would be dictated only by physical, logistical, and ecological considerations. But they are not. Certificate holders operate in a normative landscape, where markets, competitors, buyers, certification bodies and governments directly influence their decisions and where local communities, indigenous people and rights holders are affected and in turn influence the operations and decisions of

the certificate holders. Scientists, conservation and social NGOs, traditional leaders likewise exert an influence over the management decisions – directly or indirectly. Forest management is therefore a specific case of strategic situation, in which the outcome of the actions of the certificate holder also depends on the actions chosen by others. (Redpath et al 2016).

Who will decide and whose voice will be heard is the core of approach.

*The guidelines are to help people **decide***

The outcome of a process supported by the guidelines is therefore a binding decision that will shape people's choices – certificate holder, boundary partners, neighboring communities, indigenous peoples and rights holders, government officials and NGOs – for as long as the decision holds. Additional outcomes such as increased capacity, shared knowledge, strengthened trust will be byproducts of the main outcome of the process and not the core target of the process.

*The guidelines are to help people decide about how to **manage** forests*

While the scope of the decisions that will stem out of a landscape dialogue will vary based on local conditions, the core of the process will be decisions about how forests are to be managed.

*The guidelines are to help people decide about how to **better** manage forests*

One should expect all decisions to be challenged eventually and the best way to prepare for this is to share the burden of responsibility – deciding together.

Landscape dialogues are framed as responses to the wicked problem of forest and landscape management (Defries and Nagendra 2017). Wicked problems are problems where people involved do not agree on the definition of what the problem is. As a result, every solution proposed – every management decision taken – will generate new challenges down the way (Rittel and Webber 1973). In addition, there are not right or wrong decisions, but simple better and worse decisions, and this is a subjective assessment that will depend on who is judging the quality of the decision (Carmenta et al. 2017). What is better for some will be worse for others. One should expect all decisions to be challenged eventually and the best way to prepare for this is to share the burden of responsibility – deciding together.

*These guidelines are to help people decide about how to better manage forests, and in particular **FSC certified forests overlapping Intact Forest Landscapes**.*

The landscape dialogues are designed to help implement Motion 23/2020. They are meant to be convened to help National Standard Development Groups to define thresholds and management guidelines for Intact Forest Landscapes in and around FSC certified concessions. Other crucial

aspects of FSC certified forest management where a diverse set of people need to convene and agree would benefit from the application of the guidelines. This is however out of scope for the time being.

WHAT CAN WE LEARN FROM OTHER LANDSCAPE APPROACHES?

Landscape approaches have emerged as a prominent strategy for balancing conservation and development challenges. Initially, these approaches focused mainly on ecological considerations, drawing from concepts like island biogeography and protected area network design. However, it became evident that excluding people and society from these approaches resulted in disappointing conservation outcomes (Freeman et al. 2015).

To address this, landscape approaches have evolved to incorporate human priorities and consider the diverse and often conflicting interests of individuals within landscapes. These challenges are often referred to as "wicked" problems because they lack clear-cut solutions (Balint et al. 2011; Sayer et al. 2013). Dealing with such complex issues requires continuous adaptation and a willingness to navigate through uncertainties within social-ecological systems.

Landscape approaches recognize that landscapes provide the setting for these wicked problems, and they offer a framework for effectively grappling with them. By integrating ecological and social perspectives, these approaches aim to strike a balance between conservation and development goals. **They acknowledge that trade-offs and compromises are necessary, and that open and democratic discussions are essential for making fair decisions.** A core element of landscape approaches is to modify both hierarchical and grassroots governance structures, promoting more fluid actor interactions and cross-sector, cross-scale institutional collaboration (Foli et al. 2018; Olsson et al. 2006; Young 2002). To conduct a landscape approaches is to share power and responsibility over decision making.

Features of best practice participation [...] emphasize the need to replace a "tool-kit" approach, which emphasizes selecting the relevant tools for the job, with an approach that emphasizes participation as a process. (Reed, 2008)

Because landscapes are complex, a systemic approach that emphasizes navigation trumps more classic management or planning (Armitage et al. 2009; Sayer et al. 2013). A degree of improvisation or "muddling through" is seen as unavoidable (Chazdon et al. 2017; Sayer et al. 2008). We will see it is one of the aims of the Landscape Dialogue to help people improve this by developing better foresight and strategic depth through the design of scenarios of change.

Reed et al. (2016) in their systematic review of Integrated Landscape Approaches, proposed that they can efficiently address social and environmental concerns at the local level while also contributing to the broader national efforts aimed at overcoming global challenges. This provides a practical and beneficial approach for professionals working in the field.

Chevrier et al (2020) constructed a universal theory of change for integrated landscape approaches, centered around two intermediate outcomes – the rise of collaboration and social learning. They further elaborate about the circumstances that can either facilitate or impede the success of the process. This will serve as the skeleton of the landscape dialogues theory of change.

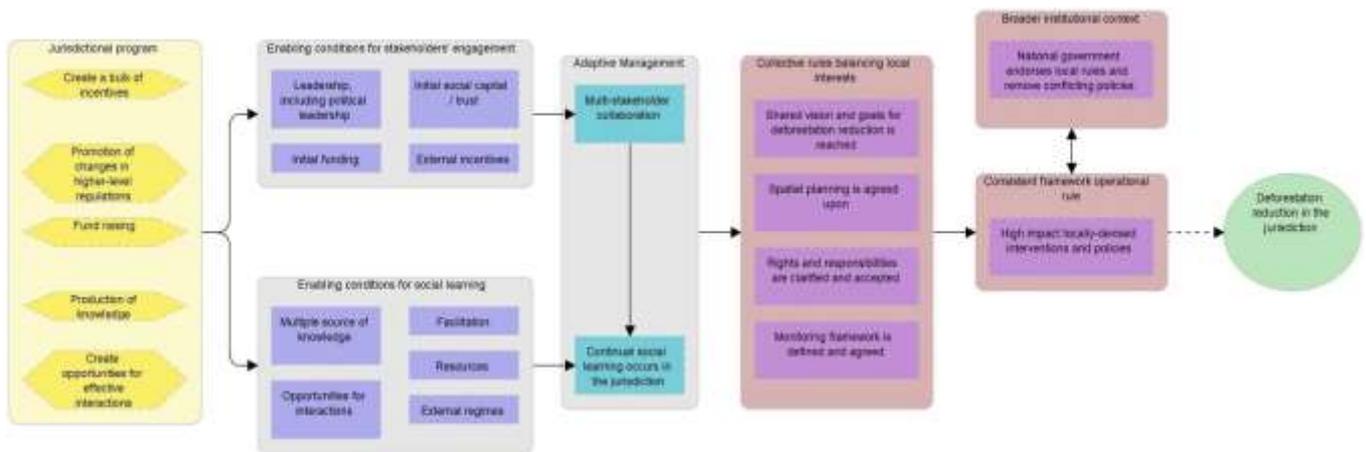


Figure 1. Generic theory of change for a landscape approach from Chevrier et al. (2020). This theory of change holds for the landscape dialogues, provided the scope is linked to the conservation and management of the Intact Forest Landscapes in and around FSC certified concessions.

Sayer et al. (2013) proposed 10 guidelines that support successful landscape approaches. This has served as a milestone to help structure the field, despite the ambiguity and lack of operability of some of these guidelines. More recently Waeber et al. (2023) proposed to restructure these in order to help practitioners of integrated landscape approaches improve their chances of building consensus and moving forward. **Professionals involved in planning, evaluation, and stakeholder engagement can categorize different landscape strategies according to their complexity and effectiveness and this will serve as the foundation of the internal monitoring proposed here.** The tool provides a consistent and clear method to compare a wide variety of approaches, regardless of their local specificities.

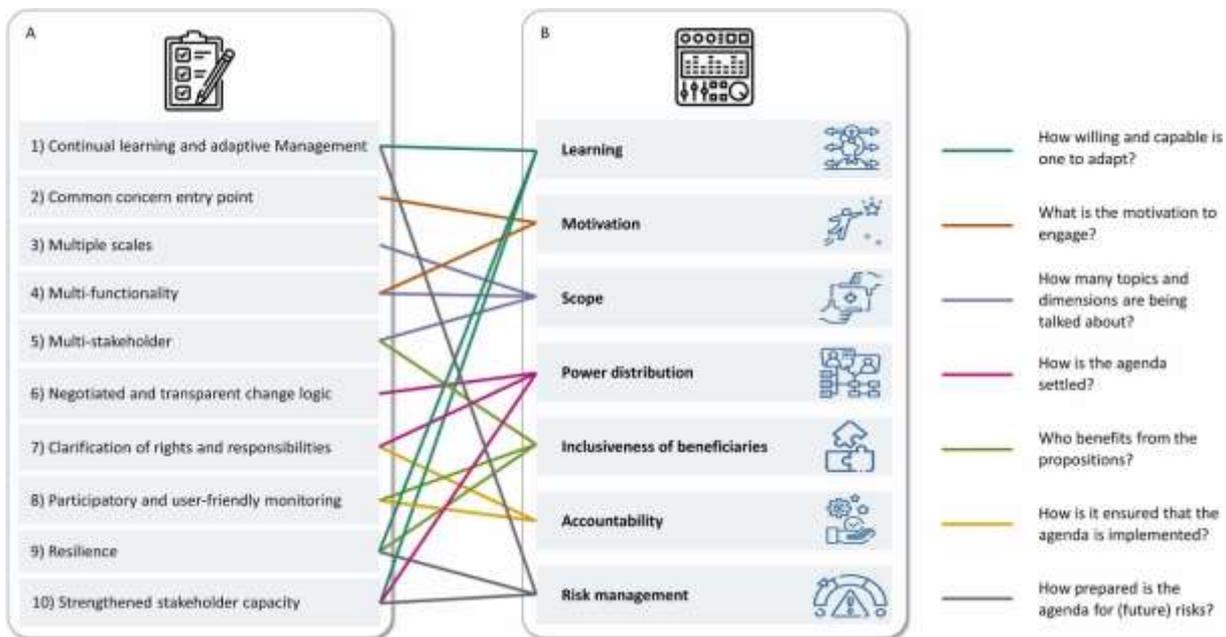


Figure 2. Developing a mixing board tool for Integrated Landscape Approach (ILA) planning or assessment and evaluation. Linking the ten principles (A) of landscape approaches (Sayer et al., 2013) with seven qualifiers (B) used to develop the ILA mixing board tool. Qualifiers are based on guiding questions derived from the natural resource management and planning literature (color coded). Source: Waeber et al. (2023). Author: F. Kleinschroth.

OVERVIEW AND KEY PRINCIPLES IN LANDSCAPE APPROACHES

In their systematic review of Integrated Landscape Approaches, Reed et al. (2016) highlighted that despite potential roadblocks during implementation, adopting a landscape strategy can be highly beneficial. The guidelines for the FSC landscape approach integrate the information of these systematic reviews. It was felt appropriate however to look more specifically how a core set of institutions apply the concepts of landscape approaches.

In the next sections of this document, we will briefly present 17 such institutions and initiatives. Given the existence of the systematic review, the selection of the 17 could afford to be subjective, on the basis of the specific interests of FSC members and allies.

The different landscape approaches have different aims, scopes and specificities. In our analysis we sought to highlight their key principles and then seek for commonalities and outliers. Some approaches are closer to the principles guiding the Focus Forest Landscape Dialogues (Table 1) and they have been presented in more detail, sometimes with a comparison of the alignment or the points of departure. Interested readers can use the references if they want to find out more about any of the specific landscape approaches detailed here.

Table 1. Overview of Key Principles of Landscape Approaches in different institutions

<i>Organization</i>	Key Principles used in Landscape Approaches						
1000L	Multi-stakeholder Engagement	Indigenous and Local Community Engagement	Knowledge Exchange and Capacity Building	Data sharing and preservation	Data analysis and visualisation		
AFI	Sustainable Financing and Market-based Approaches	Sustainable Supply Chains	Indigenous and Local Community Engagement	Integrated Landscape Management	Certification and Compliance	Forest Governance and Policy Support	
CIFOR	Inter-disciplinary Research	Collaborative Governance	Rights and Livelihoods	Integrated Landscape Management	Knowledge Exchange and Capacity Building	Policy Influence	
CI	Integrated Landscape Planning	Ecological Monitoring and Assessment	Protected Area Systems	Sustainable Land Use Practices	Indigenous and Local Community Engagement	Sustainable Financing and Market-based Approaches	Partnerships and Collaboration
HCV	HCV Assessment and Mapping	Stakeholder Engagement and Participatory Approaches	Integration with Land Use Planning and Management	Capacity Building and Training	Monitoring and Verification	Collaboration and Knowledge Sharing	
IUCN	Protected Area Management	Ecosystem-Based Approaches	Policy and Governance	Species Conservation	Capacity Building and Knowledge Exchange	Partnerships and Collaboration	

Organization

Key Principles used in Landscape Approaches

Landscape	Data Collection	Accountability	Reporting and Validation				
GEF	Integrated Landscape Management	Biodiversity Conservation	Sustainable Land Use and Agriculture	Climate Change Mitigation and Adaptation	Stakeholder Engagement and Capacity Building		
Proforest	Landscape-level Assessments	Multi-stakeholder Engagement	Sustainable Land Use Planning	Certification and Compliance	Forest Governance and Policy Support	Capacity Building and Training	
Rainforest Alliance	Certification and Standards	Integrated Landscape Management	Community Engagement and Rights	Sustainable Agriculture	Forest Conservation and Restoration	Market Access and Value Chains	
IDH	Landscape-level Collaboration	Sustainable Agriculture and Forestry	Certification and Standards	Supply Chain Transparency and Traceability	Investment and Financial Mechanisms	Capacity Building and Knowledge Exchange	
TNC	Ecoregional Planning	Science-Based Conservation	Collaborative Partnerships	Sustainable Land Management	Connectivity Conservation	Adaptive Management	Sustainable Livelihoods
TFA JAN	Integrated Landscape Management	Governance and Policy Support	Multi-Stakeholders Engagement.	Policy Advocacy and Engagement	Sustainable Supply Chains		
UNDP	Integrated Sustainable Development	Ecosystem Services and Natural Resource Management	Climate Change Mitigation and Adaptation	Governance and Policy Support	Sustainable Livelihoods and Community Empowerment	Capacity Development and Knowledge Sharing	
WRI	Integrated Resource Management	Spatial Planning and Analysis	Landscape Restoration and Conservation	Sustainable Land Use Practices	Multi-Stakeholder Engagement	Knowledge Sharing and Capacity Building	
WWF	Landscape Conservation Planning	Ecosystem-based Approaches	Sustainable Land Use Practices	Collaboration and Partnerships	Policy Advocacy and Engagement	Monitoring and Evaluation	
Yale	Collaborative Dialogue	Multi-Sector Engagement	Solutions-Oriented Approach	Inclusive Decision-making	Knowledge Sharing and Learning	Consensus Building	



Figure 3. Commonalities to landscape approaches from Table 1.

To help readers identify the commonalities between all the diverse approaches, a simple mind map was produced, showing the most common principles of landscape approaches (Figure 3). The larger the square the more frequent the key principle was among the 17 selected initiatives.

What appears from this analysis is that virtually all the Landscape approaches focus primarily on stakeholder’s participation and engagement. The second most common theme is knowledge sharing and capacity building. Many landscape approaches are all concerned with sustainable land use and integration of multiple uses in a landscape. Many consider markets but not all. Many have a strong component of policy and governance. The saliency of crucial topics such as biodiversity conservation or local communities’ rights depends on the scope of the institution that champions the ILA. Often, both are mentioned as interlinked.

The Focus Forest Landscape Dialogue will share some of these key principles – particularly the necessity to engage meaningfully with participants, respect the local governance regime and operate on the basis of Free and Prior Informed Consent with indigenous groups and pre-existing right holders if any. There will be significant departures because the focus of the discussion is very well defined – how should the IFL be managed inside management units.

HORIZON SCAN – INSTITUTIONS

Given the breadth of available knowledge on the Integrated Landscape Approaches, a horizon scan was necessary to ensure lessons can be incorporated in the landscape dialogues. On top of the scientific review, we selected 13 institutions that either promote, develop, or apply landscape approaches to draw from their collective expertise.

- 1000 Landscapes Initiative

- The Accountability Framework Initiative
- Center for International Forestry Research (CIFOR)
- Conservation International (CI)
- High Conservation Value (HCV) Network
- International Union for Conservation of Nature (IUCN)
- Landscale
- Global Environmental Facility (GEF)
- ProForest
- Rainforest Alliance
- Sustainable Trade Initiative (IDH)
- The Nature Conservancy (TNC)
- Tropical Forest Alliance - Jurisdictional Action Network
- United Nations Development Programme (UNDP)
- World Resources Institute (WRI)



- World Wildlife Fund (WWF)
- Yale Forestry Dialogues

DETAILS ABOUT LANDSCAPE APPROACHES

1000 Landscapes for 1 Billion People

The "1000 Landscapes for 1 Billion People" (1000L) initiative is a global program designed to support Landscape Partnerships. These are multi-stakeholder collaborations focused on achieving sustainability and resolving pressing global challenges like climate change, natural resource degradation, and food systems. The aim is to enhance the efficiency and effectiveness of these partnerships by offering them the tools, financial support, and connections they need to thrive. The initiative is convened by EcoAgriculture Partners and co-led by organizations such as the Rainforest Alliance, Commonland, Conservation International, the United Nations Development Programme, and the Landscape Finance Lab, among others.

Their ultimate vision is that by 2030, more than 1000 Landscape Partnerships will benefit 1 billion people and contribute significantly to the UN Sustainable Development Goals.

Here are the key components of the 1000L initiative:

The core of the initiative focuses on supporting multi-stakeholder Landscape Partnerships that aim to create a sustainable future by working together.

The Terraso Digital Landscape Platform is a set of comprehensive, open-source, and user-friendly software tools to make the actions of Landscape Partnerships more effective and inclusive.

Powered by Terraso, the Global Action Network network aims to enhance knowledge-sharing among landscape leaders. It also seeks to build alliances to influence policy.

Landscape Finance Solutions: The initiative will develop innovative financial models that will shift investments toward sustainable landscapes. It seeks to involve government, philanthropic, civic, and private institutions in these financial flows.

Landscape Capacity Development: Focuses on developing user-centered tools and curriculum to build the capabilities of Landscape Partnerships through learning networks and training institutes.

A Global Hub: Acts as a coordinating entity to enhance the overall effectiveness and efficiency of the efforts undertaken by the Landscape Partnerships.

Radical Collaboration: Promotes systems change through diverse skills, expertise, connections, and resources to solve complex challenges.

The aims and scope of the 1000 Landscapes are wider than the Focus Forest Landscape Dialogues, and includes providing tools and finance. It is designed to empower local communities but how effective is it in linking scientific findings with social and political frameworks? The technological infrastructure must not overshadow the necessity for comprehensive, people-based solutions that are sought through the development of the scenarios of landscape change.

It is worth exploring in more detail the Terraso digital platform. Terraso offers a range of tools aimed at aiding the management of natural resources. Developed through a consultative approach involving communities across six continents, the platform is intended to support local leaders in making their areas both economically and ecologically sustainable. Terraso provides open-source software that addresses several areas: accessing existing scientific research and best practices, developing local capacity, guiding financial resources, and providing data collection, sharing, and visualization tools.

These functionalities of the platform aim to support the goals of the 1000 Landscapes initiative by making landscape management more efficient and effective.

Terraso is developing a platform feature called **story maps**, designed to help landscape leaders effectively share their experiences, victories, and challenges with both local communities and the broader world. The

tool integrates various forms of media, such as text, images, videos, and interactive 3D maps, to create compelling narratives about sustainable landscape management. They are piloting this feature with organizations like the ANEI cooperative in Colombia and the Rupununi landscape in Guyana.

Based on the information available, story maps will offer limited interaction aside from basic navigation, being primarily aimed at sharing existing or planned initiatives, providing a structured but relatively fixed narrative. The risk is that the viewer will be a passive consumer of information, although the multimedia approach aims to make the content more engaging. Story maps will be very effective for transferring specific, local knowledge and experiences. They are straightforward tools for narrative sharing. While they can represent multiple narratives, the control is likely to remain with the creators. The potential for excluding voices or perspectives exists.

Terraso and the 1000 Landscapes initiative provide a valuable technological framework for landscape management. However, in the context of the human-centered approach highlighted in the FSC Focus Forest landscape dialogues, some considerations are worth mentioning:

Balanced Technology Integration: Terraso offers various tools for data collection and analysis, but how well does it facilitate human interaction, local knowledge integration, and face-to-face collaboration, which are key for solving complex environmental problems? If the technology becomes the central focus, it could potentially undermine the design of people-based solutions.

Ethical Considerations in Public Engagement: Given that the platform allows for the formation of public and private groups, strong measures are essential to ensure that the process is inclusive and ethically sound. Power dynamics must be carefully considered to ensure that technology does not become an instrument for manipulation or exclusion of certain stakeholders.

Human Presence and Knowledge Sharing: The platform is built around digital interaction. The National Conference we have designed promotes physical interactions to foster interdisciplinary collaboration.

Overall, while Terraso and 1000 Landscapes provide promising technological tools for landscape management, they have a wider scope than what is intended here and it is unclear how well they align with the human-centered approach to solving the IFL issues. What is sought in the Focus Forest landscape dialogues is a dynamic environment for exploring the complexities and contingencies of landscape change with representatives of all stakeholders – a solution design tool rather than an influence tool.

The Accountability Framework Initiative

The Accountability Framework initiative (AFi) is a collaborative organization focused on promoting ethical production and trade to protect forests, natural ecosystems, and human rights. It is made up of various entities including a Steering Group, Supporting Partners, and a Backbone Team. Financial backing comes from a list of funders. Additionally, a Private Sector Advisory Group offers insights and advice from the standpoint of companies, industry groups, and financial institutions. AFi aims to make ethical practices the standard in global production and trade.

The Accountability Framework initiative (AFi) outlines 12 core principles to guide companies in ethical production and trade:

1. **Protection of Ecosystems:** Eliminate deforestation and conversion of natural ecosystems from operations, supply chains, and investments.
2. **Respect for Human Rights:** Adhere to internationally-recognized human rights, including those of Indigenous Peoples, local communities, and workers.
3. **Commitment Specifications:** Clearly define commitments that cover operations, sourcing, and financing with time-bound targets.
4. **Implementation Systems:** Establish systems to effectively implement commitments.

5. Supply Chain Traceability: Ensure supply chain materials originate from units that comply with commitments.
6. Compliance Management: Proactively manage the entire supply chain for compliance with commitments.
7. Site Establishment: Adopt responsible practices in land acquisition and use planning.
8. Long-term Site Management: Manage lands for the long-term protection of conservation and cultural values.
9. Remediation: Provide or support remediation for any adverse human or environmental impacts caused.
10. Collaborative Initiatives: Contribute to sectoral, landscape, and jurisdictional initiatives for key challenges.
11. Monitoring and Verification: Regularly assess social and environmental performance against commitments.
12. Public Reporting: Disclose progress publicly and support claims with credible verification.

These principles aim to standardize ethical practices across operations, supply chains, and financial investments.

To help companies follow these principles, The AFI has developed guidelines for implementation. In the context of the Focus Forest Landscape Dialogues, the [Operational Guidance on Achieving Commitments Through Collaboration](#) is the most relevant, all the others being relevant to other aspects of a certified forest management.

The document provides guidelines for companies on how to collaborate with stakeholders in the landscapes, jurisdictions, and sectors where they operate to effectively implement their commitments. The aim of this collaboration is to address social and environmental issues beyond the control of individual companies and contribute to broader, more sustainable impact. Such collaboration helps companies:

1. Fulfill their commitments.
2. Show progress and compliance with their commitments.
3. Minimize legal, regulatory, and reputational risks linked to deforestation, land conversion, and human rights violations.
4. Facilitate large-scale, long-term environmental and social improvements.
5. Prevent the displacement of negative impacts to other areas.

The document offers best practices and examples on how companies can engage with governments, peers, and other stakeholders to handle matters beyond their control, such as land governance or forest protection. It also guides how companies can use jurisdictional governance or monitoring initiatives to demonstrate their commitment to voluntary goals. This guidance aligns with the Accountability Framework's existing Operational Guidance on Supply Chain Management and Monitoring and Verification.

In other words, there is a strong complementarity between the AFI and the Focus Forest Landscape Dialogues. While the aim of the Focus Forest Landscape Dialogue is meant to help set the rules for the management of IFLs inside FSC management units, the AFI could help certificate holders design engagements strategies with the stakeholders neighboring their management unit. To use the terms that will be presented in the introduction of the guidelines, the Focus Forest Landscape Dialogue sets

conditions to respect inside the **sphere of control** of the certificate holders while AFI would be concerned with the **sphere of influence** of the same certificate holder.

CIFOR

The Center for International Forestry Research (CIFOR) is a global research organization dedicated to advancing sustainable forest management and conservation. CIFOR conducts interdisciplinary research and collaborates with partners worldwide to generate knowledge and develop innovative solutions for the complex challenges facing forests and the people who depend on them. Their work focuses on issues such as forest governance, climate change, biodiversity conservation, and the rights and livelihoods of local communities.

Here are some aspects related to landscape approaches that are specific to CIFOR:

Interdisciplinary Research: CIFOR emphasizes interdisciplinary research that integrates ecological, social, and economic perspectives. Their landscape approaches recognize the complex interactions between forests, people, and other land uses, aiming to find holistic and integrated solutions.

Collaborative Governance: CIFOR recognizes the importance of engaging multiple stakeholders in decision-making processes. Their landscape approaches often involve collaborative governance, where local communities, indigenous peoples, governments, NGOs, and other actors are involved in shaping policies and implementing management strategies at the landscape scale.

Rights and Livelihoods: CIFOR's landscape approaches prioritize the recognition and protection of the rights of local communities and indigenous peoples who depend on forest resources. They aim to ensure that the design and implementation of forest management strategies are compatible with the rights, needs, and livelihoods of these communities.

Integrated Landscape Management: CIFOR promotes integrated landscape management, which involves the coordinated planning and management of multiple land uses within a specific geographic area. This approach seeks to balance conservation objectives with sustainable development goals, recognizing the interconnectedness of different sectors and stakeholders within the landscape.

Knowledge Exchange and Capacity Building: CIFOR actively engages in knowledge exchange and capacity-building activities related to landscape approaches. They facilitate the sharing of experiences, lessons learned, and best practices among practitioners, policymakers, and researchers, helping to build the capacity of individuals and institutions.

Policy Influence: CIFOR strives to influence policy development and decision-making processes through evidence-based research and engagement with policymakers. They work closely with governments and international organizations to inform policy agendas and promote the adoption of landscape approaches in national and international frameworks.

The CIFOR approach is summarized in: *Methods for a multidisciplinary landscape assessment* (Sheil et al. 2002) and *Guide to Participatory Tools for Forest Communities* (Evans et al. 2006).

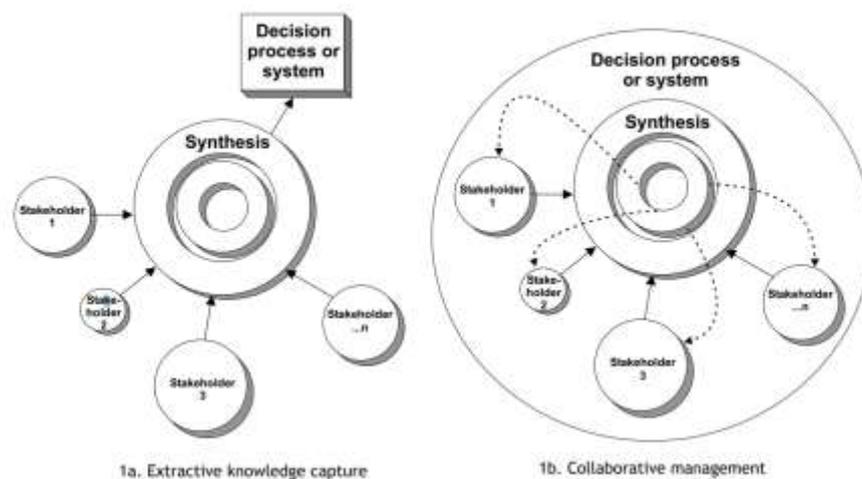


Figure 4. Modes of knowledge capture and use in the natural resources decision making context. The solid arrows represent the contribution of stakeholders to the process of synthesizing knowledge or understanding. The final synthesized knowledge is represented as the inner cylinder. The dotted lines represent the uptake of this newly synthesized knowledge by the stakeholders (Source: Evans et al. 2006).

Conservation International (CI)

Conservation International (CI) is a non-profit organization that aims to protect nature for the well-being of humanity. CI works in partnership with governments, communities, and businesses to safeguard biodiversity-rich areas, promote sustainable resource management, and address climate change. They focus on the intersection of conservation, human well-being, and economic development to ensure a healthy planet for future generations.

Conservation International (CI) is an international non-profit organization that focuses on protecting nature, promoting sustainable development, and supporting local communities. Here are some aspects related to landscape approaches that are specific to Conservation International:

1. **Integrated Landscape Planning:** Conservation International emphasizes integrated landscape planning as a key approach. This involves considering the interconnectedness of ecosystems, biodiversity, and human well-being within a landscape. They work with governments, communities, and other stakeholders to develop comprehensive landscape plans that balance conservation objectives with sustainable development goals.

2. **Ecological Monitoring and Assessment:** CI utilizes ecological monitoring and assessment tools to understand the health and dynamics of ecosystems within landscapes. This includes biodiversity surveys, habitat mapping, and monitoring of key species and ecological processes. By gathering and analyzing scientific data, CI can inform conservation strategies and identify priority areas for intervention within landscapes.

3. **Protected Area Systems:** CI supports the establishment and effective management of protected area systems within landscapes. They work to expand and strengthen protected areas, ensuring they are representative of ecosystems and species diversity. CI promotes the connectivity of protected areas and the integration of surrounding landscapes to facilitate ecological processes and enhance conservation outcomes.

4. Sustainable Land Use Practices: CI promotes sustainable land use practices within landscapes, particularly in agriculture, forestry, and fisheries sectors. They work with local communities and businesses to adopt practices that reduce deforestation, soil erosion, and water pollution, while promoting the sustainable use of natural resources. CI supports initiatives such as agroforestry, sustainable farming techniques, and responsible forestry practices.

5. Indigenous and Local Community Engagement: CI recognizes the importance of engaging indigenous peoples and local communities in landscape approaches. They work in partnership with these communities, respecting their rights, knowledge systems, and cultural practices. CI supports community-led conservation initiatives, sustainable livelihoods, and equitable benefit-sharing to ensure that local voices are heard and that conservation efforts align with community needs and aspirations.

6. Sustainable Financing and Market-based Approaches: CI promotes innovative financing mechanisms and market-based approaches within landscapes. They work to develop sustainable financing models, such as payment for ecosystem services, carbon markets, and biodiversity offsets, to incentivize conservation and sustainable land use practices. By linking conservation outcomes to economic incentives, CI aims to create economic opportunities while ensuring long-term environmental sustainability.

7. Partnerships and Collaboration: CI emphasizes partnerships and collaboration in its landscape approaches. They work with governments, NGOs, businesses, and local communities to foster dialogue, build shared vision, and develop joint initiatives. CI actively engages in multi-stakeholder platforms to promote knowledge sharing, capacity building, and collaborative decision-making processes within landscapes.

High Conservation Value (HCV) Network

The High Conservation Value (HCV) Network is an international membership-based organization that champions the identification and management of High Conservation Value areas within landscapes. With a specific focus on landscape approaches, the HCV Network provides guidance and tools to integrate HCV considerations into land management practices. By engaging stakeholders, facilitating participatory approaches, and promoting HCV assessments, the HCV Network aims to ensure the effective conservation and sustainable management of High Conservation Value areas within broader landscape planning.

Here are some specific aspects of the landscape approaches designed by the HCV Network:

1. **HCV Assessment and Mapping:** The HCV Network promotes the application of HCV assessments and mapping within landscapes. They provide methodologies and guidelines for identifying and delineating areas of High Conservation Value, which encompass critical habitats, biodiversity hotspots, rare ecosystems, and areas of cultural significance. HCV assessments help inform land-use planning and decision-making processes at the landscape level.

2. **Stakeholder Engagement and Participatory Approaches:** The HCV Network emphasizes the involvement of local communities, indigenous groups, and other stakeholders in HCV identification and management processes. They advocate for participatory approaches that recognize the rights, knowledge, and aspirations of local communities and foster inclusive decision-making. By engaging stakeholders, the HCV Network aims to ensure the effective conservation and sustainable management of HCV areas within landscapes.

“FPIC is neither an assessment nor a tool; it is a process and way of doing business that requires an attitudinal shift towards empowering communities to be at the center of land use planning and conservation priority setting that affects their lands.”

3. **Integration with Land Use Planning and Management:** The HCV Network promotes the integration of HCV considerations into land use planning and management frameworks at the landscape level. They provide guidance on incorporating HCV requirements into sustainable land management practices, including forestry, agriculture, and infrastructure development. This integration ensures that HCV areas are conserved and effectively managed within broader landscape planning processes.

4. **Capacity Building and Training:** The HCV Network offers capacity building programs and training to enhance the understanding and application of HCV concepts within landscapes. They provide technical assistance and support to stakeholders involved in HCV assessments, monitoring, and management. By building the capacity of individuals and organizations, the HCV Network facilitates the effective implementation of HCV-related activities within landscapes.

5. **Monitoring and Verification:** The HCV Network emphasizes the importance of monitoring and verification of HCV areas within landscapes. They provide guidelines and tools for monitoring the status and management of HCV areas over time. By ensuring robust monitoring and verification processes, the HCV Network contributes to the long-term conservation and management of HCV values within landscapes.

6. Collaboration and Knowledge Sharing: The HCV Network promotes collaboration and knowledge sharing among its members and partners to advance landscape-level HCV approaches. They facilitate platforms for information exchange, best practice sharing, and collaborative learning. Through these collaborations, the HCV Network aims to improve the effectiveness and impact of HCV-based landscape approaches worldwide.

The HCV method for landscape assessment is detailed in the HCV screening guide (Watson, 2020) and the HCV-HCSA Manual. The High Conservation Value (HCV) approach, established over two decades ago, initially served as a tool and framework at the management unit (MU) level. Its primary function was to safeguard critical environmental and social values within sustainable forest management in Forest Stewardship Council (FSC) certified forests. However, its use has broadened to include other commodities and ecosystems, with the maintenance of HCVs emerging as an essential aspect of responsible production and resource use in the past decade. Almost 20 certification schemes now incorporate HCV requirements.

A fundamental principle of the HCV assessments, guided by the High Conservation Value Resource Network (HCVRN), is that the identification of values within an MU must consider the 'wider landscape'. This includes unique combinations of topography, vegetation, geology, land use, and human settlement. This geographical context often determines if a feature of the MU is an HCV. For effective HCV management at the site level, a comprehensive understanding of this 'wider landscape' is crucial.

If HCVs are identified and managed on an individual MU basis without a coordinated large-scale strategy, there's a risk of creating inconsistent and conflicting maps and management recommendations due to varied methodologies. This inconsistency can lead to subpar implementation and potential harm to HCVs. Therefore, to reduce these risks, stakeholders - ranging from forest and plantation managers, certification bodies, investors, supply chain organizations, social and environmental NGOs, government planning offices, and more - require consistent guidance on handling HCVs at larger spatial scales.



Figure 5: The HCV Screening steps, propose a simple and straightforward process (left) from purpose definition to data gathering, identification of potential and threats, definition of priorities and presentation of the screening results. This helps identify and consider the 6 different high conservation values that are the backbone of the HCV approach (right). It is data intensive and requires engagement. Source: Watson 2020.

The High Conservation Stock Approach (HCSA) Toolkit is an integral tool designed to combat commodity-driven deforestation in tropical landscapes, providing plantation companies and land managers with a comprehensive, practical, and reliable solution. It offers a systematic process to distinguish High Carbon Stock (HCS) forests and inform sustainable land use decisions.

Key Elements of the HCSA Toolkit

Vegetation Stratification: Using satellite imagery and field data collection, the HCSA Toolkit first stratifies the vegetation in a given area. This initial process identifies forests with high carbon stock.

The 'Decision Tree': This step-by-step guide helps users assess the conservation value of identified HCS forest patches. By following this 'Decision Tree', users can understand the environmental importance of various HCS forest areas and make informed decisions about land use.

Integrated Conservation and Land Use Plan: The culmination of the HCSA Toolkit is the creation of an Integrated Conservation and Land Use Plan. This plan delineates areas that should be conserved, monitored, and managed to protect the HCS forests.

Holistic, Multi-Layered Approach: The HCSA Toolkit integrates other land use planning strategies, including the identification of High Conservation Value (HCV) areas that are home to rich biodiversity and essential ecosystems.

Respecting Indigenous and Traditional Land Rights: An essential aspect of the HCSA Toolkit is its commitment to upholding the rights of indigenous and traditional communities. It ensures that land use planning respects and protects these communities' lands, their cultural heritage, and their way of life.

The HCSA Toolkit proposes a structured, multi-faceted approach to end deforestation in tropical landscapes driven by commodity production. By identifying high carbon stock forests and integrating other land-use planning approaches, it enables responsible, sustainable land management practices that respect local communities and conserve biodiversity.

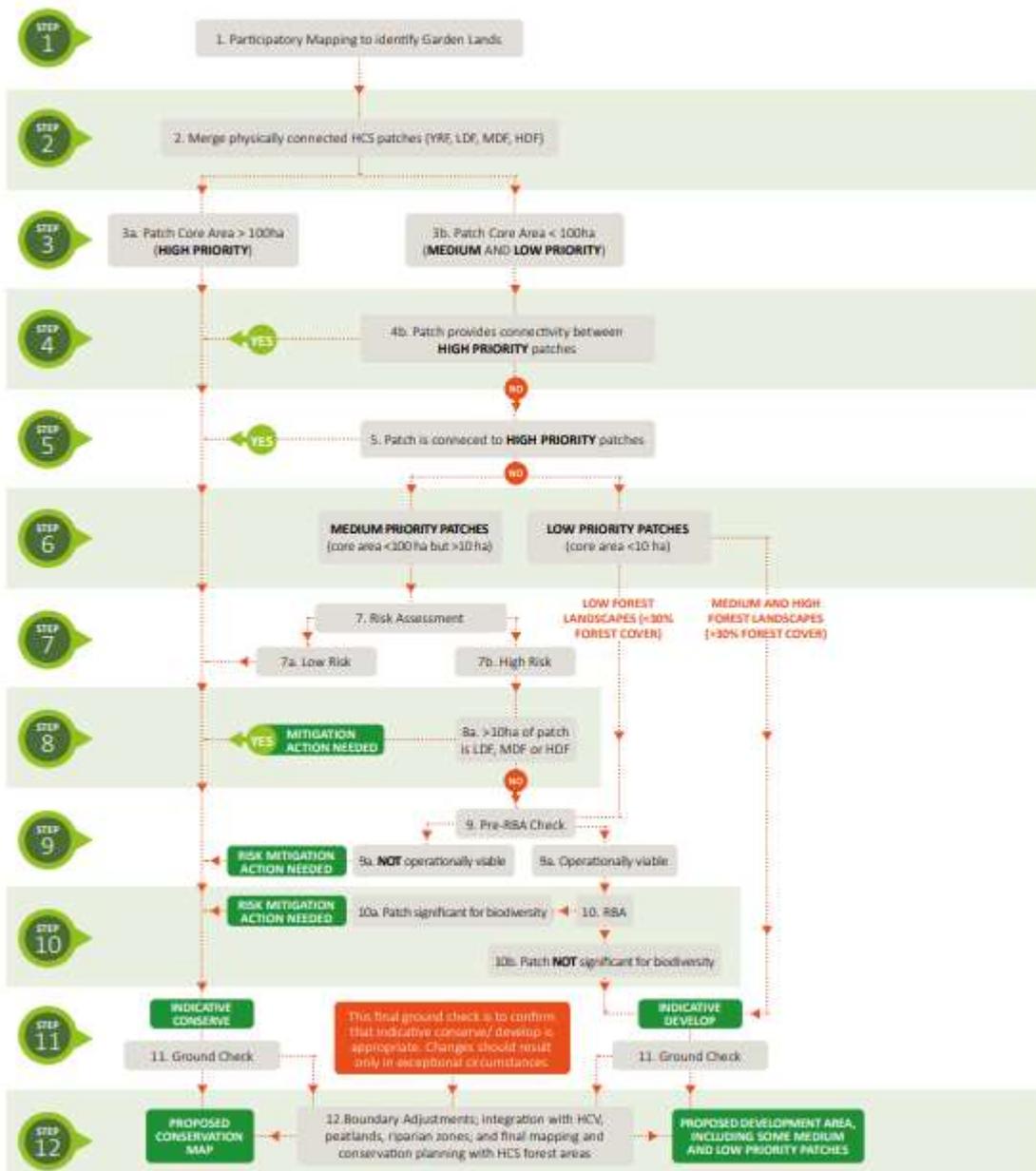


Figure 6. HCS PATCH ANALYSIS DECISION TREE outlines an algorithm for decision making. Once the thresholds have been defined (see steps 3, 6, 7 and 8) users no longer need to take decision, and just follow the arrows, to either propose conservation or develop. RBA means Rapid Biodiversity Analysis (Rosoman and Mc William 2015).

While the High Conservation Stock Approach (HCSA) Toolkit and its decision tree have proven effective in many scenarios, there are potential enhancements to consider for its future iterations:

1. **Adapting to Unique Environments:** The decision tree, with its straightforward and standardized approach, brings much-needed simplicity to complex environmental decision-making. To further increase its efficacy, there may be value in introducing supplementary guidelines to cater to unique ecological features and complex interactions within specific landscapes.
2. **Highlighting Value Diversity:** The decision tree's criteria, determined by the environmental values and priorities of its creators, provide a strong, scientifically informed foundation for conservation efforts. To complement this, it may be helpful to encourage users to consider their local environmental values and priorities, reflecting the diverse perspectives that exist among different communities and cultures.

3. Promoting User Understanding: The decision tree simplifies the process for users, helping them make informed choices about conservation. To further improve users' engagement with the toolkit, additional resources or interactive learning experiences could be provided. This would help users better appreciate the ecological significance underpinning the decision tree's guidelines.

International Union for Conservation of Nature

The International Union for Conservation of Nature (IUCN) is a global organization that brings together governments, NGOs, and experts to address pressing environmental challenges. IUCN sets standards for protected areas, species conservation, and sustainable resource management. They provide scientific expertise, policy guidance, and facilitate knowledge exchange to promote nature conservation and sustainable development worldwide.

The International Union for Conservation of Nature (IUCN) employs landscape approaches as part of its mission to conserve nature and promote sustainable development.

Here are specific aspects of the landscape approaches employed by IUCN:

1. **Protected Area Management:** IUCN supports the establishment and effective management of protected areas within landscapes. Their landscape approaches prioritize the conservation of important habitats and biodiversity hotspots by working with governments, local communities, and other stakeholders to establish protected areas, improve management practices, and ensure the ecological connectivity between protected areas.

2. **Ecosystem-Based Approaches:** IUCN promotes ecosystem-based approaches to conservation and management within landscapes. Their landscape approaches consider the functioning of entire ecosystems and the services they provide, aiming to maintain ecological integrity, restore degraded ecosystems, and sustainably manage natural resources. This approach recognizes the interconnectedness and interdependencies of different species, habitats, and ecosystem functions within a landscape.

3. **Policy and Governance:** IUCN actively engages in policy advocacy and governance processes to promote landscape approaches. They work with governments and international bodies to develop policies, guidelines, and frameworks that support integrated landscape management, biodiversity conservation, and sustainable development. IUCN's landscape approaches aim to influence decision-making processes and strengthen the governance structures necessary for effective landscape management.

4. **Species Conservation:** IUCN's landscape approaches encompass species conservation efforts within landscapes. They focus on identifying and protecting critical habitats for threatened species, implementing conservation actions, and promoting the sustainable use of natural resources to benefit both species and local communities. IUCN's Red List of Threatened Species is an important tool for identifying species at risk and guiding conservation actions within landscapes.

5. **Capacity Building and Knowledge Exchange:** IUCN emphasizes capacity building and knowledge exchange as part of their landscape approaches. They provide technical support, training, and knowledge-sharing platforms to enhance the capacity of governments, civil society organizations, and local communities in implementing effective landscape conservation and management strategies. IUCN also facilitates the exchange of best practices, lessons learned, and scientific knowledge among stakeholders to improve landscape-based conservation outcomes.

6. Partnerships and Collaboration: IUCN recognizes the importance of partnerships and collaboration in implementing landscape approaches. They work in collaboration with governments, NGOs, indigenous peoples, local communities, and other stakeholders to foster dialogue, build consensus, and jointly implement conservation initiatives within landscapes. These partnerships help leverage resources, expertise, and local knowledge to achieve shared conservation goals.

IUCN and WRI developed jointly the Restoration Opportunities Assessment Methodology (ROAM), a handbook to assessing forest landscape restoration opportunities at the national or sub-national level.

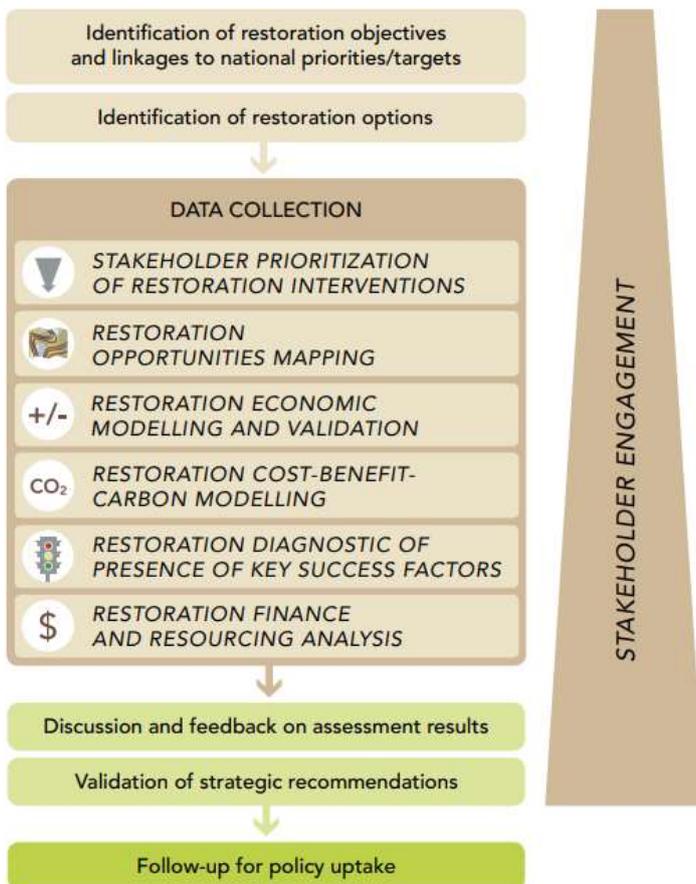


Figure 7. Key steps in a typical ROAM process. ROAM uses a combination of stakeholder engagement (“best available knowledge”) and analysis of documented data (“best science”) to identify and investigate FLR opportunities. The process is presented as linear, with increasing levels of stakeholder engagement as the process develops. (Source: IUCN and WRI 2014).

Landscape

LandScale is an initiative aimed at promoting sustainable landscape management by making reliable information on landscape sustainability available to key decision-makers. LandScale aims to contribute to solving significant environmental and social challenges by fostering collaboration, promoting innovation, and building trust among stakeholders.

LandScale's mission is to make reliable landscape sustainability performance data available to decision-makers. The initiative has been working since 2019 to develop a robust system for assessing and communicating landscape sustainability. This involves field-testing, public consultations, and extensive input from partners and advisors.

LandScale conducts assessments in various landscapes globally. They collaborate with landscape partnerships, investors, governments, and sustainable businesses to facilitate these assessments. Their aim is to make trusted, landscape-level information widely available.

They aim to provide data that will help landscape actors access market, financial, and policy incentives for sustainability improvements.

Conducting an Assessment

1. Preparation: The first step involves selecting an assessment team consisting of an owner, lead, and specialists. Objectives, stakeholder engagement plans, and landscape goals are documented.
2. Boundary Selection: The landscape boundary is confirmed, ensuring it's large enough to capture different sustainability issues but small enough to inform actionable results.
3. Indicator and Metric Selection: Users select indicators and metrics using the framework and, optionally, stakeholder surveys. Custom indicators can also be added.
4. Data Evaluation & Metric Assessment: Data sources for selected metrics are chosen and evaluated. The LandScale team and local experts then review draft results for credibility.
5. Reporting and Publication of Results: A standard report is prepared using inputs from steps 1-4, and may be published once validated.

The Landscape Assessment shows significant alignment with the initial steps of the Focus Forest Landscape Dialogues – that begin with the commitment of the convener and then proceeds to the identification of the landscape boundaries. The indicator and metrics that matter for the discussion are given by the definition of the IFL and documented in the landscape matrix (see guidelines). LandScale stops when the Focus Forest Landscape Dialogues engage with the National Conference to reach a decision on the basis of the scenarios that will be jointly developed.

Landscape propose to generate the information that can inform Landscape Dialogues. However, as will be presented in the guidelines, the Focus Forest Landscape Dialogues are people centered, not data driven, and contrary to the common expectation more precise information will not help build the agreement that is needed to unlock the IFL management rules.

However the information that Landscape can provide would prove invaluable to demonstrate to third parties the issues at play in a given landscape. This could contribute to help secure third party funding for certificate holders unable to comply with the management rules set for the IFLs in their management unit.

Global Environment Facility (GEF)

The Global Environmental Facility (GEF) is a financial mechanism that supports projects and programs to address global environmental issues. GEF provides grants to governments, NGOs, and other stakeholders for projects related to biodiversity conservation, climate change mitigation and adaptation, land

degradation, and sustainable forest management. Their funding supports initiatives that promote sustainable practices, technology transfer, capacity building, and policy reforms.

While the GEF does not directly implement landscape approaches, it funds and supports projects that incorporate landscape approaches as part of their conservation and sustainable development strategies.

Here are some aspects related to landscape approaches that are supported by the GEF:

1. **Integrated Landscape Management:** The GEF encourages projects that promote integrated landscape management. This approach emphasizes the holistic and coordinated management of ecosystems, natural resources, and human activities within a given landscape. Projects supported by the GEF often seek to address multiple environmental issues and stakeholders within a landscape, integrating conservation, sustainable land use, and livelihood considerations.

2. **Biodiversity Conservation:** The GEF funds projects that focus on biodiversity conservation within landscapes. These projects aim to protect and restore critical habitats, promote the sustainable management of biodiversity, and combat threats such as habitat loss, invasive species, and illegal wildlife trade. The GEF supports initiatives that involve multiple stakeholders and employ landscape-level conservation strategies to ensure the long-term preservation of biodiversity.

3. **Sustainable Land Use and Agriculture:** The GEF supports projects that promote sustainable land use and agriculture practices within landscapes. These projects often focus on improving agricultural productivity while minimizing negative environmental impacts, such as deforestation, soil erosion, and water pollution. The GEF provides financial assistance for initiatives that promote sustainable land management, agroforestry, ecosystem restoration, and the adoption of climate-smart agriculture practices.

4. **Climate Change Mitigation and Adaptation:** The GEF supports landscape-level projects that address climate change mitigation and adaptation. These projects aim to reduce greenhouse gas emissions, enhance carbon sequestration, and build the resilience of ecosystems and communities to climate change impacts. The GEF provides funding for initiatives that integrate climate change considerations into land-use planning, reforestation and afforestation efforts, and the conservation of natural carbon sinks, such as forests and wetlands.

5. **Stakeholder Engagement and Capacity Building:** The GEF recognizes the importance of stakeholder engagement and capacity building in successful landscape approaches. Projects supported by the GEF often include components that promote stakeholder participation, community engagement, and capacity building activities. These efforts aim to empower local communities, indigenous peoples, and other stakeholders to actively participate in decision-making processes and contribute to the sustainable management of landscapes.

Proforest

ProForest is an organization that specializes in providing expertise and guidance on responsible sourcing, forest certification, and sustainable land use. They work with a wide range of stakeholders, including governments, NGOs, companies, and certification schemes, to promote sustainable practices in forestry and agriculture. ProForest offers training, assessments and monitoring to support sustainable land management and responsible sourcing of commodities.

While ProForest does not focus exclusively on landscape approaches, they integrate landscape considerations into their work to promote sustainable practices.

Here are some aspects related to landscape approaches that are specific to ProForest:

1. **Landscape-level Assessments:** ProForest conducts landscape-level assessments to understand the ecological and socio-economic dynamics within a particular landscape. They analyze the interactions between different land uses, biodiversity, ecosystem services, and stakeholder interests. Through these assessments, ProForest identifies opportunities and challenges for sustainable resource management within landscapes.

2. **Multi-stakeholder Engagement:** ProForest promotes multi-stakeholder engagement in landscape management. They facilitate dialogue and collaboration among diverse stakeholders, including governments, local communities, private sector entities, and civil society organizations. By involving key actors in decision-making processes, ProForest aims to develop shared visions and foster cooperation for sustainable land use within landscapes.

3. **Sustainable Land Use Planning:** ProForest supports the development of sustainable land use plans within landscapes. They provide technical expertise in land use planning processes that integrate environmental conservation, socio-economic development, and stakeholder aspirations. ProForest assists in identifying suitable land uses, designing zoning systems, and promoting the integration of sustainable practices into land use plans.

4. **Certification and Compliance:** ProForest works with stakeholders to enhance sustainability through certification and compliance systems. They provide guidance on certification schemes and help organizations meet the requirements of sustainable standards and legal frameworks. ProForest assists in ensuring responsible practices within landscapes, promoting sustainable trade, and enabling market access for certified products.

5. **Forest Governance and Policy Support:** ProForest supports governments and organizations in improving forest governance and developing policies that address landscape-level challenges. They provide technical assistance in policy formulation, legal frameworks, and institutional capacity building to strengthen forest governance systems. ProForest aims to ensure the effective implementation and enforcement of policies related to sustainable land use.

6. **Capacity Building and Training:** ProForest emphasizes capacity building and training to enhance sustainable land management within landscapes. They offer customized training programs and workshops on various topics, including sustainable forest management, certification, and responsible supply chains. By building the capacity of stakeholders, ProForest contributes to the adoption and implementation of sustainable practices within landscapes.

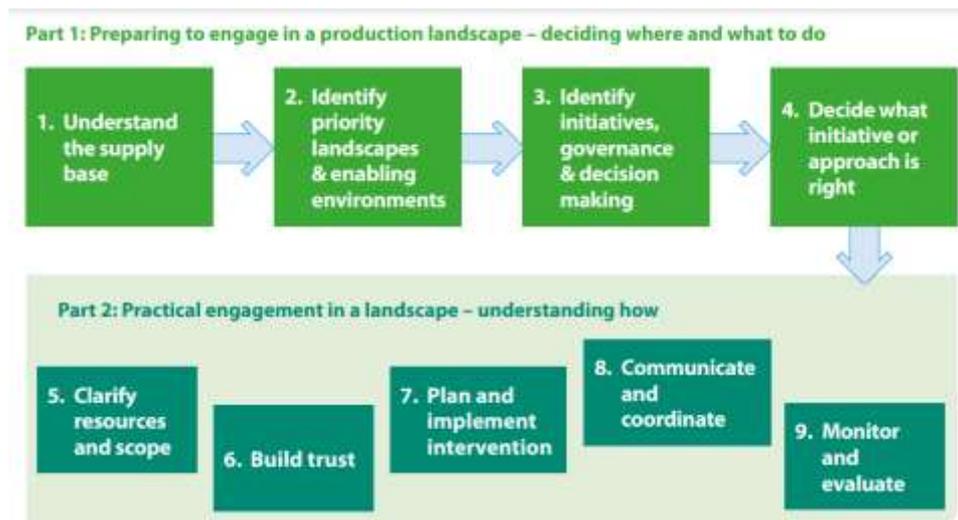


Figure 8. The Proforest ten elements for engaging with landscape initiatives. Part 1 is aimed at helping downstream companies to identify where to start. Part 2 provides guidance on how to engage with a landscape initiative and will be useful for all companies that already know where they will work. Practical engagement in the landscape is not always a sequential process. (Source: Proforest, 2020)

Rainforest Alliance

The Rainforest Alliance is an international non-profit organization that focuses on promoting the conservation of biodiversity and sustainable livelihoods. Their work encompasses various sectors, with a particular emphasis on agriculture and forestry. The Rainforest Alliance works with farmers, forest communities, and businesses to implement sustainable practices, certification schemes, and standards that contribute to the protection of forests, wildlife, and the well-being of local communities.

Rainforest Alliance implements landscape approaches as part of its efforts to promote sustainable land use and conserve forests.

Here are specific aspects of the landscape approaches employed by Rainforest Alliance:

1. **Certification and Standards:** Rainforest Alliance has developed certification standards that promote sustainable land management practices across landscapes. Their certification programs, such as the Rainforest Alliance Certified™ seal, help incentivize and recognize responsible agriculture, forestry, and tourism practices that protect ecosystems, biodiversity, and the well-being of local communities.

2. **Integrated Landscape Management:** Rainforest Alliance promotes integrated landscape management approaches that consider the multiple land uses and stakeholders within a given landscape. They work with diverse actors, including farmers, forest communities, companies, governments, and civil society, to foster collaboration, balance competing interests, and find mutually beneficial solutions that address conservation and livelihood goals.

3. **Community Engagement and Rights:** Rainforest Alliance recognizes the importance of engaging and empowering local communities and indigenous peoples in landscape approaches. They prioritize respecting and supporting the rights, traditions, and knowledge of these communities. Rainforest Alliance's approaches aim to ensure that decisions related to land use and management reflect the aspirations and well-being of local communities while conserving forest resources.

4. **Sustainable Agriculture:** Rainforest Alliance focuses on promoting sustainable agricultural practices within landscapes. They work with farmers and agricultural companies to adopt environmentally friendly and socially responsible practices, such as agroforestry, soil conservation, water management, and the

reduction of chemical pesticide use. By integrating sustainable agriculture into landscape approaches, Rainforest Alliance aims to reduce deforestation and promote biodiversity conservation.

5. Forest Conservation and Restoration: Rainforest Alliance places significant emphasis on forest conservation and restoration within landscapes. They collaborate with stakeholders to identify priority areas for forest protection, support forest restoration initiatives, and develop strategies for sustainable forest management. Their approaches involve engaging communities, companies, and governments to ensure the long-term conservation and restoration of forests.

6. Market Access and Value Chains: Rainforest Alliance helps create market access and sustainable value chains for producers within landscapes. They work with companies and consumers to promote the demand for sustainably produced goods and to ensure fair prices and market opportunities for farmers and forest communities. By connecting sustainable producers to markets, Rainforest Alliance contributes to the economic viability of landscape-based conservation and livelihood initiatives.

Sustainable Trade Initiative (IDH)

The Sustainable Trade Initiative, also known as IDH (Initiatief Duurzame Handel), is an international organization that works to promote sustainable trade and production in various sectors, including agriculture, forestry, and commodities. IDH collaborates with businesses, governments, and civil society to drive sustainable transformations in commodity supply chains, including those related to forestry and agriculture. They focus on issues such as responsible sourcing, certification. IDH integrates landscape considerations into its work to promote sustainable trade.

Here are some aspects related to landscape approaches supported by IDH:

1. Landscape-level Collaboration: IDH promotes collaboration among various stakeholders, including governments, producers, traders, and civil society, at the landscape level. They facilitate multi-stakeholder platforms and partnerships to foster dialogue, knowledge exchange, and joint action for sustainable trade within landscapes. By engaging diverse actors, IDH aims to achieve shared landscape-level objectives that balance conservation, social development, and economic viability.

2. Sustainable Agriculture and Forestry: IDH works to improve the sustainability of agricultural and forestry practices within landscapes. They support initiatives that promote responsible land use, including sustainable farming techniques, agroforestry systems, and forest management practices that conserve biodiversity, reduce deforestation, and minimize environmental impacts. By promoting sustainable production, IDH contributes to landscape-level conservation and the well-being of local communities.

3. Certification and Standards: IDH encourages the adoption of certification schemes and sustainability standards within landscapes. They collaborate with certification bodies, producers, and buyers to promote the uptake of credible certification schemes that ensure sustainable production and responsible sourcing. By supporting certification initiatives, IDH helps create market incentives for sustainable trade within landscapes.

4. Supply Chain Transparency and Traceability: IDH promotes supply chain transparency and traceability within landscapes to ensure the sustainable sourcing of commodities. They support projects that develop tools, technologies, and systems to track the origin and sustainability of products, enabling buyers and consumers to make informed choices. By promoting transparency and traceability, IDH helps reduce deforestation, improve land use practices, and support sustainable livelihoods within landscapes.

5. Investment and Financial Mechanisms: IDH works to mobilize investments and financial mechanisms that support sustainable trade within landscapes. They collaborate with financial institutions, impact investors, and governments to develop innovative financing models that incentivize sustainable practices and support the transition to sustainable production and trade. By attracting investments, IDH facilitates the scaling up of sustainable initiatives within landscapes.

6. Capacity Building and Knowledge Exchange: IDH focuses on capacity building and knowledge exchange to promote sustainable trade within landscapes. They provide training, technical assistance, and knowledge-sharing platforms to producers, traders, and other stakeholders to enhance their understanding of sustainable practices and build their capacity for implementation. Through capacity building and knowledge exchange, IDH strengthens the adoption of sustainable trade practices within landscapes.

The Nature Conservancy (TNC)

The Nature Conservancy (TNC) is a leading global conservation organization that works to protect the lands and waters on which all life depends. TNC employs science-based strategies to conserve critical habitats, restore ecosystems, and promote sustainable practices. Their approach includes working with local communities, engaging businesses, and utilizing innovative financing mechanisms to achieve lasting conservation outcomes across the globe.

The Nature Conservancy (TNC) incorporates landscape approaches as part of its conservation strategies. Here are specific aspects of the landscape approaches employed by TNC:

1. Ecoregional Planning: TNC's landscape approaches often involve ecoregional planning, which focuses on the conservation and management of entire landscapes based on their ecological and socio-economic characteristics. This approach considers the interconnectedness of habitats, species, and ecosystems within a region and aims to identify and prioritize conservation actions at the landscape scale.

2. Science-Based Conservation: TNC's landscape approaches are rooted in scientific research and data analysis. They utilize scientific knowledge, including biodiversity assessments, ecological modeling, and spatial analysis, to inform decision-making processes and identify conservation priorities within landscapes. This scientific foundation helps TNC develop effective strategies for habitat protection, restoration, and sustainable resource management.

3. Collaborative Partnerships: TNC actively engages in collaborative partnerships with governments, communities, indigenous peoples, private sector entities, and other stakeholders. By fostering partnerships, TNC aims to build consensus, leverage resources, and jointly implement landscape-scale conservation initiatives. These partnerships facilitate the integration of diverse perspectives, knowledge, and expertise in the design and implementation of landscape approaches.

4. Sustainable Land Management: TNC promotes sustainable land management practices within landscapes. They work with local communities, landowners, and businesses to develop and implement strategies for sustainable agriculture, forestry, fisheries, and other land uses. This includes promoting practices that minimize habitat destruction, soil erosion, water pollution, and other negative impacts on ecosystems.

5. **Connectivity Conservation:** TNC recognizes the importance of maintaining ecological connectivity within landscapes. Their landscape approaches often involve identifying and conserving critical wildlife corridors, protected areas, and other habitat linkages. By preserving connectivity, TNC aims to facilitate species movement, genetic exchange, and ecological resilience across landscapes.

6. **Adaptive Management:** TNC emphasizes adaptive management approaches within landscapes. This involves continuously monitoring and evaluating the effectiveness of conservation interventions and adjusting strategies based on new information and changing conditions. Adaptive management allows TNC to learn from ongoing projects, improve conservation outcomes, and respond to emerging challenges and opportunities.

7. **Sustainable Livelihoods:** TNC's landscape approaches often integrate considerations for sustainable livelihoods of local communities. They work to develop economic incentives and opportunities that align with conservation objectives, such as nature-based tourism, sustainable resource use, and green business development. By integrating conservation and livelihoods, TNC aims to create win-win solutions that benefit both people and nature.

TNC's landscape approaches may vary across different regions and projects, adapting to the specific context and conservation priorities.

Tropical Forest Alliance - Jurisdictional Action Network

The Tropical Forest Alliance's Jurisdictional Action Network (JAN) is designed to foster long-term partnerships between private sector companies and other stakeholders, such as local governments and communities. The aim is to go beyond supply chain sustainability to achieve forest-positive outcomes on a broader, jurisdictional level. JAN serves as a community for over 2,200 stakeholders from various sectors interested in utilizing landscape and jurisdictional approaches for sustainable forestry. According to JAN's communication, companies, especially those in the Consumer Goods' Forum (CGF) Forest Positive Coalition of Action, are increasingly adopting these approaches to go beyond their supply chains and make broader impacts on sustainability.

Key Points:

The Landscape and Jurisdictional Approaches involve long-term collaboration within a specific geographic or social area, reconciling various social, economic, and environmental goals. They shift from a single-supply-chain focus to holistic, area-based sustainability efforts.

Why Adopt These Approaches: Traditional supply chain-based sustainability efforts have been deemed insufficient for halting deforestation and addressing climate change. These area-focused strategies can implement global sustainability priorities at local levels.

Multi-Stakeholder Collaboration: JAN emphasizes a shared vision and responsibilities among companies, local governments, civil society, and communities. By distributing roles according to each party's capabilities, they aim for more sustainable, long-term outcomes.

Resources and Knowledge-Sharing: JAN provides multiple platforms for education and collaboration, including webinars, newsletters, and an online resource hub.

This network seeks to foster best practices, share knowledge, and drive systemic change by adopting these approaches, ultimately aiming for a "forest-positive future."

The "Jurisdictional Approaches 101" and the theory of change (Figure 12) jointly developed isea, TFA, Proforest and WWF provides insights into how the private sector is attempting to use Jurisdictional Approaches (JAs) to make their supply chains more sustainable and reduce risks like deforestation and social conflicts.

Key Takeaways:

JAs aim to implement sustainable practices by integrating them into broader governance systems that go beyond a single company's supply chain. They involve multiple stakeholders and align various activities to meet shared sustainability goals.

Geographical Scope: According to JAN, landscape approaches focus on a specific natural or social geography, whereas JAs are rooted in political or administrative boundaries. These could be at the level of states, districts, or even entire countries.

Local Government Involvement: The success of JAs is highly dependent on the commitment and leadership from local, subnational governments. These authorities have the mandate to direct land use and are better positioned to engage with various stakeholder groups for sustainable development.

These two points highlight a discrepancy between JAN and the Focus Forest Landscape Dialogue Guidelines. In the guidelines, we have defined a landscape in a way that accommodates any boundary the conveners have responsibility over. In other words, Jurisdictional Approaches are just landscape approaches that operate on an administrative boundary as it matches the sphere of control of the conveners. This is why leadership is crucial in these processes. In the case of the Focus Forest Landscape Dialogues the Conveners sphere of control is restricted to FSC certified concessions or forest areas that might become part of the FSC system.

Cross-Sectoral, Cross-Commodities: JAs are inherently broad in scope, affecting multiple sectors and commodities. Local governments can work with companies to address systemic challenges such as land tenure issues or forest fires, making sustainability efforts more effective.

Scaling Impact: JAs allow companies to amplify the social and environmental impacts of their sustainability efforts by pooling resources and coordinating strategies with other stakeholders, thus going beyond what can be achieved through individual supply chains.

Overall, JAs offer a more comprehensive, locally-rooted, and multi-stakeholder approach to achieving sustainability goals, especially when compared to more traditional, supply chain-focused strategies. They share similarities with all the other landscape approaches. The theory of change bears striking similarities with some of the activities the Focus Forest Landscape Dialogues suggests, with a more static approach – however complex, a theory of change is only one narrative about how things could develop in a landscape, whereas with the scenario design we propose to explore the diversity of possible outcomes to better guide decision.

Overview

Stakeholders see value in working together to achieve shared sustainability goals.

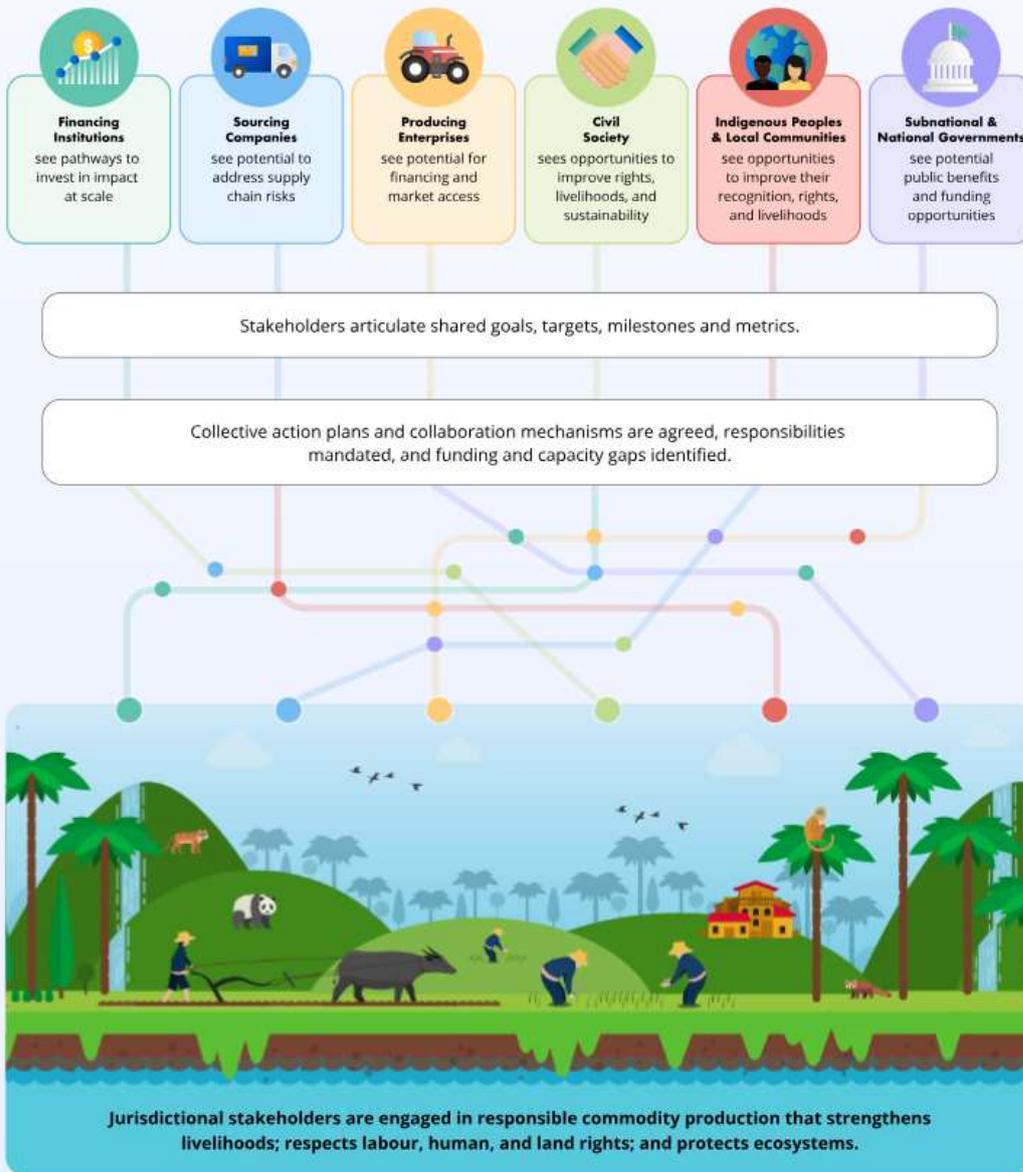


Figure 12. TFA JAN Theory of Change (Source : <https://jaresourcehub.org/theory-of-change/#full-graphic> accessed 01/09/2023).

United Nations Development Programme (UNDP)

The United Nations Development Programme (UNDP) is a global development organization that supports countries in achieving sustainable development goals. UNDP works on various fronts, including environmental sustainability, poverty reduction, gender equality, and good governance. They assist countries in formulating policies, implementing projects, and building capacity to address environmental challenges, including those related to forests and natural resources.

While the UNDP does not focus exclusively on landscape approaches, it supports projects and initiatives that incorporate landscape-based strategies for sustainable development and environmental conservation.

1. **Integrated Sustainable Development:** The UNDP promotes integrated approaches to sustainable development that consider the social, economic, and environmental aspects of landscapes. They work with governments, local communities, and other stakeholders to develop and implement strategies that balance conservation objectives with poverty reduction, economic growth, and social inclusion within landscapes.

2. **Ecosystem Services and Natural Resource Management:** The UNDP recognizes the importance of sustainable natural resource management and the provision of ecosystem services within landscapes. They support projects that focus on the conservation and restoration of ecosystems, the sustainable management of forests, watersheds, and biodiversity, and the promotion of sustainable land use practices. These efforts contribute to maintaining the resilience of landscapes and ensuring the long-term benefits they provide to communities.

3. **Climate Change Mitigation and Adaptation:** The UNDP integrates climate change mitigation and adaptation into landscape approaches. They support projects that address climate change challenges within landscapes, such as promoting sustainable land management practices, enhancing climate resilience of communities, supporting renewable energy initiatives, and reducing greenhouse gas emissions through sustainable practices. These efforts contribute to both climate change mitigation and adaptation goals.

4. **Governance and Policy Support:** The UNDP provides governance and policy support to promote effective landscape management. They work with governments to develop and strengthen policy frameworks, legal instruments, and institutional capacities for integrated landscape planning, management, and conservation. The UNDP also promotes inclusive and participatory decision-making processes that engage local communities and other stakeholders in landscape governance.

5. **Sustainable Livelihoods and Community Empowerment:** The UNDP emphasizes the importance of sustainable livelihoods and community empowerment within landscapes. They support projects that promote income-generating activities, sustainable agriculture, and entrepreneurship opportunities for local communities. By aligning conservation objectives with community needs and aspirations, the UNDP aims to create sustainable economic opportunities that benefit both people and nature.

6. **Capacity Development and Knowledge Sharing:** The UNDP focuses on capacity development and knowledge sharing to enhance landscape approaches. They provide technical assistance, training, and knowledge-sharing platforms to governments, civil society organizations, and local communities. By building local capacities in integrated landscape management, the UNDP aims to ensure the effective implementation and sustainability of landscape-based initiatives.

World Resources Institute (WRI)

The World Resources Institute (WRI) is a non-profit research organization that aims to address the world's most urgent environmental and sustainability challenges. WRI works at the intersection of environment, economics, and social development to develop practical solutions for issues like climate change, forests, water resources, and sustainable cities. They engage with governments, businesses, and civil society to drive transformative change towards a more sustainable future.

The World Resources Institute (WRI) employs landscape approaches as part of their broader efforts to address environmental and sustainability challenges. Here are some specific aspects of the landscape approaches employed by WRI:

Integrated Resource Management: WRI's landscape approaches emphasize the integrated management of natural resources within a specific geographic area. This involves considering the interconnections and trade-offs between land use, forests, water, agriculture, energy, and other sectors. By taking a holistic approach, WRI seeks to promote sustainable and coordinated resource management practices that optimize multiple benefits and minimize negative impacts.

Spatial Planning and Analysis: WRI employs spatial planning and analysis tools to support landscape approaches. They use geographic information systems (GIS) and remote sensing data to map and assess landscapes, analyze land use patterns, and identify areas of high conservation value or vulnerability. These spatial tools help inform decision-making processes and guide the design and implementation of landscape interventions.

Landscape Restoration and Conservation: WRI focuses on landscape restoration and conservation efforts to enhance ecosystem health and resilience. They work with stakeholders to identify priority areas for restoration, develop restoration strategies, and implement activities that restore degraded landscapes, such as reforestation, soil conservation, and habitat restoration. WRI also promotes the conservation and sustainable management of critical ecosystems within landscapes.

Sustainable Land Use Practices: WRI advocates for and promotes sustainable land use practices within landscapes. This includes sustainable agriculture, responsible forestry, and best practices for managing water resources. WRI collaborates with governments, businesses, and communities to develop guidelines, tools, and policies that support sustainable land use decision-making and implementation.

Multi-Stakeholder Engagement: WRI recognizes the importance of engaging multiple stakeholders in landscape approaches. They actively involve governments, local communities, indigenous peoples, private sector actors, and civil society organizations in the planning and implementation of landscape interventions. By fostering collaboration and inclusivity, WRI aims to ensure that diverse perspectives are considered, and decisions reflect the needs and aspirations of various stakeholders.

Knowledge Sharing and Capacity Building: WRI emphasizes knowledge sharing and capacity building to support the adoption and implementation of landscape approaches. They develop and disseminate research, guidelines, and tools to help stakeholders make informed decisions and implement effective landscape interventions. WRI also conducts training programs, workshops, and capacity-building activities to enhance the skills and understanding of practitioners and decision-makers.

WRI's landscape approaches are part of their broader portfolio of work on environmental sustainability, including climate change, forests, water resources, and sustainable cities.

World Wildlife Fund (WWF)

The World Wildlife Fund (WWF) is a global conservation organization dedicated to protecting the Earth's biodiversity and promoting sustainable practices. With a strong interest in landscape approaches, WWF employs a comprehensive approach that includes landscape conservation planning, ecosystem-based strategies, and sustainable land use practices. By working at the landscape level, WWF aims to address interconnected conservation challenges, protect critical habitats, and promote sustainable development. WWF's also employ landscape approaches to achieve their conservation goals.

Here are some specific aspects of the landscape approaches designed by WWF:

1. **Landscape Conservation Planning:** WWF engages in landscape-level conservation planning, which involves assessing the ecological, social, and economic aspects of a given landscape. They identify key conservation targets, prioritize areas for protection, and develop strategies to address threats and promote sustainable land use practices. Through landscape conservation planning, WWF aims to achieve biodiversity conservation and support sustainable development within landscapes.

2. **Ecosystem-based Approaches:** WWF emphasizes ecosystem-based approaches within landscapes, recognizing the interconnectedness of species, habitats, and ecological processes. They promote the conservation and restoration of ecosystems, including forests, wetlands, and marine environments, and advocate for the sustainable management of natural resources. By taking an ecosystem-based approach, WWF aims to maintain the integrity and resilience of landscapes.

3. **Sustainable Land Use Practices:** WWF promotes sustainable land use practices within landscapes, considering the needs of both people and nature. They work with local communities, governments, and businesses to encourage practices such as sustainable agriculture, responsible forestry, and renewable energy development. By promoting sustainable land use, WWF aims to minimize negative impacts on biodiversity and ecosystems within landscapes.

4. **Collaboration and Partnerships:** WWF emphasizes collaboration and partnerships with local communities, governments, and other stakeholders within landscapes. They work together with these actors to develop and implement conservation strategies, share knowledge and resources, and foster community-based conservation initiatives. By building strong partnerships, WWF aims to achieve greater impact and sustainability in their landscape conservation efforts.

5. **Policy Advocacy and Engagement:** WWF engages in policy advocacy at various levels, from local to international, to promote supportive legal and policy frameworks for landscape conservation. They work with governments and other stakeholders to develop and implement policies that address conservation challenges, support sustainable land use, and protect critical habitats within landscapes. WWF also engages in public awareness campaigns to mobilize support for landscape conservation.

6. **Monitoring and Evaluation:** WWF incorporates monitoring and evaluation into their landscape approaches to assess the effectiveness of conservation interventions and adapt strategies as needed. They use scientific monitoring techniques, satellite imagery, and community-based monitoring to track changes in biodiversity, ecosystems, and the well-being of local communities within landscapes.

Monitoring and evaluation help WWF to measure the impact of their actions and make informed decisions for future conservation efforts.

Yale Forestry Dialogues

The Yale Forestry Dialogues is an initiative led by the Yale School of the Environment, specifically its Forest Dialogue Program. It aims to facilitate multi-stakeholder dialogues on critical forestry and conservation issues. The dialogues bring together representatives from diverse backgrounds, including academia, NGOs, industry, indigenous communities, and government, to foster collaborative discussions and generate innovative solutions. The goal is to bridge gaps, build consensus, and advance sustainable forest management practices through constructive dialogue and knowledge sharing.

Over the last 20 years, TFD has developed, implemented, and refined a model for multi-stakeholder dialogue that has addressed many of the world's most contentious forest and environmental issues. While TFD uses the model to address forests and livelihood conflicts, it can easily be applied to other natural resource and social issues such as agriculture, food security, and mining. Here are some specific aspects of the landscape approaches employed by The Yale Forestry Dialogue:

Landscape approaches are fraught with challenges,

...that may include lack of appropriate stakeholder involvement, reluctance of participants to engage openly, and unfamiliarity with best practices for dialogue. Often, organizations struggle to engage interest groups such as private companies and marginalized communities in multi-stakeholder processes, especially when those groups have negative relationships with one another. When dialogues don't produce outcomes, participants may be less willing to engage with and support future initiatives. (TFD 2020)

Collaborative Dialogue: TFD emphasize the importance of collaborative dialogue among diverse stakeholders. They bring together representatives from academia, NGOs, industry, indigenous communities, governments, and other key actors to foster inclusive and constructive discussions. This participatory approach allows for different perspectives, knowledge, and experiences to be shared and integrated into decision-making processes.

TFD PRINCIPLES: OUTPUTS ARE DEFINED BY PARTICIPANTS. TFD has a unique policy of deliberately not designing nor proposing dialogue outputs or solutions upfront—this role is held by the participants themselves. In this way, participants are not limited by TFD in how they address problems and identify solutions. It is important to note that TFD is driven by a mandate to achieve results, however those results are determined by the participants, not TFD.

Multi-Sector Engagement: TFD involve stakeholders from various sectors related to forests and landscapes. This includes representatives from forestry, conservation, agriculture, energy, finance, and other relevant fields. By involving multiple sectors, the dialogues strive to find comprehensive and integrated solutions that address the interconnected challenges of landscapes.

Solutions-Oriented Approach: The focus of TFD is on generating actionable solutions. Through dialogue and collaboration, participants work together to identify shared goals, explore innovative approaches, and develop practical strategies to address complex forestry and conservation issues. The aim is to go beyond discussing problems and engage in problem-solving that leads to real-world impacts.

Inclusive Decision-making: TFD promote inclusive decision-making processes. By involving a wide range of stakeholders, including local communities and indigenous peoples, they seek to ensure that decisions related to forests and landscapes reflect diverse perspectives and consider the needs and aspirations of those directly affected.

Knowledge Sharing and Learning: TFD encourage knowledge sharing and mutual learning. Participants have opportunities to exchange experiences, share best practices, and learn from one another's successes and challenges. This collaborative learning environment fosters innovation and helps shape more effective landscape approaches.

Consensus Building: TFD aim to build consensus among stakeholders. By engaging in open and respectful dialogue, participants work towards finding common ground, identifying shared values and goals, and developing joint actions. Consensus-building processes contribute to the development of more effective and sustainable landscape approaches.

The Yale Forestry Dialogues focus on facilitating dialogues and collaborations rather than directly implementing projects or initiatives. They serve as a platform for stakeholders to come together, exchange ideas, and collectively explore solutions for sustainable forest management and conservation. The method is detailed in *The Forest Dialogue* (2020).



Figure 9. The flow of a TFD initiative. The process is non-linear and iterative. Each phase has distinct steps (displayed in blue) for achieving its objectives (displayed as arrows). The objectives are displayed as arrows because they should be achieved in sequence. (Source: TFD 2020).

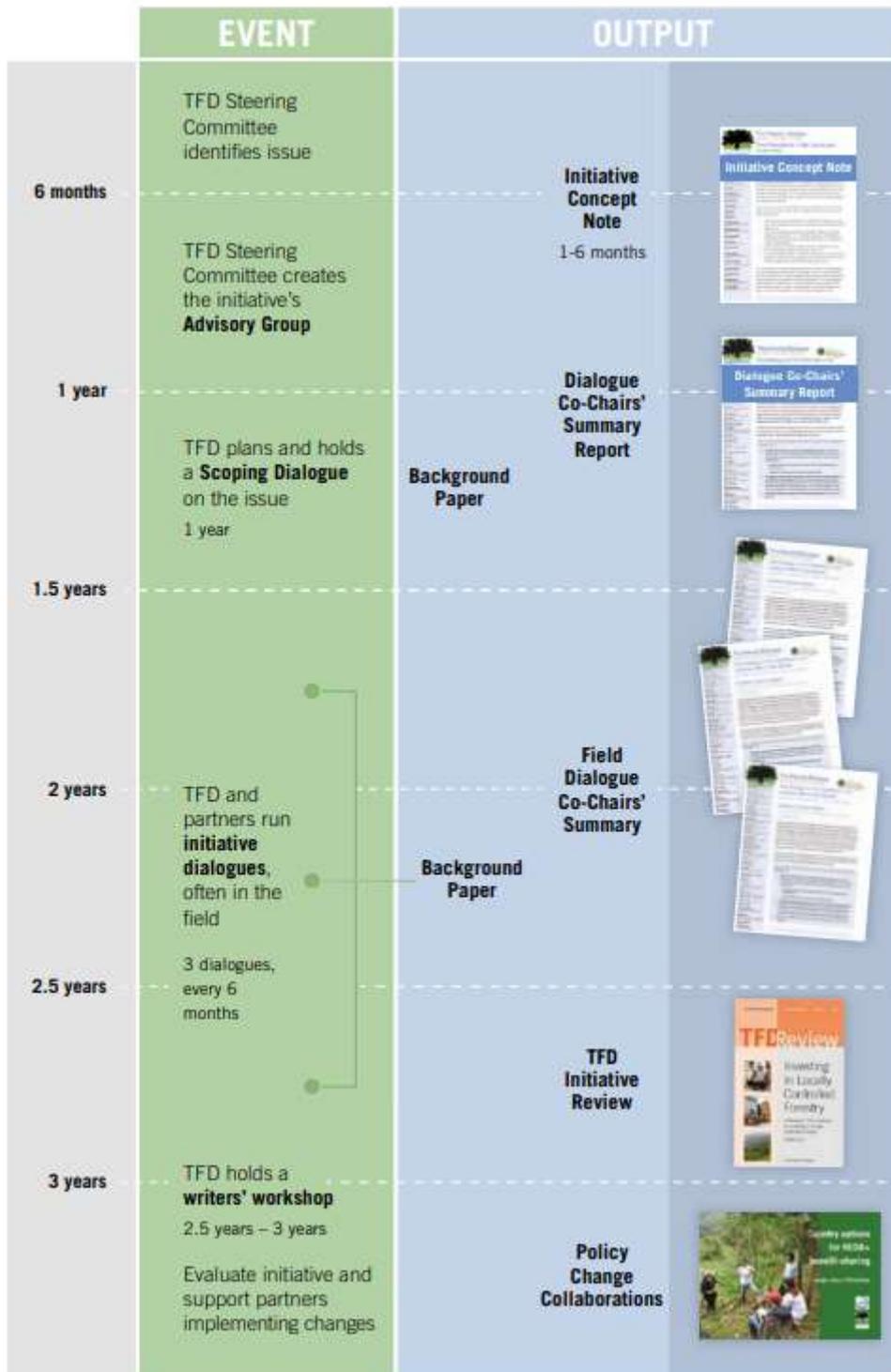


Figure 10. Timeline of a typical TFD process. Because the process is adaptive and iterative, time horizons will vary. (Source: TFD 2020)

REFERENCES

Scientific publications

- Armitage, Derek R., et al. "Adaptive co-management for social–ecological complexity." *Frontiers in Ecology and the Environment* 7.2 (2009): 95-102.
- Balint, Peter J., et al. *Wicked environmental problems: managing uncertainty and conflict*. Island Press, 2011.
- Carmenta, Rachel, et al. "Perceptions across scales of governance and the Indonesian peatland fires." *Global Environmental Change* 46 (2017): 50-59.
- Chazdon, R. L., et al. "Policy perspective : A Policy-Driven Knowledge Agenda for Global Forest and Landscape Restoration. 10." (2017): 125-132.
- Chervier, Colas, Marie-Gabrielle Piketty, and James Reed. "A tentative theory of change to evaluate jurisdictional approaches to reduced deforestation." *Frontiers in Forests and Global Change* 3 (2020): 498151.
- DeFries, Ruth, and Harini Nagendra. "Ecosystem management as a wicked problem." *Science* 356.6335 (2017): 265-270.
- Etienne, Michel, Derick R. Du Toit, and Sharon Pollard. "ARDI: a co-construction method for participatory modeling in natural resources management." *Ecology and society* 16.1 (2011).
- Evans, Kristen, et al. *Guide to participatory tools for forest communities*. CIFOR, 2006.
- Foli, Samson, et al. "Natural resource management schemes as entry points for integrated landscape approaches: evidence from Ghana and Burkina Faso." *Environmental management* 62 (2018): 82-97.
- Freeman, Olivia E., Lalisa A. Duguma, and Peter A. Minang. "Operationalizing the integrated landscape approach in practice." *Ecology and Society* 20.1 (2015).
- Gignoux, Jacques, et al. "The ecosystem in practice: Interest and problems of an old definition for constructing ecological models." *Ecosystems* 14 (2011): 1039-1054.
- Olsson, Per, et al. "Shooting the rapids: navigating transitions to adaptive governance of social-ecological systems." *Ecology and society* 11.1 (2006).
- Reed, Mark S. "Stakeholder participation for environmental management: a literature review." *Biological conservation* 141.10 (2008): 2417-2431.
- Reed, James, et al. "Integrated landscape approaches to managing social and environmental issues in the tropics: learning from the past to guide the future." *Global change biology* 22.7 (2016): 2540-2554.
- Rittel, Horst WJ, and Melvin M. Webber. "Dilemmas in a general theory of planning." *Policy sciences* 4.2 (1973): 155-169.
- Sayer, Jeffrey, Gary Bullb, and Chris Elliott. "Mediating Forest Transitions: 'Grand Design' or 'Muddling Through'." *Conservation and Society* 6.4 (2008): 320-327.
- Sayer, Jeffrey, et al. "Ten principles for a landscape approach to reconciling agriculture, conservation, and other competing land uses." *Proceedings of the national academy of sciences* 110.21 (2013): 8349-8356.
- Tansley, Arthur G. "The use and abuse of vegetational concepts and terms." *Ecology* 16.3 (1935): 284-307.
- Waeber, Patrick O., et al. "Structuring the complexity of integrated landscape approaches into selectable, scalable, and measurable attributes." *Environmental Science & Policy* 147 (2023): 67-77.
- Young, Oran R. "Institutional interplay: the environmental consequences of cross-scale interactions." *The drama of the commons* 1 (2002): 263-291.

Reports

IUCN and WRI (2014). A guide to the Restoration Opportunities Assessment Methodology (ROAM): Assessing forest landscape restoration opportunities at the national or sub-national level. Working Paper (Road-test edition). Gland, Switzerland: IUCN. 125 pp. <https://portals.iucn.org/library/sites/library/files/documents/2014-030.pdf>

Proforest (2020) Engaging with landscape initiatives: A practical guide for supply chain companies. Infonote 03. 24 p. proforest.net/fileadmin/uploads/proforest/Documents/Publications/engaging-with-landscape-initiatives-ed2.pdf

Watson, E. (2020). High Conservation Value (HCV) Screening: Guidance for identifying and prioritising action for HCVs in jurisdictional and landscape settings. HCV Network Ltd

The Forests Dialogue 2020. Addressing Natural Resource Conflicts through Dialogue: A Guide to The Forests Dialogue's Process and Model. TFD, New Haven, CT. theforestdialogue.org/publication/forests-dialogue-guide



FSC Global Development

Adenauerallee 134

53113 Bonn

Germany

Phone: +49 -(0)228 -36766 -0

Fax: +49 -(0)228 -36766 -30

Email: engagement@fsc.org