Report

Collaborative IMPACT

Robust, Relevant and Empowering

Final Evaluation of Rainforest Alliance's LandScale Initiative

Strengthening LandScale's functionality and business viability, effectively engaging and benefiting communities, and clarifying LandScale's UVP

Submitted to Rainforest Alliance (RA)
by Collaborative Impact on 4 February 2025

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Foremost, we convey our deepest appreciation to **Rainforest Alliance and BHP Foundation** colleagues for the trust bestowed upon the evaluation team to undertake this work, their ongoing support and understanding of the challenges faced during the process. Their honest feedback and critical reflections from the evaluation's design to its delivery were invaluable and critical to the success of the evaluation.

Our special thanks goes to global Rainforest Alliance colleagues **Edita Chavez-Heredia** (LandScale Product Manager) and **Alice Gottesman** (LandScale Technical Manager) for facilitating not only access to but also understanding of crucial LandScale information and providing their unwavering support throughout. We also extend our sincere gratitude to landscape-level Rainforest Alliance colleagues **Susana Salmeron**, **Gustavo Rojas** and **Santiago Machado** (Mexico), **Vanessa Coronado** (Colombia), **Javier Martinez** and **Rosa Céspeedes** (Peru), and **Tubagus M. Siagian** (Indonesia) for their invaluable support in planning and coordinating the case study inquiries, and their contributions to the analysis and reporting. Finally, we are grateful to **Henk Gilhuis** for his invaluable expertise and trust in the approach and methodology used in this evaluation, which played a key role in helping colleagues gain confidence in our work.

Although all global and landscape-level partners and stakeholders had their voice heard during the inquiries and sensemaking events, the findings and conclusions presented in this report are those of the evaluation team and are solely the responsibility of the evaluation team leader.

EVALUATION TEAM

The evaluation was designed and implemented by Collaborative Impact (CI), a women-led consultancy and collective of like-minded professionals whose mission is to *create a more sustainable and fairer world through a systemic, empowering and rigorously innovative approach to strategy, learning and evaluation.* CI specialises in supporting and assessing transformative change and impact in complex and difficult environments, combining methodologies for rigorous analysis with well-facilitated processes to generate robust and co-owned evidence and solutions. Its professionals bring decades of hands-on experience in utilization-focused evaluation, supporting institutional strategy and MEL design, and strengthening capacities and partnerships for innovation and impact across levels and sectors.

The evaluation was implemented in collaboration with Azai Consultores, a like-minded Colombia-based partner whose mission is to empower communities, civil society actors, social entrepreneurs, corporate citizens, and public institutions across Latin America to drive sustainable, community-centered change through innovative and collaborative approaches to impact measurement, organisation strengthening, and knowledge management.

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ACRONYMS

CI	Collaborative Impact
CLAP	Collaborative Landscape Action Plan
EO	Evaluation Objective
EToC	Evaluative Theory of Change
H	Hypothesis
MVP	Minimum Viable Product
PIALA	Participatory Impact Assessment and Learning Approach
PMF	Product Market Fit
PWD	People with Disabilities
RA	Rainforest Alliance
SBTN	Science-based Targets Network
TCFD	Task Force on Climate-Related Financial Disclosures
TNFD	Taskforce on Nature-Related Financial Disclosures
UVP	Unique Value Proposition

TEXT BOXES, TABLES AND FIGURES

EXECUTIVE SUMMARY

Introduction

The LandScale initiative, developed by the Rainforest Alliance (RA) in collaboration with Conservation International and Verra, promotes sustainable landscape development by empowering stakeholders to collaboratively measure, learn and improve the environmental and socioeconomic sustainability conditions in their region. It provides an assessment framework, validation mechanism, and online platform comprising metrics, tools and guidelines combined with supporting services that enable communities, governments, producers, businesses, and civil society to build shared evidence on landscape-level health and sustainability, undertake collective action to effectively address critical sustainability challenges, and attract investment for sustainable development initiatives within the landscape. LandScale's vision is a future where people, nature, and businesses prosper through sustainable landscape management and governance, driven by its mission to generate trusted landscape-level insights that align and incentivize local and global action for sustainability at scale.

This report presents the Final Evaluation of the LandScale Initiative, which focused on:

- Exploring use cases and engagement incentives to strengthen LandScale's functionality and viability;
- Identifying lessons and best practices for effectively engaging and benefiting local and indigenous communities to achieve long-term landscape sustainability and scalable impact; and
- Gathering insights and success stories to clarify LandScale's Unique Value Proposition (UVP).

The evaluation was designed and implemented by Collaborative Impact (CI), a women-led consultancy and collective of like-minded professionals that specialises in supporting and assessing transformative change and impact in complex and difficult environments, combining methodologies for rigorous analysis with well-facilitated processes to generate robust and co-owned evidence and solutions. The evaluation was implemented in collaboration with Azai Consultores, a like-minded Colombia-based partner.

Evaluation Approach and Methodology

The approach used for the evaluation is Collaborative Impact's Participatory Impact Assessment & Learning Approach (PIALA). A multi-case study was conducted in four selected landscape initiatives[1] and at the global level, employing a methodology that combined Outcome Harvesting and Constituent Voice tools for data gathering, and Contribution Tracing, Configuration Analysis and Participatory Sensemaking tools and processes for analysis and cross-validation. The Value Proposition Canvas was used for examining use cases as the basis for clarifying LandScale's UVP.

The landscape initiatives chosen for the multi-case study based on agreed criteria were:

- The **Lamas Province Landscape Initiative** in Peru (pilot funded by BHP Foundation);
- The **Sierra de Tapalpa Landscape Initiative** in Mexico (pilot funded by BHP Foundation);
- The **Piedemonte Amazonico Landscape Initiative** in Colombia; and
- The **Sintang Landscape Initiative** in West Kalimantan, Indonesia.

[1] Landscape initiatives typically involve large-scale, integrated efforts to manage land, water, and other natural resources sustainably across a region or ecosystem. The efforts are managed by organizations who engage in convening, financing, and/or implementing landscape initiative assessments using the LandScale tool.

Data was analysed alongside an **Evaluative Theory of Change (EToC)** derived from LandScale's landscape-level and global Theories of Change. Since the evaluation focused on generating insights and findings to help RA refine and adapt its strategies and plans for the next phase, the EToC adopted an explicitly forward-looking lens, with the evaluation objectives as the starting point (rather than the end point) of an envisioned change process.

Main Evaluation Findings

The landscape-level and global evaluation findings are presented alongside the EToC in relation to the Evaluation Objectives.

Strengthening LandScale's functionality and business viability

Use cases and engagement incentives:

1. Landscape initiatives use LandScale to integrate sustainability concerns in governance and stakeholder collaboration, aligning livelihoods and businesses with region-specific program and policy priorities like agroforestry (Peru and Colombia), biocultural biodiversity (Mexico), and forest and water protection (Indonesia).
2. Landscape actors[2] are motivated to engage in LandScale-based assessments and governance processes because it offers opportunities to: enhance market access and competitiveness (e.g. coffee and cocoa producers in Peru); attract climate finance and government investment (e.g. avocado and berry producers and businesses in Mexico); and participate in local governance for sustainable livelihood development (e.g. palm oil cooperatives and mercury-free fishing communities in Indonesia; communities in the Amazon Rainforest Reserve Zone in Colombia).

Functionality and business viability:

3. LandScale's searchable database, adaptable tools and indicators, and step-wise guidance enable streamlined sustainability assessments and visualizations aligned with global standards, fostering collaboration and impact tracking across diverse geographies.
4. LandScale's complex metrics/tools and validation requirements, lengthy and time-consuming assessments, inconsistent data displays and bugs, language barriers, and visualization limitations make it hard for communities, businesses, and funders to remain engaged.
5. LandScale consolidates data effectively, aiding decision-making across the landscape, but its potential for local producers, businesses and policymakers remains underutilized due to the unavailability of customizable tools for market and finance linking, ecosystem service valuation, investment calculation, and alignment with evolving policy terminology.

Effectively engaging and benefiting local and indigenous communities

Community engagement:

6. LandScale engages communities through shared baseline assessments, participatory planning and monitoring, peer learning, and targeted communication, fostering trust, ownership, and sustained participation in landscape governance.
7. The complexity of LandScale's interface and statistical data alienates communities, highlighting the need for a more inclusive, user-friendly display with explanatory narratives, along with ongoing feedback loops, training, and culturally relevant communication through local leaders.

[2] Landscape actors refer to all the actors operating within the defined territory of a landscape—e.g. local and indigenous communities, specific groups (e.g. women, youth), commodity-specific producers (e.g. cocoa, palm oil, fishery), local businesses and traders, larger companies and investors, private and public service providers, local and regional governments, civil society organisations, and academia.

Sustainability and scalable impact:

8. Active and sustained stakeholder engagement generating tangible benefits and facilitating access to finance for communities, businesses and ecosystems is crucial for achieving long-term sustainability and scalable impact in the landscapes.

Clarifying LandScale's Unique Value Proposition (UVP)

Landscape-level UVP:

9. LandScale drives long-term sustainability and impact by fostering inclusive multi-stakeholder collaboration to monitor and address sustainability gaps, generating tangible benefits and empowerment opportunities for local/indigenous communities, businesses, and specific groups such as women and youth.
10. LandScale provides a structured and integrated approach for tracking and improving landscape sustainability through technical assessments and multi-stakeholder engagements supporting agroforestry and biodiversity conservation initiatives, fostering public-private sector alignment, and enabling private sector actors to adopt sustainability measures incrementally.

Global UVP:

11. LandScale fosters sustainable landscape governance and investment by supporting sustainable commodity development and market linking—e.g. through enhanced readiness for certification (Peru), improved climate-resilient farming for potential climate finance (Mexico), and improved alignment of fisheries with mercury-free policies (Indonesia).
12. LandScale is uniquely well positioned to support compliance with global corporate sustainability frameworks like TCFD and TNFD, helping companies demonstrate sustainability impacts by enhancing self-reporting credibility through phased verification aligned with corporate disclosure needs.

Conclusions and Recommendations

Conclusions linking evaluation findings to LandSale's scaling, impact and financial sustainability ambitions

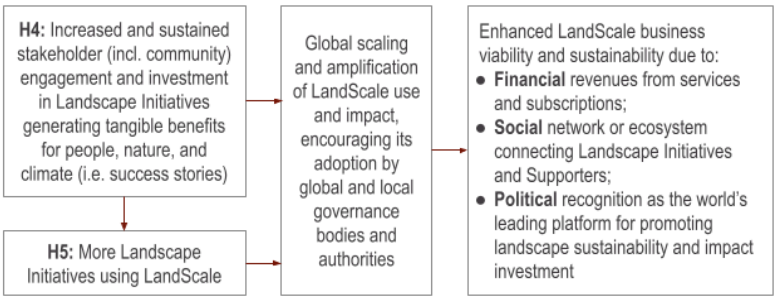
LandScale drives long-term sustainability and impact by fostering multi-stakeholder collaboration that mobilizes communities, governments, producers, businesses, and civil society around shared landscape sustainability goals. Through data-driven landscape management combined with efforts to improve access to sustainable markets for producers and businesses and link investments with local environmental, social, and economic priorities, these collaborative processes create positive impacts on landscape ecosystems, businesses, and communities.

By providing technical and facilitation support, LandScale helps landscape initiatives advance biodiversity conservation, land and forest restoration, human rights and wellbeing, and sustainable production and business development. By helping define shared goals, boundaries, metrics, and data needs, it enables landscape initiative partners to collaboratively plan sustainability actions, demonstrate improvements in landscape health and sustainability, and strengthen the maturity of the initiative. This unleashes opportunities to attract investments and generate tangible benefits such as improved livelihoods, enhanced climate resilience, reduced land-use conflict, strengthened governance, and enhanced competitiveness for local producers and businesses in globalised markets. By tying landscape initiatives' collaborative efforts to measurable outcomes, LandScale facilitates the translation of stakeholder engagements into scalable, long-term sustainability impacts.

However, the evaluation findings show that LandScale faces several challenges in securing ownership and sustaining engagement. Addressing these challenges while meeting landscape-level and global stakeholders' needs is critical for unlocking the platform's full potential. Given the numerous, diverse, and complex stakeholder needs—many of which may be difficult to address within available budgets—**prioritizing unmet needs** where LandScale can provide the greatest added value becomes essential.

With BHP Foundation funding eventually ending and alternative funding shrinking amid shifting geopolitical priorities, securing LandScale's **financial self-sustainability** is urgent. Despite funding challenges, demand for platforms like LandScale is set to grow—potentially surging in the coming years. This evaluation highlights LandScale's pivotal role in **supporting bottom-up sustainable landscape initiatives** to grow, mature, and sustain themselves—initiatives that will become increasingly vital as sustainability challenges and climate hazards intensify.

To maximize impact, LandScale must evolve from a standardized assessment tool into a more **flexible, utility-driven approach** that attracts investment in landscapes, embedding an **adaptive community engagement model** to strengthen and sustain local uptake and participation. To achieve its ambitions, LandScale must transition from piloting to controlled scaling by solidifying its financial viability, strengthening its market position, and enhancing its appeal to current and potential customers—as illustrated in the end-stage part of the Evaluative Theory of Change (EToC) diagram in Section 4 (Figure 1, right-hand side):



Based on these conclusions, the evaluation provides **seven key recommendations** that correspond to the Evaluation Objectives and the Hypotheses in the EToC.

Recommendations for strengthening LandScale's functionality and business case

1. Define LandScale's comparative advantage by reviewing its Product Market Fit (PMF) to identify and prioritize unmet or underserved needs where LandScale can provide the greatest added value (i.e. niche use cases).[3]
2. Enhance LandScale's offerings focused on prioritized unmet needs (or niche use cases) by developing customizable tools and dashboards—e.g. for community engagement, market and finance linking, ecosystem service valuation, investment calculation, and policy alignment—and identify engagement incentives through stress-testing and ongoing feedback loops with landscape stakeholders.
3. Enhance LandScale's functionality by simplifying and improving assessment tools and validation processes, developing a user-tailored modular approach, addressing bugs and data inconsistencies, and improving visualisation options to better serve prioritized unmet needs (or niche use cases).
4. Develop a robust, viable business plan and strategy to secure LandScale's market position, enhance its financial self-sustainability and competitiveness, and sustain its offerings to landscape initiatives, focusing on prioritized unmet needs (or niche use cases).

[3] Comparative advantage can be defined as the way in which LandScale's unique capabilities meet unmet needs. Unique capabilities refer to LandScale's strengths that its competitors don't have. Unmet needs refer to the needs of LandScale's actual and potential customers—the various landscape actors and investors who have an interest in using the platform—that are unmet by its competitors.

Recommendations for effectively engaging and benefiting communities

5. Prioritize engaging and benefiting local and indigenous communities and their businesses in LandScale assessment tools and guidance, ensuring the inclusion of women, youth, indigenous people, and other groups. Provide culturally-relevant training and support to enable them to participate meaningfully and optimize their use and uptake of LandScale tools, dashboards, and data.

Recommendations for clarifying LandScale's Unique Value Proposition (UVP)

6. Clarify LandScale's UVP by articulating and showcasing the distinct added value it provides through a modular, adaptive approach that serves prioritized unmet needs (or niche use cases) of landscape initiative stakeholders while advancing investments in integrated landscape management.
7. Strengthen LandScale's value proposition for companies and investors by aligning its metrics and tools with global corporate sustainability frameworks and collaborating with complementary platforms to enhance landscapes' market visibility and credibility.

1 INTRODUCTION

1.1 About LandScale

The LandScale initiative, developed by the Rainforest Alliance (RA) in collaboration with Conservation International and Verra, promotes sustainable landscape development by empowering stakeholders to collaboratively measure, learn and improve the environmental and socioeconomic sustainability conditions in their region. Its vision is a future where people, nature, and businesses prosper through sustainable landscape management and governance, driven by its mission to generate trusted landscape-level insights that align and incentivize local and global action for sustainability at scale.

LandScale provides an assessment framework, validation mechanism, and online platform comprising metrics, tools, and guidelines combined with supporting services that enable communities, governments, producers, businesses, and civil society to build shared evidence on landscape-level health and sustainability, undertake collective action to effectively address critical sustainability challenges, and attract investment for sustainable development initiatives within the landscape. By helping landscape initiatives[4] to define shared goals, boundaries, metrics, and data needs, it enables partners and stakeholders to collaboratively plan sustainability actions, track improvements in landscape health and sustainability, validate sustainability investment and impact claims, publish results and insights, and assess and strengthen the maturity of the initiative. By integrating various aspects and sharing best practices of biodiversity conservation, land and forest restoration, human rights and wellbeing, and sustainable production and business development, LandScale helps balance economic development with environmental conservation and social equity considerations, supporting actions that benefit people, nature, and businesses.[5]

Since its inception in 2019, the LandScale initiative has been field-tested in more than 15 landscapes across five continents. The global LandScale initiative and its pilots in Mexico and Peru received substantial funding from BHP Foundation through its Environmental Resilience Program. Reaching the end of the (extended) five-year grant, BHP Foundation required Rainforest Alliance to commission an end evaluation.

Based on a collective visioning with RA's global team and pilot coordinators as well as BHP Foundation's fund manager for LandScale, it was agreed upon that the evaluation should focus on generating insights and findings to help RA to refine and adapt its strategies and plans for LandScale's next phase. Learning was prioritized over accountability, shifting away from a basic performance assessment of KPIs and milestones.

1.2 About the Evaluation

1.2.1 Evaluation objectives and questions

The following evaluation objectives (EO1-3) and related questions were agreed upon with the RA team and BHP Foundation:

EO1. Explore use cases and engagement incentives to strengthen LandScale's functionality and business viability:
- What types of incentives can help strengthen LandScale's business case and increase stakeholder engagement and investment?
- What types of use cases can help strengthen LandScale's functionality and uptake?

[4] Landscape initiatives typically involve large-scale, integrated efforts to manage land, water, and other natural resources sustainably across a region or ecosystem. The efforts are managed by organizations who engage in convening, financing, and/or implementing landscape initiative assessments using the LandScale tool.
[5] LandScale's pillars are: ecosystems, human well-being, governance, and production.

EO2. Identify lessons and best practices for effectively engaging and benefiting local/indigenous communities to achieve long-term landscape sustainability and scalable impact:
    - How effectively does LandScale engage and benefit local/indigenous communities?
    - What lessons and best practices can be identified from the LandScale pilots that demonstrate LandScale's contribution to landscape initiatives' benefits and impact for local/indigenous communities?
    - What are the critical conditions for achieving long-term landscape sustainability and scalable impact?

EO3. Gather insights and success stories to clarify LandScale's Unique Value Proposition (UVP):
    - How can LandScale further clarify and communicate its UVP?
    - What success stories of LandScale use can help with this?

1.2.2 Evaluation approach and methodology

The approach used for the evaluation is Collaborative Impact's Participatory Impact Assessment & Learning Approach (PIALA). This is a theory-based, participatory mixed-methods approach initially developed with the International Fund for Agricultural Development (IFAD) to design and conduct rigorous outcome and impact evaluations that support evidence-based and collaborative learning around how multiple interventions and influences interact and converge to generate system change and impact. Drawing on the *realist*, *developmental* and *transformative* evaluation traditions, PIALA provides a tested framework for creatively combining and integrating different types of methods and data to assess non-linear contribution to change in a comprehensive and inclusive way, with optimal validity and learning value for all stakeholders involved.

A multi-case study was conducted in four selected landscape initiatives and at the global level. The methodology employed for landscape-level and global inquiries combined Outcome Harvesting and Constituent Voice tools for data gathering, and Contribution Tracing, Configuration Analysis and Participatory Sensemaking tools and processes for analysis and cross-validation. The Value Proposition Canvas was used for examining use cases as the basis for clarifying LandScale's UVP. **Annex I** provides greater detail on the various methods mapped onto the evaluation questions.

1.2.3 Case selection

Landscape initiatives for the multi-case study were selected in close consultation with RA's global team and the BHP Foundation's fund manager for LandScale, based on the following criteria:

- Higher and comparative levels of landscape maturity;
- Variation in landscape context and management approach;
- Landscape stakeholders' resources and availability to engage; and
- Feasibility taking into account the accessibility and weather circumstances of the landscape sites.

The following landscape initiatives were selected:

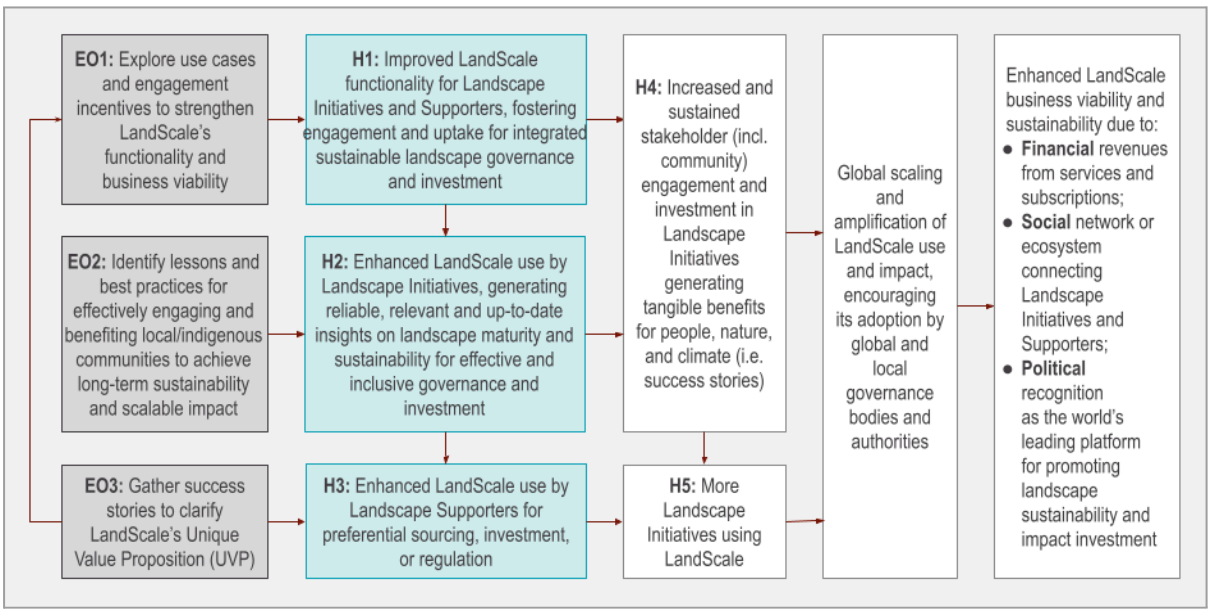
- The **Lamas Province Landscape Initiative** in Peru (pilot funded by BHP Foundation);
- The **Sierra de Tapalpa Landscape Initiative** in Mexico (pilot funded by BHP Foundation);
- The **Piedemonte Amazonico Landscape Initiative** in Colombia; and
- The **Sintang Landscape Initiative** in West Kalimantan, Indonesia.

2 EVALUATIVE THEORY OF CHANGE

A central element of PIALA is its Evaluative Theory of Change (EToC) that serves as a roadmap for gathering and analysing data, sensemaking of findings, and formulating recommendations.

The EToC for the LandScale evaluation, presented by the diagram in Figure 1 below, is derived from LandScale's landscape-level and global Theories of Change. Since the evaluation focused on generating insights and findings to help RA refine and adapt its strategies and plans for the next phase, the EToC adopted an explicitly forward-looking lens, with the evaluation objectives (EO1-3) as the starting point (rather than the end point) of an envisioned change process. The EToC served to orient the analysis towards what will happen in the next phase, rather than to guide data collection on what has been achieved in the past five years.

Figure 1: Evaluative Theory of Change (EToC)



The evaluation covers the first four of the five hypotheses (cf. H1-H5) in the EToC, which are:

H1. LandScale's functionality for landscape initiatives and supporters can be improved by exploring use cases and engagement incentives and by clarifying LandScale's Unique Value Proposition (UVP).
H2. LandScale use by landscape initiatives for effective and inclusive governance and investment can be enhanced by improving LandScale's functionality and establishing best practices for engaging and benefiting local/indigenous communities.
H3. LandScale use by landscape supporters for preferential sourcing, investment, or regulation can be enhanced by fostering LandScale use by landscape initiatives generating reliable, relevant and up-to-date insights on landscape maturity and sustainability, and by clarifying LandScale's UVP responding to landscape initiatives' and supporters' needs.
H4. Stakeholder (incl. community) engagement and investment in landscape initiatives can be increased and sustained by improving LandScale functionality and enhancing LandScale use by landscape initiatives generating reliable, relevant and up-to-date insights on landscape maturity and sustainability for effective and inclusive governance and investment.
H5. The number of landscape initiatives using LandScale can be increased by sharing success stories of increased and sustained stakeholder (incl. community) engagement and investment in landscape initiatives generating tangible benefits for people, nature, and climate, and by enhancing LandScale use by landscape supporters for preferential sourcing, investment, or regulation.

3 MAIN EVALUATION FINDINGS

In this section, we present the main landscape-level and global evaluation findings alongside the evaluation objectives and questions. The findings are evidenced by the substantiated and triangulated stakeholder feedback obtained from the landscape-level and global inquiries, cross-checked with evidence captured on LandScale's website and in its documents.

Each finding includes a brief explanation, and in footnote, an indicative score for evidence strength (from 1 being 'very strong' to 4 meaning 'very weak') reflecting the evaluation team's judgement based on the triangulation and substantiation of findings from multiple independent sources. Also participants' cross-validations in the landscape-level and global sensemaking workshops have been taken into account.

3.1 Strengthening LandScale's Functionality and Business Viability

Box 1: Main findings responding to the first evaluation objective and related questions

Use cases and engagement incentives:

1. Landscape initiatives use LandScale to integrate sustainability concerns in governance and stakeholder collaboration, aligning livelihoods and businesses with region-specific program and policy priorities like agroforestry (Peru and Colombia), biocultural biodiversity (Mexico), and forest and water protection (Indonesia).
2. Landscape actors[6] are motivated to engage in LandScale-based assessments and governance processes because it offers opportunities to: enhance market access and competitiveness (e.g. coffee and cocoa producers in Peru); attract climate finance and government investment (e.g. avocado and berry producers and businesses in Mexico); and participate in local governance for sustainable livelihood development (e.g. palm oil cooperatives and mercury-free fishing communities in Indonesia; communities in the Amazon Rainforest Reserve Zone in Colombia).

Functionality and business viability:

3. LandScale's searchable database, adaptable tools and indicators, and step-wise guidance enable streamlined sustainability assessments and visualizations aligned with global standards, fostering collaboration and impact tracking across diverse geographies.
4. LandScale's complex metrics/tools and validation requirements, lengthy and time-consuming assessments, inconsistent data displays and bugs, language barriers, and visualization limitations make it hard for communities, businesses, and funders to remain engaged
5. LandScale consolidates data effectively, aiding decision-making across the landscape, but its potential for local producers, businesses and policymakers remains underutilized due to the unavailability of customizable tools for market and finance linking, ecosystem service valuation, investment calculation, and alignment with evolving policy terminology.

[6] Landscape actors refer to all the actors operating within the defined territory of a landscape—e.g. local and indigenous communities, specific groups (e.g. women, youth), commodity-specific producers (e.g. cocoa, palm oil, fishery), local businesses and traders, larger companies and investors, private and public service providers, local and regional governments, civil society organisations, and academia.

3.1.1 Use cases and engagement incentives

Finding 1:
Landscape initiatives use LandScale to integrate sustainability concerns in governance and stakeholder collaboration, aligning livelihoods and businesses with region-specific program and policy priorities like agroforestry (Peru and Colombia), biocultural biodiversity (Mexico), and forest and water protection (Indonesia).[7]

LandScale helps landscapes in addressing long-term sustainability concerns by facilitating multi-stakeholder collaboration to monitor and tackle critical sustainability gaps while fostering regional alignment across policies, programs, and practices in diverse landscapes.

In **Peru's Lamas province landscape**, LandScale has become a cornerstone of agroforestry strategy development aimed at addressing significant deforestation (170.16 km² lost since 2001), while also promoting market access for cocoa and coffee producers and creating synergies between community interests and regional sustainability policies and frameworks.[8] Similarly, in **Mexico's Sierra de Tapalpa Landscape**, the platform supports urban biodiversity conservation by aligning stakeholder efforts and promoting compliance with sustainability standards through targeted investments linking avocado and berry producers and businesses to premium global markets.[9] In **Indonesia's Sintang district (West Kalimantan)**, LandScale is leveraged to promote a holistic approach to sustainable socio-economic development and food security, aligning local livelihood initiatives such as fish processing with environmental goals such as mercury-free lakes, while providing actionable insights to the Landscape Initiative to enhance collaborative landscape governance and planning.

In **Colombia's Piedemonte Amazonico**, the Landscape Initiative operates in a highly complex, conflict-prone region and remains in its early stages. About 40% of the landscape is protected under the official Amazon Rainforest Reserve Zone, with land legally allocated to a diverse range of local and indigenous communities. Armed groups complicate stakeholder interactions across the landscape's territories. Despite these challenges, the LandScale baseline assessment created a safe space for communities, authorities, and private sector actors to build trust and shared understanding of the complex production and power structures in the landscape's fragile territories and discuss critical sustainability threats. This shifted the focus from introducing non-native commercial cash crops, such as cocoa and plantain, to improving agricultural practices that support profitable local crop cultivation while enhancing soil health.

From the **global inquiries**, it became evident that LandScale served diverse use cases across various contexts. In Vietnam, it played a key role in monitoring biodiversity and water management while improving livelihoods through systematic landscape-level assessments. In Kenya, it has supported efforts to integrate conservation with social well-being, helping stakeholders track progress on reforestation and habitat restoration. In Guyana, it has facilitated structured multi-stakeholder discussions aligning economic, social, and environmental priorities to

[7] Indicative Score 1 of evidence strength. Landscape initiatives typically involve large-scale, integrated efforts to manage land, water, and other natural resources sustainably across a region or ecosystem. The efforts are managed by organizations who engage in convening, financing, and/or implementing landscape initiative assessments using the LandScale tool.
[8] LandScale supported the landscape's agroforestry strategy development for addressing deforestation, promoting market access for cocoa and coffee producers through ecocertification, and creating synergies between community interests and regional sustainability goals. Cocoa producers and producer associations used the Lamas case as a component of product traceability to ensure its organic origin. They leveraged their participation in the LandScale process as a credential to showcase their product, supporting eco-certification to access global eco-markets. Similarly, discussions within the Coffee Technical Roundtable—a collaborative space addressing environmental and socioeconomic challenges in coffee production—highlighted LandScale's role in consolidating valuable information for decision-making. By helping producers and associations assess the conditions of their production areas, LandScale supports both cocoa and coffee sectors in meeting certification requirements and improving market access.
[9] LandScale's assessment framework is perceived as robust and well-aligned with local and international Environmental, Social, and Governance (ESG) approaches, like those promoted in regional public policies, and the Sustainable Development Goals (SDGs) relevant for the claims feature. It generates reliable information for current and potential investors. Discussions with avocado and berry producers indicated interest in using the LandScale metrics to demonstrate compliance with international sustainability standards to enhance their marketability and access premium markets. LandScale helped address essential questions related to the risk mitigation strategies (e.g. water scarcity or deforestation), linkages between various value chain initiatives, and alignment of local initiatives with prioritized landscape objectives or sectors, which provided a solid basis for private sector use and linking to global premium markets.

advance sustainable development goals. LandScale has also proven valuable for corporate users like Unilever, enabling them to align supply chain assessments with global sustainability standards while addressing deforestation risks. These examples highlight LandScale's ability to adapt to region-specific priorities and foster collaboration, reinforcing its potential to enhance sustainability across multiple areas and priorities.

Finding 2:

Landscape actors are motivated to engage in LandScale-based assessments and governance processes because it offers opportunities to: enhance market access and competitiveness (e.g. coffee and cocoa producers in Peru); attract climate finance and government investment (e.g. avocado and berry producers and businesses in Mexico); and participate in local governance for sustainable livelihood development (e.g. palm oil cooperatives and mercury-free fishing communities in Indonesia; communities in the Amazon Rainforest Reserve Zone in Colombia).[10]

Incentives for engagement with LandScale revolve around its role in enabling landscape governance to align stakeholders with shared sustainability goals while also unlocking market and investment opportunities.

Coffee and cocoa producers and businesses in **Peru's Lamas province** leverage LandScale to identify and demonstrate sustainable production practices, monitor deforestation, and prepare for eco-certification to access global eco-markets.[11] For example, Cooperativa Oro Verde has benefited from using LandScale to strengthen efforts to improve product quality for establishing sustainability claims to potential buyers.[12] Government stakeholders highlighted that LandScale indicators can guide regional investment priorities and foster public-private alignment, a functionality that NGOs see as advancing their collaboration goals with the private sector. GIZ supports financial interventions in the territories of San Martín, La Libertad, and Arequipa and plans to use LandScale to promote investment initiatives targeting prioritized sustainability gaps in collaboration with the regional government and aligned with the Lamas landscape goals. LandScale's compatibility with public policy instruments led to a Regional Ordinance mandating its use in regional planning.[13]

Similarly, in **Mexico's Sierra de Tapalpa**, avocado producers and businesses are incentivized by the opportunity to demonstrate environmental stewardship through reforestation and conservation practices for obtaining climate finance. In El Jazmín, LandScale contributed to identifying carbon credit projects and forest service payment opportunities, demonstrating its potential to help attract alternative finance.[14] Furthermore, farmer field schools in four municipalities helped organize producers, which made them eligible for investment from the Forestry Service in Guadalajara valued at 1.5 million Mexican Pesos in a single cycle (about USD 75,000).[15] Additionally, LandScale facilitated continued technical support from the Secretary of Agriculture and Rural Development of the State of Jalisco, allocating resources to producers for sustainable water distribution (valued at 200,000 Mexican Pesos, or approximately USD 10,000). LandScale played a key role in securing government funds for the

[10] Indicative Score 1 of evidence strength.
[11] Cf. Footnote 8.
[12] It should be noted that the claims were not yet validated at the time of writing this report.
[13] The Ordinance had yet to be implemented, but challenges were already evident, as its execution required both familiarity with LandScale and sufficient resources for the regional government to use the platform effectively.
[14] LandScale provided a structured framework and credible data that helped local stakeholders in El Jazmín uncover potential carbon credit projects and forest service payment schemes. By systematically analyzing landscape conditions—such as deforestation rates, land-use patterns, and stakeholder engagement—LandScale illuminated opportunities for alternative finance. The Youth Reforestation Initiative, funded by carbon credit revenues, enabled youth to cultivate 40,000 tree plants. In addition to receiving training and compensation, these youth learned responsible forest management practices. Such endeavors highlight the financial, social, and environmental sustainability of community-driven models for forest services.
[15] The LandScale program provided practical training and peer learning opportunities, primarily through Farmer Field Schools (a FAO methodology) that identified common challenges and co-developed curricula and plans with participants for interactive sessions where participants exchange knowledge. Across four municipalities, producers gained practical skills and organized to pursue sustainable practices. With technical assistance and a clear monitoring framework enabled by LandScale, these produvìcers became attractive candidates for finance. FIPRODEFO (Forestry Service in Guadalajara) invested after seeing their ability to credibly measure sustainability outcomes. Similarly, the Secretary of Agriculture and Rural Development of the State of Jalisco provided ongoing technical support and resources for water distribution. LandScale played a structured approach and evidence-based reporting, demonstrating to funders that producers could manage resources responsibly and track results effectively. Investors viewed the initiative as lower-risk and aligned with sustainable development goals. Ultimately, LandScale proved to be a valuable tool for informing and leveraging finance mechanisms.

biocultural landscape by helping landscape stakeholders answer decision-makers' questions related to the priority issues needing investment, impact measurement of investments, and communication of results. While LandScale's functionality for linking specific actions or projects to investors is not yet fully automated, the upcoming 2.0 version of the platform may offer further potential for streamlining these processes. New use cases such as customizable assessments and data outputs for carbon credits, climate adaptation, and supply chain integration projects could expand market access for sectors like avocado and berries by demonstrating compliance with international sustainability standards, further enhancing LandScale's value for the Landscape Initiative.

In **Colombia's Piedemonte Amazonico**, poor infrastructure and ongoing socio-political challenges, rooted in a colonial history and internal armed conflict, limit communities' fair market access and fuel land use conflicts, perpetuating chronicle inequality and poverty. Commercial cash cropping and unsustainable agricultural practices have degraded the land, while security issues hinder environmental initiatives, making it difficult to build trust and unite communities, authorities, and private sector actors around collective sustainability goals and priority actions. Communities in the Caquetá region, such as Belén de los Andaquíes or San Vicente del Caguán, were initially hesitant to participate in the LandScale baseline data gathering due to concerns about how the information would be used. However, once they recognized that it provided a better understanding of territorial and landscape dynamics and revealed opportunities for collaboration to address land use conflicts and develop agriculture that is both profitable and sustainable, trust began to grow. This encouraged their engagement not only in data collection but also in decision-making and stakeholder mobilization for concerted action. As a result, organizations overseeing agricultural development in the region, such as Corpo Amazonía, have been able to participate more effectively and better represent the stakeholders they serve.

In **Indonesia's Sintang district** (West Kalimantan), consolidation of available public and non-governmental datasets with LandScale data in a Collaborative Landscape Action Plan (CLAP) has proven effective in aligning sustainable socio-economic development efforts of government, private sector, and civil society, incentivizing engagement in local governance and decision-making. The LandScale data highlighted the risks of deforestation and land-use change, linking them to economic pressures, illegal activities, and climate-related impacts. It identified key economic dependencies on forest resources and suggested sustainable livelihood alternatives. This informed government decision-making for jurisdictional conservation and HCP management, ensuring long-term sustainability efforts. Indigenous groups acknowledged LandScale's role in highlighting landscape changes but emphasized that economic pressures forced them into palm oil expansion despite conservation goals. Palm oil cooperatives used LandScale-related data to promote sustainable palm oil production, training farmers on sustainable practices to obtain RSPO certification (Roundtable on Sustainable Palm Oil) leading to better market access and improved economic opportunities. The Civil Society Communication Forum (FKMS) used LandScale data to drive Rimba Gupung recognition, leading to the issuance of 21 decrees supporting indigenous land rights. Focusing on developing community- and nature-based production, the Sintang-based innovation and production center, Semesta Sintang Lestari, leveraged LandScale to identify mercury-free lakes for sustainable fish processing, promoting localized sustainable livelihoods.[16] New use cases such as trends analysis across ecosystem, welfare, and protected area management pillars could further enhance LandScale's utility for the Sintang landscape initiative and expand opportunities for engagement (e.g. water-related interventions by organizations like WWF).

[16] Mercury contamination from gold mining activities, industrial waste, and environmental pollution, threatens aquatic life and human health. Identifying mercury-free lakes in Sintang is crucial for ensuring safe, sustainable fish processing. Preventing contamination during handling and preservation (i.e. Mercury-free fish processing) is vital for pregnant women and children who are more susceptible to mercury toxics. Using LandScale indicators such as iron (Fe) content and Total Suspended Solids (TSS), the Sintang Landscape Initiative addresses fish pollution to safeguard public health. LandScale data helps trace contamination sources and identify community-based protected lakes (per the Regent's Decree). The local Landscape Initiative and LandScale team has provided information and advice to Semesta Sintang Lestari (SSL) for the design of a strategy on the prevention of stunting through healthy local food production.

3.1.2 Functionality and business viability

Finding 3:
LandScale's searchable data platform, adaptable tools and indicators, and step-wise guidance enable streamlined sustainability assessments and visualizations aligned with global standards, fostering collaboration, and impact tracking across diverse geographies.[17]

LandScale's searchable data platform and adaptable tools streamline sustainability assessments by integrating and aligning diverse data sets with global standards. The platform provides reliable information on landscape initiatives' partners, stakeholders, collective goals, and level of maturity, alongside holistic sustainability assessment results across ecological, social, economic, and governance indicators.[18] It also provides access to the landscape initiatives' assessment and activity monitoring reports, action plans, and funding needs. This helps stakeholders and potential investors gain a clear understanding of progress towards landscape sustainability and impact, and creates visibility for good practices and contributions to collective goals. LandScale's stepwise guidance helps clarify roles and reduce ambiguity, while its geo-localization streamlines area-specific workflows and improves accessibility, enhancing its relevance for diverse users and contexts. LandScale's assessment framework is perceived as robust and well-aligned with international environmental, social, and governance (ESG) standards as well as the Sustainable Development Goals (SDGs). LandScale's digital platform also contributes to building public awareness about the importance of sustainable landscape governance and the need for collaboration among public and private actors and communities to improve landscape health and sustainability.

In **Peru's Lamas province**, these features enabled public, private, and community stakeholders to establish a common framework for collaborative planning and monitoring of long-term actions to address critical landscape sustainability gaps and assess the impacts of sustainable development projects. LandScale's functionality is highly valued for its ability to allow stakeholders to develop a common understanding of the landscape conditions, which is critical for cohesive planning and strategy development. The use of georeferenced maps and the infographics created by the LandScale assessment teams allows for clear data visualization, enabling stakeholders to make informed decisions and identify critical intervention areas. By offering real-time visualization and linking data to public conservation policies and strategies, LandScale facilitates consensus building for long-term action. By delivering reliable sustainability data, the platform enables public decision makers and investors to identify priority investment areas and opportunities for conservation and sustainable development within the landscape, aligning public and private sectors to foster sustainable development investment. Periodic monitoring of variable trends and outcomes demonstrates progress in closing sustainability gaps by policies and investment initiatives implemented in the territory.

In **Mexico's Sierra de Tapalpa**, the LandScale platform and process empowered private, public, and community stakeholders to collaboratively design a Biocultural Landscape Model (as an alternative for Protected Natural Areas) through structured dialogues resulting in a collective vision and action plan for the Tapalpa territory. It helped identify the diverse stakeholders involved in the landscape territory—such as ejidatarios,[19] avocado producer groups, poultry businesses, agribusiness, women groups, churches, companies, local and regional governments, and intermunicipal boards—and how to engage and influence them, and spark interest and encourage resource contributions from the communities. LandScale's operational and technical guidance helped clarify stakeholders' roles and individual and collective contributions towards achieving the shared vision and goals, and coordinate and monitor the sustainable agriculture and biodiversity conservation efforts alongside agreed ecological, social, and economic indicators. It facilitated informed and transparent decision-making, fostering trust among stakeholders as the foundation for their collaboration. This enabled them to demonstrate positive outcomes in biodiversity conservation and sustainable production practices alongside improvements in community wellbeing, while also delivering integrated reporting aligned with frameworks like ESG and SDGs.

[17] Indicative Score 1 of evidence strength.
[18] LandScale's pillars are: ecosystems, human well-being, governance, and production.
[19] Reference from the Collins dictionary: Ejidatario is a member of an ejido, an area of communal land used for agriculture in which community members have usufruct rights rather than ownership rights to land, which in Mexico is held by the Mexican State.

The **Piedemonte Amazonico in Colombia** is a complex region where the availability of anonymous data can support and facilitate the development of new initiatives and further information gathering in the territory, bringing together various stakeholders (producers, local authorities, civil society organizations) and enabling accurate responses to the complex and conflict-prone sustainability challenges of the landscape. A key aspect is the inclusion of community knowledge in the data collection process. Obtaining reliable information is challenging yet crucial in the context of Piedemonte Amazonico to enable stakeholders to build shared understanding of the complex production structures and power dynamics among the various landscape actors. Sensitive to the security issues and the risks for communities to be exposed to armed groups, LandScale's adaptable tools and indicators allowed for informal and qualitative information gathering that avoided compromising them. Furthermore, spatialized and georeferenced data is found useful for addressing land-use conflicts and aligning local governance strategies with real-time environmental and social dynamics. LandScale-generated insights helped communities, local authorities, and private sector actors in the landscape territories understand environmental challenges and governance conditions, fostering trust-building and informed decision-making at the local level.

In **Indonesia's Sintang district**, the LandScale features facilitated evidence-based collaborative planning by local government, private sector, and civil society, based on an integrated analysis of available public and non-governmental datasets and gap-filling LandScale data. Furthermore, they enabled collaborative monitoring of localized, food security-related socio-economic development opportunities (such as mercury-free fish processing livelihoods), providing stakeholders with deeper and shared insights into the landscape dynamics. LandScale's structured approach allows for standardized data collection and analysis on contextualized environmental, social, and economic indicators relevant to the local realities and regional priorities, empowering local actors to actively participate in governance and decision-making processes. By integrating diverse contributions from government, private sector, and civil society, the LandScale assessment enhances recognition of shared responsibilities in sustainable landscape management.

Finding 4:

LandScale's complex metrics/tools and validation requirements, lengthy and time-consuming assessments, inconsistent data displays and bugs, language barriers, and visualization limitations make it hard for communities, businesses, and funders to remain engaged.[20]

In **Peru's Lamas province**, LandScale's validation requirements and maturity index are found too complex, hindering adoption among coffee and cocoa producers striving for eco-certification and leading to funders and partners to withdraw. For organizations like Helvetas, the technical validation process of the data has proven to be a significant challenge, making it difficult to balance the effort required with the benefits of validated information. To local stakeholders, the maturity index is difficult to understand and adapt to the local context and has little perceived value, serving merely as a reference for comparing landscape initiatives. Language barriers were also a limitation, not only for customers and buyers, but also for local government and decision makers. Strengthening LandScale's business case requires involvement from the local academic sector to help simplify and adapt its metrics and formats to the local context, lift the language barrier, and provide localized, culturally relevant training and support. Clearly profiling its various users in the landscape—i.e. actual and potential customers and buyers involved in landscapes' value chains, investments, and governance—and understanding their short- and longer-term needs is essential to encourage uptake and ownership.

Similarly, in **Mexico's Sierra de Tapalpa**, urbanization and unregulated tourism strain the Sierra de Tapalpa Landscape, but LandScale's complex interface and tools, limitations in visualization, and language barriers hinder collaborative engagement from landscape stakeholders, excluding smaller organizations and rural communities. Stakeholders also highlighted the need to enable visualizations of master plans (strategies that outline how specific sites should be managed from a tourism perspective) and individual sustainability contributions (such as water collection practices and agrochemical recycling) on the LandScale portal for their landscape. The system does not allow them to individually access the platform and upload their contributions discussed in the Local Committee meetings, which limits their ability to look for support and investment**.** As a

[20] Indicative Score 2 of evidence strength.

result, these local initiatives rarely make it through the LandScale system. The 'Who is Involved' section of the platform could be expanded to allow for such uploads, particularly from local communities to amplify recognition of their efforts, which is an important incentive for them to engage with LandScale. Most importantly, stakeholders have yet to take real ownership of LandScale, making it unlikely they will continue using the platform independently without Rainforest Alliance's or consultants' support, unless existing barriers and limitations are addressed.

In **Colombia's Piedemonte Amazonico**, generating data, charts, and maps is crucial for understanding the territory, but it must incorporate localised and contextualised information in the local language (Spanish) to enable stakeholders to understand and identify with the information and feel motivated to engage in the landscape initiative. In communities like San Vicente del Caguán and Cartagena del Chairá, cattle ranching expansion persists, and without accessible and up-to-date information, advocating for more sustainable practices remains challenging. Infrequent data updates reduce relevance for real-time decision-making, while reliance on outdated public datasets and formal data creates information gaps and erodes user confidence. Stakeholders also highlighted the need for qualitative sources, such as community testimonies, to provide deeper insights. Incorporating real-time data and alternative datasets—community-based information and qualitative narratives—would enhance reliability, relevance, and applicability, strengthening LandScale's role in sustainable landscape management.

In **Indonesia's Sintang district**, inconsistent data displays, misaligned indicators, and insufficient phased steps to assessments obstruct the integration of LandScale into key initiatives like the Collaborative Landscape Action Plan (CLAP). Challenges in alignment with evolving policy terminology and national policies such as the Single Data Policy (i.e. Indonesia's official data standardization and integration for accurate, accountable, and accessible governance) limits LandScale's use for influencing policy making. While LandScale provides a valuable foundation for collaborative governance and sustainability monitoring, its complex technical interfaces and data inconsistencies obstruct full adoption among landscape stakeholders, underscoring the need for simplified metrics, improved data consistency, accuracy and alignment, phased and user-tailored assessment approach, and localized training.

At the **global level**, the updated LandScale 2.0 version (forthcoming in 2025)—is expected to enhance accessibility by providing spatially explicit data and visualizations, which are critical for decision-making across geographies. This is particularly relevant for local actors. For example, in Peru's Lamas province, actionable insights into landscape dynamics can bridge technical gaps for coffee and cocoa producers aiming to meet eco-certification standards. By making data and tools more adaptable to user needs, LandScale increases its applicability across, reinforcing its role in sustainable landscape management.

Finding 5:

LandScale consolidates data effectively, aiding decision-making across the landscape, but its potential for local producers, businesses and policy makers remains underutilized due to the unavailability of customizable tools for market and finance linking, ecosystem service valuation, investment calculation, and alignment with evolving policy terminology.[21]

LandScale consolidates data to support sustainable decision-making across landscapes, but its potential for producers, businesses, and policymakers remains underutilized due to limited adoption of claim-based customizable solutions.

In **Peru's Lamas province**, LandScale's georeferenced maps have the potential to enhance decision-making by identifying priority areas for planning and facilitating alignment between public and private sector strategies. However, LandScale's ability to connect local initiatives to global markets and investment platforms remains underutilized. While it creates visibility for projects like Cooperativa Oro Verde, stakeholders note that claims have not achieved concrete results, highlighting the need to link LandScale data to financial investment platforms and markets. Additionally, the platform has the potential for improved alignment of policies with broader

[21] Indicative Score 2 of evidence strength.

sustainability frameworks, fostering regional coordination and cross-landscape learning. Expanding customization for investor needs and integrating policy tools could greatly enhance its adoption, effectiveness, and global impact.

In **Mexico's Sierra de Tapalpa**, LandScale has the potential to enhance long-term climate resilience through monitoring long-term landscape-level adaptations and identification of high-risk water-stressed zones to align local adaptation measures with broader resilience-building efforts. Furthermore, it has also shown potential for identifying and leveraging carbon credit opportunities, providing stakeholders with avenues to finance sustainability initiatives. A community dashboard facilitating real-time decision-making, a marketplace feature linking local avocado and berry producers who comply with international sustainability standards to premium markets, and an investment calculator quantifying forest ecosystem service benefits and required investments, would further significantly improve LandScale's functionality and utility for the communities, fostering sustained engagement. Local producers reported that, while they have learned a great deal through the LandScale process, their participation is often limited due to time constraints, as workshops and meetings take them away from their daily work. Creating a dedicated space in the form of a community dashboard that highlights community contributions and the landscape initiatives' benefits and impact on their livelihoods could significantly enhance communities' engagement with the platform. A detailed visualization of territorial priorities for sustainable agriculture and ecosystem services, and of stakeholders' individual sustainability contributions would further help build (even greater) transparency, collaboration and trust among the landscape stakeholders.

In **Colombia's Piedemonte Amazonico**, stakeholders emphasized the importance of having visual tools, such as dashboards and infographics, which make complex data more comprehensible. These tools are essential for collaborative engagement and decision-making. Expanding interactive dashboards, scenario modeling features, and infographics would improve data interpretation and accessibility for all users. The Management Team acknowledges that LandScale, in the case of Colombia, has not been able to reach its full potential due to these types of constraints and the lack of georeferenced information—as indicated by stakeholders from Corpo Amazonía, who see an obstacle in not being able to locate the data that has been collected.

In **Indonesia's Sintang district**, LandScale aligns governance and local economic development through the CLAP. Still, usability issues and limitations were reported to limit broader and sustained engagement. Informants noted that better alignment of LandScale's offerings and functionalities with evolving policies (e.g. the Single Data Policy), commodities, investment- and market-linking needs could enhance the measurement of governance outcomes and increase stakeholder collaboration. While stakeholders recognize the platform's value in fostering collaboration and enabling data-driven decision-making, its potential to link sustainability metrics with financial investments and market opportunities remains largely untapped, underscoring the need for customized tools and localized training. Additionally, stakeholders noted that its limited focus on five key commodities restricts broader private sector engagement, which is critical for the Sintang landscape coalition to achieve its holistic sustainable socio-economic development goals. To ensure sustained stakeholder engagement, streamlined data updates, improved alignment with evolving policies, and expanded functionality to facilitate broader private sector engagement and market and investment linking will be critical.

3.2 Effectively Engaging and Benefiting Communities

Box 2: Main findings responding to the second evaluation objective and related questions

Community engagement:

6. LandScale engages communities through shared baseline assessments, participatory planning and monitoring, peer learning, and targeted communication, fostering trust, ownership, and sustained participation in landscape governance.
7. The complexity of LandScale's interface and statistical data alienates communities, highlighting the need for a more inclusive, user-friendly display with explanatory narratives, along with ongoing feedback loops,

training, and culturally relevant communication through local leaders.

Sustainability and scalable impact:

8. Active and sustained stakeholder engagement generating tangible benefits and facilitating access to finance for communities, businesses and ecosystems is crucial for achieving long-term sustainability and scalable impact in the landscapes.

3.2.1 Community engagement

Finding 6:
LandScale engages communities through shared baseline assessments, participatory planning and monitoring, peer learning, and targeted communication, fostering trust, ownership, and sustained participation in landscape governance.[22]

In **Peru's Lamas province**, indigenous communities and local governments engaged in the LandScale baseline data collection, fostering participatory planning and alignment of sustainability goals with regional and local priorities. By integrating community perspectives into a shared baseline, the platform helped build ownership and trust while ensuring locally relevant and effective sustainability initiatives. LandScale also empowers communities to actively participate in landscape governance and decision-making by providing data that enhance their understanding of landscape changes. The producer association FEPIKRESAM acknowledges LandScale's critical role in engaging local actors in knowledge generation, enabling more organized advocacy efforts and amplifying communities voices in decision-making and planning processes, strengthening local governance.

In **Mexico's Sierra de Tapalpa**, LandScale facilitated local community engagement in the landscape's sustainability assessments and ongoing monitoring. Local producers in Tapalpa participated in workshops and contributed valuable data on land use, which helped shape the joint action plan and strategies for Sierra de Tapalpa Biocultural Landscape. This engagement has strengthened local communities' capacity and motivation to participate in territorial planning decisions and take an active role in the governance of their landscape. Targeted communication strategies using social media (e.g. WhatsApp groups and Facebook campaigns) and printable data visualizations (e.g. infographics created by the LandScale assessment teams) further help to sustain community engagement in landscape governance and action, while successfully mobilizing communities and other stakeholders to pursue sustainable tourism (among others). Stakeholder feedback highlighted the need to enhance the participation of the different generational groups in the LandScale processes and trainings to foster cross-generational learning and stewardship while ensuring that traditional environmental knowledge, complementing LandScale's data-driven insights, is retained and integrated into conservation efforts.

In the **Colombian Piedmonte Amazonico**, a large number of producers, especially cocoa farmers, operate in the region. This poses a significant challenge in engaging them in the Landscale data collection process. However, participatory spaces successfully convened key stakeholders representing producers within the area of interest. As a result, the baseline accurately reflects the realities of the Piedmont, and the messages generated are clear, relevant, and embraced by the community. Nevertheless, according to COMICACAO—the Committee of Cocoa Growers in Agroforestry Systems of the Municipality of San Vicente del Caguán that collaborates with numerous Indigenous, Afro-descendant, and youth organizations—a significant gap in population representation persists in these spaces, particularly for those living in more remote areas of the territory. Strengthening community participation in data collection and analysis fosters a sense of ownership and enhances local governance practices. While participants recognized progress in collaboration, they emphasized the need for more equitable and inclusive engagement processes to ensure community perspectives are fully integrated.

[22] Indicative Score 1 of evidence strength.

In **Indonesia's Sintang district**, the LandScale assessment integrated traditional knowledge and insights on local ecosystems—such as micro-hydro electricity access and traditional agricultural practices—from indigenous communities and farmer groups across five commodities. Palm oil farmers contributed detailed information on land use and cultivation impacts. This type of knowledge and information cannot be found in public records. The assessment team contextualized environmental, social, and economic indicators, ensuring their local economic and cultural relevance. This helped build shared understanding among local stakeholders and enabled local communities to engage in landscape governance and decision making. LandScale's structured approach allows for standardized data collection and analysis on contextualized environmental, social, and economic indicators relevant to the local realities and regional priorities, empowering local actors to actively participate in governance and decision-making processes.

Finding 7:

The complexity of LandScale's interface and statistical data alienates communities, highlighting the need for a more inclusive, user-friendly display with explanatory narratives, along with ongoing feedback loops, training, and culturally relevant communication through local leaders.[23]

Complex statistical data often alienates communities, creating a significant barrier to their meaningful engagement in landscape initiatives. As already mentioned earlier, stakeholders in **Mexico's Sierra de Tapalpa** noted that the reliance on technical metrics and complex statistical outputs undermines accessibility, particularly for rural communities and smaller organizations with limited technical capacity. Traditional knowledge plays a crucial role in environmental conservation and climate adaptation—for instance, local (and indigenous) communities have historically used their understanding of local ecosystems to predict weather changes and manage natural resources sustainably—but tends to be excluded in favor of statistical data and standardized formats that don't resonate with communities. This underscores the need for a more inclusive and user-friendly interface with narratives that explain and contextualize quantitative data.

In **Peru's Lamas province**, eco-certification for coffee and cocoa producers highlights the need for accessible data that can drive economic opportunities. LandScale's statistical outputs and technical tools insufficiently meet this need. To improve its accessibility and enhance community engagement, functionality improvements are urgently needed with support from the local academic sector, including: simplification of LandScale's metrics and data presentations (e.g. infographics, maps); translation of content into local languages; provision of localized, culturally relevant training and support to enhance data literacy and uptake among the communities; creation of feedback loops to ensure LandScale assessments include community-specific metrics directly relevant to local priorities and capture crucial local/traditional knowledge; and targeted communications provided by local leaders and organizers to ensure communities remain engaged and are empowered to drive sustainable development effectively.

LandScale has the potential to empower local communities of **Piedemonte Amazonico in Colombia** to participate in landscape management, but barriers remain. The interface established by the assessment experts included clearly formulated and well-explained qualitative questions centered around the purpose of the data collection. However, gathering hard data proved to be challenging, even from available information sources, and much of the necessary data was not accessible. Communities reported frustrations with data being too generic or outdated, limiting its usefulness for real-time decision-making. The rigid structure of LandScale's metrics often excludes locally generated or informal data, making it less relevant to community-specific contexts. The platform's complexity presents barriers to local users with limited technical expertise, such as rural communities and local producers. Simplifying the interface and enhancing usability through localized training and capacity-building could improve accessibility. While recognized as important, the effective integration of local and indigenous knowledge needs further improvement. Progress can be made by providing clearer guidelines, simplified tools, and potential incentives for knowledge sharing to encourage contributions from local communities.

[23] Indicative Score 2 of evidence strength.

Similarly, in **Indonesia's Sintang district**, stakeholder feedback highlighted that statistical data don't resonate with the local communities whose interest lies in tangible livelihood improvements and market access. The disjointed presentation of indicators and inconsistent data displays have been critiqued for lacking clarity, further hindering their usability and alignment with local knowledge systems. A tailored communication strategy, emphasizing actionable and relational insights, is necessary to facilitate meaningful community engagement. Field organizers and community leaders can play a pivotal role by translating LandScale's findings into practical actions and behavioral changes, fostering community-driven sustainable development in the Sintang landscape.

3.2.2 Long-term landscape sustainability and scalable impact

Finding 8:
Active and sustained stakeholder engagement generating tangible benefits and access to finance for communities, businesses and ecosystems is crucial for achieving long-term sustainability and scalable impact in the landscapes.

LandScale drives long-term sustainability and impact by fostering multi-stakeholder collaboration that aligns diverse actors—communities, businesses, governments, and civil society—around shared landscape sustainability goals. As we have seen in Sections 3.1.1, LandScale's ability to foster multi-stakeholder efforts that generate tangible economic, social, and ecological benefits is essential for sustained stakeholder engagement.

In **Mexico's Sierra de Tapalpa**, LandScale incentivizes multi-stakeholder initiatives that support biodiversity conservation, creating opportunities for avocado and berry producers and businesses to access climate finance and premium markets. Similarly, in Peru's Lamas Landscape, the platform enables public, private, and community stakeholders to collaboratively develop agroforestry strategies to combat deforestation while promoting market access for coffee and cocoa producers and creating synergies between community interests and regional sustainability policies and frameworks. In **Colombia's Piedemonte Amazónico**, LandScale facilitates multi-stakeholder engagements related to sustainable agriculture and forestry and mitigating security risks for the communities in the landscape initiative's protected areas, which to date have not yet generated concrete benefits, making their incentives to remain engaged fairly weak. In **Indonesia's Sintang district**, LandScale fosters multi-stakeholder governance that aligns local socio-economic development priorities with environmental goals, creating sustainable livelihood opportunities such as mercury-free fish processing.

Across all landscapes, stakeholders confirmed that LandScale helps them to not only measure and understand but also develop and implement sustainability improvements in collaboration with each other and with respect for the local identity and cultural heritage, which contributes to local community cohesion and wellbeing. This demonstrates that tying sustainability to clear social, economic and livelihood benefits is key to long-term engagement. It means or requires initiating a process of engagement with the community, identifying relevant stakeholders, and gathering information that may or may not be readily available. In the long run, this becomes the beginning of both a technical and trust-building process with the community, which must have sufficient time and demonstrate potential positive outcomes for the stakeholders involved.

Access to finance and investment is a critical driver for sustained stakeholder engagement. LandScale facilitates this by linking sustainability practices to funding opportunities, as seen in **Mexico's Sierra de Tapalpa**, where stakeholders accessed carbon credit projects, forestry service investments, and water distribution support primarily through RA's direct involvement rather than through the use of LandScale itself. Access to finance and markets incentivized local communities to engage in sustainability initiatives and adopt conservation practices. However, stakeholders also highlighted the need for better LandScale functionality to directly connect actions with financial platforms, emphasizing the importance of streamlined customizable tools to attract investments and enhance the scalability of landscape-level interventions.

As further discussed in Sections 3.1.2 and 3.2.1, **active and sustained stakeholder engagement** depends on the accessibility and utility of the LandScale platform and tools to monitor and demonstrate their sustainability contributions, and connect to bigger investors and markets to generate benefits and impact at scale. Critical in this respect is to: (a) overcome the technical, cultural and language barriers for communities to engage with the

LandScale data and processes; (b) address user needs for visualization of stakeholders' sustainability contributions and investment needs; and (c) find a delicate balance between rigour and feasibility of the assessment and validation tools and processes to timely meet partners' and funders' needs and keep them engaged. Across all landscapes, stakeholders and particularly communities emphasized the importance of simplification, integrating local knowledge, and providing ongoing training and feedback loops to overcome barriers, ensuring that LandScale's tools, processes and data outputs resonate with community realities and support informed decision-making.

3.3 Clarifying LandScale's Unique Value Proposition (UVP)

Box 3: Main findings responding to the third evaluation objective and related questions

Landscape-level UVP:

9. LandScale drives long-term sustainability and impact by fostering inclusive multi-stakeholder collaboration to monitor and address sustainability gaps, generating tangible benefits and empowerment opportunities for local/indigenous communities, businesses, and specific groups such as women and youth.
10. LandScale provides a structured and integrated approach for tracking and improving landscape sustainability through technical assessments and multi-stakeholder engagements supporting agroforestry and biodiversity conservation initiatives, fostering public-private sector alignment, and enabling private sector actors to adopt sustainability measures incrementally.

Global UVP:

11. LandScale fosters sustainable landscape governance and investment by supporting sustainably commodity development and market linking—e.g. through enhanced readiness for certification (Peru), improved climate-resilient farming for climate finance (Mexico), and improved alignment of fisheries with mercury-free policies (Indonesia).
12. LandScale is uniquely well positioned to support compliance with global corporate sustainability frameworks like TCFD and TNFD, helping companies demonstrate sustainability impacts by enhancing self-reporting credibility through phased verification aligned with corporate disclosure needs.

3.3.1 LandScale's landscape-level UVP

Finding 9:
LandScale drives long-term sustainability and impact by fostering inclusive multi-stakeholder collaboration to monitor and address sustainability gaps, generating tangible benefits and empowerment opportunities for local/indigenous communities, businesses, and specific groups such as women and youth.[24]

The collaborative governance model of **Mexico's Sierra de Tapalpa Biocultural Landscape** demonstrates the potential of linking biodiversity preservation with market-driven incentives, and of integrating ecological stewardship with women's and youth's empowerment. Producers of high-value crops like avocados and berries benefit from eco-certifications while mitigating environmental degradation. The 'Happy Egg' initiative reported increased self-sufficiency and leadership opportunities for women, and youth reforestation efforts exemplify successful generational inclusion, showing the potential for scalable empowerment projects contributing to ecological restoration. The landscape's collaborative governance model further embed sustainability into public policy frameworks, fostering coordinated action across regional and local scales.

[24] Indicative Score 1 for evidence strength.

In the **Piedmonte Amazonico of Colombia**, the LandScale assessment process raised local awareness of existing information on landscape dynamics and created a space for local communities, authorities, and private sector actors to collectively discuss sustainability issues, build trust, and formulate evidence-based arguments for policy-making. This shows that even in highly complex, conflict-prone areas, LandScale can foster inclusive collaboration for sustainability, potentially benefiting and empowering local and indigenous communities. However, greater effort is needed to account for the region's unique production and power structures and better represent/include the diverse indigenous, Afro-descendant, and youth groups.

In **Peru's Lamas province**, LandScale's integration with local governance frameworks has fostered collaboration among public, private, and community stakeholders to promote sustainable agroforestry and eco-certifications for coffee and cocoa producers, effectively addressing deforestation and socio-economic development challenges of in a balanced and integrated way. In **Indonesia's Sintang district**, LandScale has been pivotal in advancing the "Sustainable Sintang" framework, which integrates production, governance, and ecosystem preservation. By supporting localized initiatives like the CLAP and mercury-free fish processing, LandScale ensures that sustainability goals translate into tangible socio-economic benefits. The integration of LandScale also enables decision-makers to align indicators with national priorities.

These cases demonstrate how LandScale's adaptability and focus on stakeholder inclusivity create scalable models for integrating sustainability into local governance that generate tangible benefits and empowerment opportunities for local/indigenous communities and businesses and specific groups such as women and youth, fostering long-term impact for people, nature, and economies.

Finding 10:

LandScale provides a structured and integrated approach for tracking and improving landscape sustainability through technical assessments and multi-stakeholder engagements supporting agroforestry and biodiversity conservation initiatives, fostering public-private sector alignment, and enabling private sector actors to adopt sustainability measures incrementally.

LandScale fosters governance alignment by integrating technical assessments with multi-stakeholder engagement to support sustainability and decision-making. In **Peru's Lamas province**, the platform enables collaboration among local governments, academia, and indigenous communities to address deforestation and socio-economic challenges through data-driven agroforestry initiatives, fostering coffee and cocoa market access while aligning with regional development goals. Similarly, in **Mexico's landscape**, LandScale facilitates partnerships that integrate biodiversity conservation and sustainable agriculture into public governance frameworks. In the **Colombian Piedemonte**, the LandScale assessment process fosters collaboration by providing a safe space for local communities, authorities, and private sector actors to build a shared understanding of the region's complex production and power structures and discuss sustainability threats, creating opportunities for profitable and sustainable native agriculture in the fragile and complicit-prone territories of the Amazon Rainforest Reserve Zone.

This approach strengthens ecological resilience while engaging private sector actors through premium certifications and aligning tourism management with policy objectives. In **Indonesia's Sintang Regency**, LandScale advances governance coordination by embedding its assessments within the "Sustainable Sintang" framework, which aligns stakeholder priorities with Indonesia's Single Data Policy. Multi-stakeholder contributions are exemplified in projects like mercury-free fish processing, which integrate local economic development with sustainability goals. These examples highlight how LandScale's structured assessments and collaborative processes enable landscapes to harmonize governance efforts with environmental and socio-economic priorities.

Private-sector actors leverage LandScale to incrementally adopt sustainability measures by aligning their business priorities with eco-certifications, market access, and collaborative governance. In **Peru**, coffee and cocoa producers focus on eco-friendly certifications, which not only enhance competitiveness in international markets but also support regional economic growth (Cooperativa Oro Verde). Similarly, in **Mexico**, high-value crop sectors like berries and avocados and real estate developers, adopt sustainable agricultural and construction practices by accessing premium markets through certifications and CSR acknowledgments,

progressively improving competitiveness while fostering environmental stewardship. In **Indonesia**, collaborative governance efforts, such as integrating local knowledge and public policy frameworks, enable gradual alignment with sustainability goals, ensuring a stepwise transition to sustainable landscape management (SSL). This phased approach addresses technical complexities, such as platform usability and training gaps, while fostering private-sector engagement through achievable, market-driven sustainability benchmarks.

3.3.2 LandScale's global UVP

Finding 11:
LandScale fosters sustainable landscape governance and investment by supporting sustainably commodity development and market linking—e.g. through enhanced readiness for certification (Peru), improved climate-resilient farming for potential climate finance (Mexico), and improved alignment of fisheries with mercury-free policies (Indonesia).[25]

LandScale has consistently proven its ability to foster sustainable landscape governance by supporting commodity-focused sustainability initiatives and enabling market linkages. For instance, in Peru, LandCale was leveraged as a credential to showcase coffee and cocoa producers' product, supporting eco-certification to access eco-certifications, increasing competitiveness in global markets while simultaneously driving regional economic growth. In Mexico, LandScale has enabled climate-resilient farming, empowering farmers and cattle ranchers to access climate finance by showcasing stewardship practices like reforestation and sustainable livestock farming . In Indonesia, its focus on mercury-free policies has strengthened fisheries management, directly benefiting fish processors and aligning local practices with national sustainability goals.

Global informants emphasized that LandScale's structured and incremental approach makes it adaptable to diverse commodity landscapes, from high-value coconut systems in the Philippines to biodiversity-critical corridors in Kenya. By integrating governance and market priorities, LandScale enhances accountability while attracting investments for scalable, sustainable practices. Furthermore, its ability to consolidate data across production, ecosystem services, and governance enables stakeholders to create collaborative roadmaps for long-term sustainability. This adaptability to complex socio-ecological systems positions LandScale as a valuable tool for addressing both market-driven and governance-oriented sustainability demands.

Finding 12:
LandScale is uniquely well positioned to support compliance with global corporate sustainability frameworks like TCFD and TNFD, helping companies demonstrate sustainability impacts by enhancing self-reporting credibility through phased verification aligned with corporate disclosure needs.[26]

LandScale's potential alignment with global corporate sustainability frameworks like the Task Force on Climate-Related Financial Disclosures (TCFD) and the Taskforce on Nature-Related Financial Disclosures (TNFD) presents an opportunity to attract corporate attention and drive investment in landscapes by enabling companies to demonstrate measurable impacts. Stakeholders interviewed by this evaluation emphasized that LandScale is uniquely well positioned to provide the structured, credible sources for disclosure required to meet these frameworks' requirements. This will gain exponential pertinence under the increasing global regulatory pressure for transparency and accountability.

Stakeholders underscored the platform's capacity to align metrics with corporate sustainability goals such as carbon sequestration and deforestation tracking, which are crucial for Green Bond issuance and sustainability-linked loans. Practical examples include how landscapes focusing on biodiversity corridors (in Kenya and Mexico), sustainable agroforestry (in Peru), and community-led conservation (in Vietnam) use LandScale to systematically monitor outcomes like land restoration, water security, and livelihood improvements. To enhance LandScale's reach, stakeholders suggest the adoption of modular tools, enabling companies to start with self-reporting metrics and gradually move to full validation as capacity grows. This stepwise approach lowers

[25] Indicative Score 1 of evidence strength.
[26] Indicative Score 1 of evidence strength.

adoption barriers for under-resourced landscapes while catering to private sector users needing alignment with strict corporate disclosure frameworks.

Additionally, stakeholders highlighted the growing demand for real-time insights and data sharing, with calls for GIS mapping and hotspot visualization tools, which the forthcoming LandScale 2.0 version scheduled for release in 2025 aims to address. The new version of LandScale can foster peer-to-peer learning through partnerships like the "1,000 Landscapes for 1 Billion People" initiative and the Tropical Forest Alliance maps, providing stakeholders with actionable insights that integrate local and global priorities. Stakeholders pointed out that LandScale 2.0's increased flexibility will allow landscapes to adopt a dual approach, simultaneously supporting self-reporting and market visibility while driving alignment with public sector goals for regional planning and climate adaptation. This adaptability ensures that LandScale is both a gateway for new entrants into sustainability and ensures robust validation for mature initiatives, bridging the gap between private investment needs and public governance systems.

LandScale's potential to aggregate and present impact data tailored to investor needs is another key strength, as highlighted by global and landscape-level stakeholders. By linking data on ecosystem services, such as carbon credits or biodiversity indices, with market trends and compliance requirements, the platform provides a compelling Value Proposition for investors. Stakeholders noted that LandScale 2.0's modularity will enable regions with limited resources to focus initially on critical indicators, such as water quality or soil erosion, while maintaining a pathway for expansion into more comprehensive assessments as funding and capacity grow. For example, aligning LandScale's offerings with disclosure priorities such as TNFD—like tracking risks associated with biodiversity loss—is seen as a strategic way to integrate landscapes into emerging global frameworks.

By transitioning from a comprehensive assessment model to a hybrid approach that is modular and more user-tailored, LandScale will empower landscape businesses and companies to self-report data, which it can subsequently verify to ensure alignment with global corporate sustainability framework requirements and regional sustainability goals. Such a hybrid approach would address key user concerns about resource demands and lengthy timelines associated with the comprehensive baselines—which many identified as a barrier to engage in follow-up assessments. It would foster investment in the landscapes, helping reduce their aid-dependency and mature in integrated landscape management. The table below provides an overview of some global corporate sustainability frameworks for consideration.

Additionally, integrating verified self-reported data with complementary platforms like SourceUp—recognized for its blend of self-reporting and expert validation—could offer an opportunity to significantly boost landscapes' visibility and credibility to attract bigger investments, while fostering greater alignment with sustainability goals.

Table 1: Global corporate sustainability frameworks

Corporate sustainability frameworks	Focus	Key dimensions	Benefits for companies	Markets benefiting local businesses & producers groups
Environmental, Social, and Governance (ESG)	Broad framework for assessing sustainability performance.	Environmental impact, social responsibility, governance structures.	Enhances investor confidence, risk management, and long-term value.	Primarily large corporations, but opportunities in sustainable supply chains benefiting SMEs and cooperatives.
Task Force on Climate-related Financial Disclosures (TCFD)	Climate-related financial risk disclosure.	Governance, strategy, risk management, metrics, and targets for climate impact.	Improves transparency, resilience, and access to sustainable finance.	Financial institutions & investors encouraging climate-resilient agriculture and SMEs through investment criteria.

Task Force on Nature-related Financial Disclosures (TNFD)	Nature and biodiversity-related financial risk management.	Dependencies, impacts, risks, and opportunities related to nature and ecosystems.	Helps mitigate biodiversity risks, future-proof business strategies, and attract responsible investment.	Sustainable forestry, regenerative agriculture, and biodiversity-related businesses (e.g., eco-tourism, agroforestry cooperatives).
Carbon Disclosure Project (CDP)	Environmental impact disclosure (climate, water, forests).	Carbon emissions, water security, deforestation.	Helps companies improve environmental transparency.	Benefits small businesses in sustainable water and energy management.
Forest Stewardship Council (FSC)	Certification for responsible forestry practices	Sustainable wood sourcing, biodiversity conservation.	Ensures ethical supply chains for timber and paper products.	Benefits smallholder forestry and sustainable timber enterprises.
European Sustainability Reporting Standards – Own Workforce (ESRS S4)	EU-mandated corporate sustainability reporting standard focused on workforce-related impacts.	Employee rights, working conditions, diversity, training, well-being.	Ensures compliance with EU regulations, enhances workforce management, and social responsibility.	EU-based supply chains, potentially benefiting local producers exporting to the EU through fair labor practices and social reporting.
Roundtable on Sustainable Palm Oil (RSPO)	Certification standard for sustainable palm oil production.	Deforestation-free supply chains, fair labor, biodiversity conservation.	Strengthens market access, brand reputation, and sustainable sourcing practices.	Palm oil-producing regions (Indonesia, Malaysia, Africa, Latin America), benefiting smallholder farmers and cooperatives.
No Deforestation, No Peat, No Exploitation (NDPE)	Policy commitment for sustainable commodity production (esp. palm oil, soy, timber).	Forest conservation, peatland protection, labor and human rights.	Reduces environmental risks, improves supply chain sustainability, and ensures compliance with global sustainability commitments.	Commodity producers (palm oil, soy, timber, cocoa) in Latin America, Africa, and Southeast Asia, particularly smallholders and cooperatives engaging in deforestation-free supply chains.

4 CONCLUSIONS AND RECOMMENDATIONS

4.1 Summarising Conclusions

4.1.1 LandScale's contributions and benefits

LandScale drives long-term sustainability and impact by fostering multi-stakeholder collaboration that mobilizes communities, governments, producers, businesses, and civil society around shared landscape sustainability goals. Through data-driven landscape management combined with efforts to create improved access to sustainable markets for producers and businesses and link investments with local environmental, social, and economic priorities, these collaborative processes create positive impacts on landscape ecosystems, businesses, and communities.

By providing technical and facilitation support, LandScale helps landscape initiatives advance biodiversity conservation, land and forest restoration, human rights and wellbeing, and sustainable production and business development. By helping define shared goals, boundaries, metrics, and data needs, it enables landscape partners to collaboratively plan sustainability actions, demonstrate improvements in landscape health and sustainability, and strengthen the maturity of the initiative. This unleashes opportunities to attract investments and generate tangible benefits such as improved livelihoods, enhanced climate resilience, reduced land-use conflict, strengthened governance, and enhanced competitiveness for local producers and businesses in globalised markets. By tying landscape initiatives' collaborative efforts to measurable outcomes, LandScale facilitates the translation of stakeholder engagements into scalable, long-term sustainability impacts.

4.1.2 LandScale's challenges and limitations

However, the evaluation findings show that LandScale faces several challenges in securing ownership and sustaining engagement for achieving long-term sustainability and impact across its landscapes. In Peru, the platform's complex validation requirements and technical tools hinder adoption among stakeholders like coffee and cocoa producers striving for eco-certification, while a lack of localized training and simplified metrics reduces its accessibility. In Colombia, infrequent data updates reduce relevance for real-time decision-making, while reliance on formal data and outdated public datasets creates information gaps and erodes user confidence. In Mexico, limited visualization options restrict stakeholders' ability to fully leverage the platform, and in Indonesia, inconsistencies in data presentation and technical limitations obstruct collaborative planning.

Across all landscapes, concerns about the resource demands and lengthy timelines of comprehensive LandScale assessments have caused many users to disengage. Additionally, language barriers, insufficient integration of traditional knowledge, and overreliance on quantitative metrics reduce the platform's accessibility and relevance to local contexts. Although LandScale has facilitated access to financial opportunities, such as climate finance in Mexico, its capacity to seamlessly connect sustainability efforts with investments remains underdeveloped, limiting its scalability and impact.

4.1.3 Achieving LandSale's scaling, impact and financial sustainability ambitions

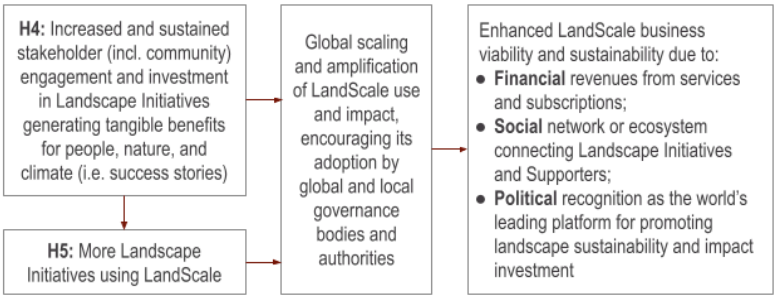
Addressing these challenges and barriers while meeting landscape-level and global stakeholders' needs is critical for unlocking LandScale's full potential. Given the numerous, diverse, and complex stakeholder needs—many of which may be difficult to address within available budgets—**prioritizing unmet needs** where LandScale can provide the greatest added value becomes essential.

The eventual conclusion of BHP Foundation funding and the decline of alternative funding opportunities in a changing global context, where funding priorities are shifting from sustainable development to geopolitics and defense, makes it necessary and urgent to **secure the financial self-sustainability** of LandScale's offerings.

Despite an expected decrease in public and private funding, demand for platforms like LandScale is poised to grow—potentially surging in the coming years. The insights and lessons from this evaluation suggest that LandScale can play a pivotal role in **supporting bottom-up sustainable landscape initiatives** to grow, mature, and sustain. These initiatives will become increasingly important and critical as sustainability and climate change hazards intensify.

The case studies demonstrate that LandScale's viability depends on its ability to move beyond a purely standardized assessment tool that generates scientific data for landscape management and investment. Adopting a more flexible, utility-driven approach is critical—an approach that encourages businesses and companies to invest and grow in the landscapes, while fostering knowledge co-creation and collaborative landscape governance. Sustaining LandScale's offerings in ways that deliver **tangible benefits** and generate **long-term impact** requires investment in designing and testing a replicable, adaptive model for meaningful and sustained community engagement, backed by culturally relevant facilitation, training, and support to optimize the uptake of LandScale tools, dashboards, and data among local and indigenous communities and their businesses. The valuable experiences and impressive results from LandScale's first piloting stage, as described in this report, provide a solid foundation for developing such an adaptive approach and engagement model and bringing LandScale to the next stage of scaling.

To achieve its ambitions, LandScale must transition from piloting to controlled scaling by solidifying its financial viability, strengthening its market position, and enhancing its appeal to current and potential customers across landscapes' value chains, investments, and governance, as illustrated in the endstage part of the Evaluative Theory of Change (EToC) diagram in Section 4 (Figure 1, right-hand side):



4.2 Main Recommendations

Based on the **above conclusions**, we provide **seven recommendations** linked to the three Evaluation Objectives (EO1-3) and related questions outlined in Section 1.2.1, and the five Hypotheses (H1-5) in the Evaluative Theory of Change (EToC) listed in Section 2. The recommendations are presented in Box 4 below.

Box 4: Overview of recommendations

Recommendations for strengthening LandScale's functionality and business case (in the EToC: EO1 to H1):

1. Define LandScale's comparative advantage by reviewing its Product Market Fit (PMF) to identify and prioritize unmet or underserved needs where LandScale can provide the greatest added value (i.e. niche use cases)**.**
2. Enhance LandScale's offerings focused on prioritized unmet needs (or niche use cases) by developing customizable tools and dashboards—e.g. for community engagement, market and finance linking, ecosystem service valuation, investment calculation, and policy alignment—and identify engagement incentives through stress-testing and ongoing feedback loops with landscape stakeholders.
3. Enhance LandScale's functionality by simplifying and improving assessment tools and validation

processes, developing a user-tailored modular approach, addressing bugs and data inconsistencies, and improving visualisation options to better serve prioritized unmet needs (or niche use cases).

4. Develop a robust, viable business plan and strategy to secure LandScale's market position, enhance its financial self-sustainability and competitiveness, and sustain its offerings to landscape initiatives, focusing on prioritized unmet needs (or niche use cases).

Recommendations for effectively engaging and benefiting communities (in the EToC: EO2 to H2 to H4):

5. Prioritize engaging and benefiting local and Indigenous communities and their businesses in LandScale assessment tools and guidance, ensuring the inclusion of women, youth, indigenous people, and other groups. Provide culturally relevant facilitation, training, and support to enable them to participate meaningfully and optimize their use and uptake of LandScale tools.

Recommendations for clarifying LandScale's UVP (in the EToC: EO3 to H3):

6. Clarify LandScale's UVP by articulating and showcasing the distinct added value it provides through a modular, adaptive approach that serves prioritized unmet needs (or niche use cases) of landscape initiative stakeholders while advancing investments in integrated landscape management.
7. Strengthen LandScale's value proposition for companies and investors by aligning its metrics and tools with global corporate sustainability frameworks and collaborating with complementary platforms to enhance landscapes' market visibility and credibility.

4.2.1 Strengthening LandScale's functionality and business viability

In this section, we present the recommendations that address to Evaluation Objective 1 and related questions (cf. EO1 in Section 1.2.1), namely:

- What types of incentives can help strengthen LandScale's business case and increase stakeholder engagement and investment?
- What types of use cases can help strengthen LandScale's functionality and uptake?

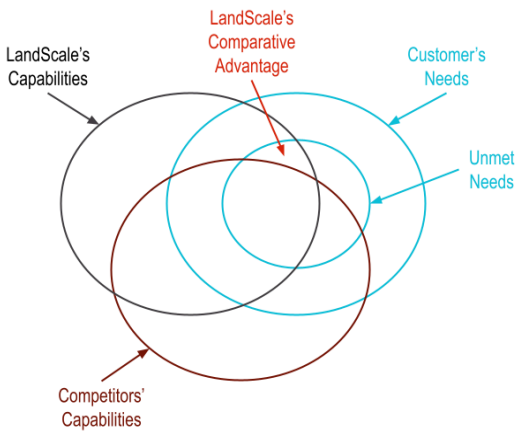
This objective and questions correspond to Hypothesis 1 in the Evaluative Theory of Change (cf. H1 in Section 2). The recommendations are as follows.

Recommendation 1:

Define LandScale's comparative advantage by reviewing its Product Market Fit (PMF) to identify and prioritize unmet or underserved needs where LandScale can provide the greatest added value (i.e. niche use cases).

Comparative advantage can be defined as the way in which **LandScale's unique capabilities meet unmet needs**. Unique capabilities refer to LandScale's strengths that its competitors don't have. Unmet needs refer to the needs of LandScale's actual and potential customers that are unmet by its competitors. To determine the unique capabilities, a clear and shared understanding of **LandScale's identity** is needed—in particular, where it sits along the spectrum between being a pure, standardized assessment tool that generates scientific data for landscape management and investment, and an adaptive or customizable approach that facilitates knowledge co-creation and use for collaborative landscape governance and development. Depending on its defined identity, the focus of its strategy, offerings, and

Figure 2: Comparative Advantage



capabilities to meet unmet needs and achieve impact will vary.

LandScale's comparative advantage is affected by how the world changes and how Rainforest Alliance strategizes to achieve LandScale's vision and mission and have impact in this changing world. To define its comparative advantage, it is critical to think of how Rainforest Alliance can **build resilience into its LandScale strategy** so that it can respond to expected and unexpected change and meet unmet needs today and tomorrow.

Reviewing LandScale's Product Market Fit (PMF) helps define its comparative advantage by identifying unmet or underserved needs. It requires **detailed profiling of actual and potential customers** involved in landscapes' value chains, investments, and governance (ranging from large companies and investors to local communities, businesses, and governments) and their unmet needs with regards to their landscape activities and ambitions (including the gains they are aiming for, the pains they want to avoid, and the jobs they need to get done).

By building a comprehensive understanding of customers' needs that competitors fail to address today and may fail to address tomorrow, LandScale can pinpoint **niche use cases** where it can deliver sustained unique value. Enhancing LandScale's offerings and functionality for these niche use cases will help strengthen its market position and attractiveness to both users and investors, providing a solid foundation for developing a robust and viable business plan. Furthermore, it will enable LandScale to clarify and sharpen its Unique Value Proposition (UVP) focused on current and future customers' unmet needs.

When prioritizing niche use cases, it is essential to allocate sufficient time and resources to gaining a comprehensive understanding of unmet or underserved needs in a changing world and collaboratively developing effective solutions. To ensure LandScale's financial viability, **self-financing mechanisms and exit strategies** should be established to support long-term sustainability and allow for a gradual phase-out if continued viability is no longer guaranteed.

Recommendation 2:
Enhance LandScale's offerings focused on prioritized unmet needs (or niche use cases) by developing customizable tools and dashboards —e.g. for community engagement, market and finance linking, ecosystem service valuation, investment calculation, and policy alignment—and identify engagement incentives through stress-testing and ongoing feedback loops with landscape stakeholders.

LandScale drives long-term sustainability and impact by promoting data-driven landscape governance that engage communities, businesses, governments, and civil society in creating local solutions to achieve shared sustainability goals and improve access to sustainable markets. To strengthen its business case for data-driven governance, LandScale must ensure its offerings and functionality remain relevant and responsive to evolving on-the-ground needs. This requires enhancing local use cases through **user profiling** and **co-designing platform improvements through regular feedback loops**.

Stakeholders across landscapes called for tools that translate LandScale data into actionable outputs to foster broader engagement and support decision-making. **Customizable dashboards** with features like tailored metrics for community engagement, market and finance linking, ecosystem service valuation, risk and investment calculation, and policy alignment were identified as key to enhancing LandScale's relevance for diverse user groups within and beyond the landscapes. Additionally, stakeholders also highlighted the need to **expand the data scope beyond the limit of five commodities** to foster broader private sector engagement and achieve socio-economic development goals.

Customizable dashboards and tools can help:

- Enhance the visibility of community actions and contributions (e.g. on a community dashboard) to facilitate broader community engagement and real-time decision-making;
- Link certified small producers who comply with international sustainability standards to eco-focused premium markets (e.g. cocoa and coffee in Peru, avocado and berry in Mexico);
- Calculate risks and investment needs enable stakeholders to attract funding and investment for addressing environmental and financial uncertainties;

- Calculate the monetary value of carbon credit and ecosystem services to enable communities to identify and leverage opportunities to attract finance; and
- Improve policy coherence and alignment with broader sustainability frameworks to foster regional coordination and cross-landscape learning.

Critical is to ensure that the dashboards remain **accessible and user-friendly** under varying connectivity conditions. Currently, the LandScale interface does not provide quick and easy access for uploads or online consultations. Enhancing its accessibility by simplifying and tailoring dashboards for ease of use—particularly in low-connectivity environments—is essential to maintaining LandScale's relevance for local landscape stakeholders.

Under the updated LandScale 2.0 version (forthcoming in 2025), users will benefit from a clearer framework of required versus optional indicators, allowing for more targeted data collection and greater flexibility. An updated, easy-to-use Data Resource Library embedded in the platform, provides users with immediate access to relevant tools and resources for each metric, saving time and effort.

Box 5: Examples of potential niche use cases from Mexico's Sierra de Tapalpa Landscape

1. Linking to alternative funding opportunities

In Mexico's Sierra de Tapalpa Landscape, LandScale data helped local stakeholders in El Jazmín uncover potential carbon credit projects and forest service payment schemes. By systematically analyzing landscape conditions—such as deforestation rates, land-use patterns, and stakeholder engagement—LandScale illuminated opportunities for alternative finance. The Youth Reforestation Initiative, funded by carbon credit revenues, enabled youth to cultivate 40k tree plants.

Fully automated functions would facilitate greater uptake, for example:

- An investment calculator quantifying forest ecosystem service benefits and investments,
- A carbon credit calculator and funding opportunity identifier
- An ecosystem service / carbon credit funding application function
- Customizable assessments and data outputs for carbon credits and climate adaptation

This would make it easier for local actors to pinpoint alternative finance opportunities and streamline proposal and application processes.

2. Leveraging inbound marketing

In Mexico's Sierra de Tapalpa Landscape, LandScale supports urban biodiversity conservation by aligning stakeholder efforts and promoting compliance with sustainability standards through targeted investments linking avocado and berry producers and businesses to premium global markets. Discussions with the producers indicated interest in using the LandScale metrics to demonstrate compliance with international sustainability standards to enhance their marketability and access premium markets. LandScale helped address essential questions related to the risk mitigation strategies (e.g. water scarcity or deforestation), linkages between various value chain initiatives, and alignment of local initiatives with prioritized landscape objectives or sectors, which provided a solid basis for private sector use and linking to global premium markets. While the LandScale Initiative succeeds in making local connections for accessing market and finance opportunities through facilitation by local RA staff, its utility and impact could be significantly enhanced by leveraging inbound marketing. Inbound marketing involves attracting partners and investors through valuable content and experiences that align with their interests. By using this approach, LandScale could more effectively engage impact investors and international partners who are relevant to the landscape.

Potential functions that could facilitate inbound marketing are for example:

- A marketplace feature linking local avocado and berry producers who comply with international sustainability standards to premium markets
- Customizable assessments and data outputs for supply chain integration projects

- Sharing information with platforms such as "1000 Landscapes for 1 Billion People" to facilitate access to international resources and strengthen collaborative partnerships

3. Facilitating real-time community decision making

In Mexico's Sierra de Tapalpa Landscape, local producers reported that, while they have learned a great deal through the LandScale process, their participation is often limited due to time constraints, as workshops and meetings take them away from their daily work.

Creating a dedicated space in the form of a community dashboard that highlights community contributions and the landscape initiatives' benefits and impact on their livelihoods could significantly enhance community engagement with the platform. A detailed visualization of territorial priorities for sustainable agriculture and ecosystem services, and of stakeholders' individual sustainability contributions (as detailed under the former finding) would further help build (even greater) transparency, collaboration and trust among the landscape stakeholders.

Recommendation 3:
Enhance LandScale's functionality by simplifying and improving assessment tools and validation processes, developing a user-tailored modular approach, addressing bugs and data inconsistencies, and improving visualisation options to better serve prioritized unmet needs (or niche use cases).

A phased and user-tailored modular approach would enhance local economic and cultural relevance by differentiating between comprehensive, rigorous assessments aimed at attracting big investors or accessing high-value export markets, and more limited, focused short-cycle assessments designed to achieve specific local gains (e.g. securing climate finance or aligning with regional policies). This approach aims to maximize the utility of **self-reporting** by landscape stakeholders, while also enabling **phased verification**, addressing key user concerns about resource demands and lengthy timelines associated with the comprehensive baselines, which many LandScale users identified as a barrier to engage in follow-up assessments.

Simplification and improvement of LandScale's assessment tools and validation processes would significantly increase its uptake and keep stakeholders interested and engaged, better balancing their required efforts with their benefits. Specifically, stakeholders requested for:

- Simplification and improved adaptability of the LandScale maturity index and assessment metrics, with culturally relevant training and support to help local stakeholders understand their utility for guiding landscape initiative development and measurement;
- Simplification and improved adaptability of the LandScale interface, with different language options and downloadable tools in local languages to enable offline use in areas with limited connectivity; and
- Improvement of transparency in the management of sensitive data, involving independent parties to maintain trust and credibility.

Some stakeholders (particularly in Indonesia) also mentioned persistent bugs and data display inconsistencies, which could be addressed by:

- More stabilized versioning and indicator setting with clear documentation to prevent confusion;
- Consensus building among stakeholders on landscape indicators and data standards to address discrepancies, improve usability, and ensure data accuracy;
- Streamlined approval processes for platform updates to reduce delays and improve responsiveness and alignment with evolving policies (e.g. the Single Data Policy in Indonesia).

Finally, stakeholders emphasized the need for **visualization** of master plans, territorial priorities for sustainable agriculture and ecosystem services, and individual sustainability contributions (such as water collection practices and agrochemical recycling). This would enhance transparency, foster greater engagement and trust, and enable individual stakeholders to attract investment and support**.** A suggestion was made to expand the "Who is

Involved" section of the platform to allow for **individual stakeholder uploads**, particularly from the local communities to amplify recognition of their efforts.

The forthcoming LandScale 2.0 version will introduce significant improvements to enhance usability, efficiency, and accessibility for users. The new version aims to streamline the assessment process with a simpler workflow, eliminating redundancies and guiding users directly through steps without unnecessary backtracking. Key features include integrated GIS tools and standardized data points, which lower costs and improve access to essential resources.

Box 6: Example of improving LandScale's functionality for unmet private sector needs

The case study summaries (cf. Annexes III–VI) illustrate how LandScale could better serve unmet private sector needs without significant new resources for add-ons, third-party data, or compliance services. Stakeholders suggested that uptake could increase if LandScale provided clear, structured, and easy-to-use outputs for reporting, risk management, and sustainability compliance.

1. Provide Clear, Ready-to-Use Sustainability Summaries:

- **What businesses need:** Simple, pre-structured reports that they can directly insert into ESG, NDPE, TCFD, TNFD, or RSPO reports for compliance with global corporate sustainability goals.
- **How LandScale can help:**
  - Create standardized sustainability summaries for landscapes, formatted in a way that aligns with business reporting needs.
  - Offer jurisdictional risk profiles with simple scoring (e.g., high, medium, low risk for deforestation, community conflict, water quality, etc.).
- **Example:** A palm oil cooperative applying for RSPO certification could copy-paste LandScale's "Deforestation Risk: Low" statement into its compliance report instead of conducting an additional assessment.

2. Use Simple Traffic Light Indicators Instead of Complex Metrics:

- **What businesses need:** Quick ways to assess risks without deep analysis.
- **How LandScale can help:** Replace technical reports with a traffic light system for key sustainability metrics:
  - **Green:** No significant risks (e.g., stable forest cover, no land conflicts).
  - **Yellow:** Some risks, but manageable (e.g., minor deforestation, smallholder land disputes).
  - **Red**: High risks requiring action (e.g., illegal land clearing, high water pollution).
- **Example:** A retailer sourcing sustainable palm oil could see "Water Quality: Green" in a LandScale summary and confidently report that its sourcing area meets sustainability standards.

3. Offer Pre-Written Compliance Statements for Business Reports:

- **What businesses need:** Ready-to-use text for sustainability reports.
- **How LandScale can help:** Provide one-paragraph sustainability statements for companies to include in their annual ESG reports, RSPO submissions, or sustainability policies—e.g. *"In [Jurisdiction X], forest loss has remained below 0.5% annually, meeting NDPE compliance standards."*
- **Example:** A timber company writing an FSC compliance report could copy LandScale's pre-written deforestation statement instead of hiring consultants for verification.

4. Make LandScale Data Accessible via a Simple One-Page Downloadable Dashboard

- **What businesses need:** A quick-reference document instead of navigating complex databases.
- **How LandScale can help:** Provide a one-page, downloadable summary per landscape, covering: (a) key sustainability risks and opportunities; (b) traffic light sustainability indicators; and (c) Pre-written compliance statements.
- **Example:** An impact investor considering funding a project in Sintang could download LandScale's one-page sustainability summary instead of commissioning a full risk assessment.

Recommendation 4:
Develop a robust, viable business plan and strategy to secure LandScale's market position, enhance its financial self-sustainability and competitiveness, and sustain its offerings to landscape initiatives, focusing on prioritized unmet needs (or niche use cases).

A robust and viable business plan and strategy must help ensure financial sustainability and secure market position in the short and longer term to enable LandScale to **sustain its offerings** serving prioritized unmet needs and **achieve its vision and mission**, taking into account potential changes in the world that may affect landscape contexts and influence customer priorities and needs. As mentioned earlier, it is critical to think of how Rainforest Alliance can **build resilience into its LandScale strategy** so that it can respond to expected and unexpected change and meet unmet needs today and tomorrow.

This can be achieved by pursuing a number of key strategic measures in the next few years, notably:

- **Adopt a more flexible hybrid approach** that draws on a holistic vision but is more user-tailored and modular, with enhanced functionality and offerings aiming to reduce adoption and investment barriers for landscape businesses and companies while fostering sustained engagement in collaborative landscape governance, knowledge co-creation, and concerted action (cf. Recommendations 2 and 3).
- **Invest in designing and testing a replicable, adaptive community engagement model** for effectively involving local and Indigenous communities and businesses in LandScale processes and co-designing solutions for their unmet needs, while also ensuring the delivery of culturally relevant facilitation, training, and support to optimize their use and uptake of LandScale tools, dashboards, and data (cf. Recommendation 5).
- **Partner with complementary platforms like SourceUp**, which cater to corporate needs with an incremental approach combining self-assessment and external validation, to boost landscapes' visibility and access to major investments and high-value market opportunities (cf. Recommendation 7).
- **Secure 4-5 years funding to scale LandScale**, moving from the current 'Minimum Viable Product' (MVP) piloting stage to the 'controlled scaling' stage, where the hybrid approach and tested model are implemented under controlled conditions with ongoing coordination and management support from rainforest Alliance, while also laying the groundwork for uncontrolled scaling (e.g. through the Global Landscapes Forum).
- **Identify indicators that can generate high value data** to attract international 'data buyers' willing to pay for LandScale to fund its services to local landscape actors with lower financial capacity.
- **Reach out to the World Bank and/or other global impact investors** to set up a fund for supporting comprehensive and rigorous assessments for attracting bigger investors and buyers while generating global public value (GPV).

4.2.2 Effectively engaging and benefiting communities

This section presents the main recommendation that pertains to Evaluation Objective 2 and its questions (cf. EO2 in Section 1.2.1), which are:

- How effectively does LandScale engage and benefit local/indigenous communities?
- What lessons and best practices can be identified from the LandScale pilots that demonstrate LandScale's contribution to landscape initiatives' benefits and impact for local/indigenous communities?
- What are the critical conditions for achieving long-term landscape sustainability and scalable impact?

The objective and questions correspond to Hypotheses 2 and 4 in the Evaluative Theory of Change (cf. H1 and H4 in Section 2). The recommendations are as follows.

Recommendation 5:
Prioritize engaging and benefiting local and Indigenous communities and their businesses in LandScale assessment tools and guidance, ensuring the inclusion of women, youth, indigenous people, and other groups. Provide culturally relevant facilitation, training, and support to enable them to participate meaningfully and optimize their use and uptake of LandScale tools.

As mentioned in Section 3.1.2, landscape stakeholders and particularly local communities have yet to take real ownership of LandScale. Without addressing existing engagement barriers and limitations, and providing ongoing training and support, local and indigenous communities and businesses are unlikely to continue using the platform.

To address this challenge, Recommendation 2 emphasizes strengthening local use cases through user profiling and co-designing platform improvements via **regular feedback loops**, ensuring LandScale's offerings and functionality remain relevant and responsive to evolving on-the-ground needs. Customizable tools and dashboards tailored to the **unmet needs of local and indigenous communities and their businesses** can foster broader engagement and support real-time decision-making. Specifically, a customizable community dashboard with tailored metrics can enhance visibility of community actions and contributions, generate locally relevant and owned knowledge, and support broader community engagement.

To enable meaningful and sustained community engagement with the platform, LandScale assessment tools and guidance must prioritize engaging and benefiting local and indigenous communities and their businesses, making their **inclusion** a core requirement. Culturally relevant **training and ongoing support** should be provided, incorporating **targeted communication** to enhance reach and ensure the inclusion of women, youth, indigenous people, and other groups. Stakeholder feedback from Mexico highlighted the need to enhance the participation of the different generational groups in the LandScale processes and trainings to foster cross-generational learning and stewardship while ensuring that traditional environmental knowledge, complementing LandScale's data-driven insights, is retained and integrated into conservation efforts.

A tested **community engagement model** should be developed to effectively involve local and Indigenous communities and businesses in LandScale processes and co-designing solutions for their unmet needs, while also ensuring the delivery of training and support to optimize their use and uptake of LandScale tools, dashboards, and data. The model should be adaptable to various landscape contexts and co-developed and tested in collaboration with local academia and civil society organizations in diverse landscapes. To ensure broad adoption, the model must be **practical and implementable by local landscape partners** independently, with optional support from academia and civil society organizations.

4.2.3 Clarifying LandScale's Unique Value Proposition (UVP)

Below, we present the main recommendations that pertain to Evaluation Objective 3 and related questions (cf. EO3 in Section 1.2.1), namely:

- How can LandScale further clarify and communicate its UVP?
- What success stories of LandScale use can help with this?

This objective and questions correspond to Hypothesis 3 in the Evaluative Theory of Change (cf. H3 in Section 2). The recommendations are as follows.

Recommendation 6:
Clarify LandScale's UVP by articulating and showcasing the distinct added value it provides through a modular, adaptive approach that serves prioritized unmet needs (or niche use cases) of landscape initiative stakeholders while advancing investments in integrated landscape management.

LandScale can foster engagement and uptake by clearly communicating the **distinct added value** to current and potential customers involved in landscapes' value chains, investments, and governance—including large companies and investors, local communities and indigenous, commodity-specific producers and businesses, and

local and regional governments. By highlighting **case-specific examples** of the socio-economic, environmental, and strategic governance benefits its phased and modular approach can generate for them, LandScale can further demonstrate its value. Particularly, LandScale's UVP should demonstrate its ability to support commodity-based livelihoods by enabling local businesses and companies to gradually adopt sustainability measures aligned with local and regional sustainability goals as well as private and public investment requirements for supporting sustainability efforts.

By facilitating **alignment with regional and global investor priorities and requirements**, LandScale can better equip local landscape stakeholders to collaboratively tackle challenges related to market access, climate resilience, governance, and private-public partnerships. Key strategies include offering **modular options** from self-reporting to full validation, developing **tailored tools** like data visualizations and dashboards, and illustrating **socio-economic gains** through success stories and impact metrics.

Integrating **participatory insights** and fostering **inclusivity** will ensure stakeholder-driven development and improvement of LandScale's offerings, focusing on prioritized unmet needs (or niche use cases). Strategic partnerships (cf. next recommendation) can further position LandScale as an instrument for aligning local actions with broader sustainability goals, making LandScale's UVP clear, actionable, and widely recognized.

Recommendation 7:
Strengthen LandScale's value proposition for companies and investors by aligning its metrics and tools with global corporate sustainability frameworks and collaborating with complementary platforms to enhance landscapes' market visibility and credibility.

To strengthen its value proposition for investors, LandScale should maximize alignment with other global sustainability frameworks such as TCFD, TNFD, and ESRS S4, and clearly communicate how these alignments can drive benefits for local businesses, governments, and communities. The table below provides an overview of some global frameworks for consideration.

As noted in Section 3.3.2, LandScale is well-positioned to provide structured and credible disclosure sources required under rising global regulatory pressures for transparency. By adopting a phased, modular approach, as highlighted under Recommendation 3, LandScale can collaborate with complementary platforms like SourceUp to integrate validated self-reported data. This would amplify landscapes' visibility and credibility, aligning with investor expectations while showcasing tangible impacts. Partnerships with regional organizations and targeted outreach to highlight LandScale's success in sustainable initiatives will further reinforce its adaptive approach, ensuring it meets diverse stakeholder needs and attracts substantial investment in sustainable landscapes.

ANNEXES

Annex I - Evaluation Methodology

Questions	Methods
Objective 1: Explore use cases and engagement incentives to strengthen LandScale's functionality and viability	
• What specific incentives can be implemented to strengthen LandScale's business case and increase stakeholder engagement and investment? • What additional use cases and insights can be explored to improve LandScale functionality and stakeholder buy-in?	• Outcome harvesting with landscape initiative management teams. • Constituent Voice focus group discussions with landscape initiative communities. • Constituent Voice interviews with other landscape initiative stakeholders as well as global stakeholders.
Objective 2: Identify lessons and best practices for effectively engaging and benefiting local/indigenous communities, and achieve scalable impact	
• How effectively does LandScale engage and benefit local/indigenous communities? • What lessons can be drawn from the LandScale pilots to establish best practices for achieving impact? • What are the critical conditions for achieving long-term sustainability and scalable impact in the landscape initiatives?	• Landscape-level Contribution Tracing of primary and secondary data collation. • Landscape-level Participatory Sensemaking of the findings on stakeholder engagement and investment. • Qualitative Configurational Analysis of findings and insights from the landscape-level and global inquiries.
Objective 3: Gather success stories to clarify LandScale's UVP	
• How can LandScale further clarify and communicate its UVP? • What success stories of LandScale use by landscape initiatives and supporters can help with this?	• Value Proposition Canvas for examining 'customer profiles' emerging from the primary and secondary data gathering and analysis at landscape and global levels. • Global Participatory Sensemaking of the findings on LandScale uses.

Annex II - Overview of Evaluation Sources

Overview of evaluation participants

Global participants

# Participants	Organisation	Type of Stakeholder	Sphere
Jeff Milder Sarah Luperberg Virginia Foster Sarah Luperberg Marie Vallée Alice Gottesman Edita Chavez Henk Gilhuis Heather Elgar Hannah Grice	Rainforest Alliance	International NGO	Control
Niels Haak John Buchanan Bruno Montesinos	Conservation International	International NGO	Influence
Renata Lozano Giral	Verra	Non-Profit Organization	Influence
Sara Scherr	EcoAgriculture Partners	International NGO	Influence
Mike Senior	Proforest	International NGO	Influence
Lucy Garrett	Landscape Finance Lab	International NGO	Influence
Norma Pedroza Arceo	CDP	Non-Profit Organization	Influence
Tony Nello	IUCN	Non-governmental membership union	Influence
Sophie Persey	Bregal Sphere	Private Sector Organization	Influence

Mexico Participants

Name	Organisation	Type of Stakeholder	Sphere
● Santiago Machado ● Susana Salmeron ● Gustavo Rojas ● Alezyn Chavez	RA team Mexico	**Formal partner and implementer.** NGO/civil society.	Control
● Juan José Llamas	SEMADET	**Formal partner and supporter.** Secretary of Environment and Territorial Development.	Influence
● Sara Lupberger in NY	RA - Corporate Climate and Policy Specialist	**Former partner and implementer.** She led the piloting of the LandScale initiative in Mexico and Latin America.	Influence

● Jaime Severino	2Grados	**Formal partner.** Involved in LandScale baseline assessment, and understands the transition from Version 1.0 and Version 2.	Influence
● Jesus Juan Rosales	University of Guadalajara	**Formal partner.** Representative of the academic sector involved in governance in the Sierra Occidental and Sierra de Tapalpa.	Influence
● Mauricio Margules	ITESO - Jesuit University of Guadalajara	**Formal partner.** Director of the Professional Application Projects Program (PAP) that formulates practical and sustainable tourism proposals.	Influence
● Miguel Angel	Tapalpa city council member- Ecology Director of the Municipality.	**Implementer.** Member from the Government of Tapalpa.	Influence, and Impact
● Oscar Gabriel ● Participant (anonymous)	Intermunicipal Environmental Board directors from: ● Junta Intermunicipal de Medio Ambiente de la Cuenca Baja del Rio Ayuquila (JIRA) ● Jurisdictional board	**Implementer.** The Intermunicipal Boards represent local communities and is an entity operating between the municipality and the state, responsible for managing the landscape using a watershed approach.	Influence, and Impact
● 18 community members	Small Producers	**Community.** Small vegetable producers, chicken and livestock farm owners, egg marketers, forestry operators, and foresters.	Influence, and Impact
● Armando García ● Michelle Espinoza ● Danny Roger Blanco ● Karen Esparza	Large private sector companies and solidarity-based organization: ● Sustainability Director of Los Cerritos ● Director of APEAJAL and sustainability and environmental Director (Association of Producers and Exporters of Avocado of Jalisco) ● Director of sustainability of Mazati	**Formal partner, implementer, and funder.** Private Sector representatives or companies producing crops ranging from timber, agave and corn to avocados and berries, and a sustainable real estate developer.	Influence, and Impact
	LandScale Sierra de Tapalpa Local Committee	**Partner and supporter.** Engages a diversity of local stakeholders (incl. government and producers) in LandScale Sierra de Tapalpa decision-making.	Influence, and Impact

Peru participants

Name	Organisation	Type of Stakeholder	Sphere
● Javier Martinez ● Rosa Céspeedes	Rainforest Alliance	**Formal partner and implementer.** RA lead on the Peru LandScale pilot funded by BHP Foundation.	Control
● Participant (anonymous)	Conservation International	**Formal partner.** Member of the initial group that designed the LandScale assessment tool for the Lamas and Alto Mayo landscape initiatives, and implemented the first measurements in the field.	Control
● Groder Torres	GIZ	**Formal partner.** Organization interested in using LandScale, seeking to connect the private sector with NGO initiatives.	Influence
● Participant (anonymous)	Cooperativa Oro Verde	**Formal partner.** User of LandScale that worked with the claims component.	Influence
● Participant (anonymous)	Helvetas	**Formal partner.** User of LandScale who also tried to conduct a LandScale assessment, aiming to replicate Lamas', but didn't complete the cycle.	Impact
● Participant (anonymous) ● Participant (anonymous)	Gobierno Regional de San Martín (GORESAM)	**Implementer.** Regional government organization in charge of promoting LandScale, ensuring validation of findings by stakeholders, providing information, and using findings for public policy decisions.	Impact
● Walter Sangama ● Participant (anonymous) ● Participant (anonymous)	Federación De Pueblos Indígenas Kechwas De La Región San Martín (FEPRIKESAM)	**Community.** Federation of Kechwa Indigenous Peoples of the San Martín Region. Provided information for the tool's assessment. Potential front-end users.	Impact

Colombia participants

Name	Organisation	Type of Stakeholder	Sphere
● Vanessa Coronado	Rainforest Alliance (RA) Business Case	**Formal partner and implementer.** Landscape management team based in Colombia.	Control
● Hernando Morales ● Monica Cabrera ● Juliana Monsalve	Rainforest Alliance (RA) Landscape Alliance (Aliaza para el paisaje)	**Formal partner and implementer.** Manages the Landscape Initiative and is hosted by the RA Business Case Office in Colombia.	Control

● Magda Rojas ● Juan Gabriel Rojas ● Karina Monroy ● Tathiana Bezerra	Earth Innovation Institute	**Implementer.** Involved in the LandScale baseline assessment.	Control
● Gustavo Gutiérrez ● Maria Camila Sanchez ● Yesid Meneses ● Germán Endo	Local Reviewers of ecosystems, human wellbeing, governance, and production pillars	**Implementers.** Local subject matter experts involved in the validation of LandScale assessment results.	Control
● Participant (anonymous)	Asociación Organización de productores de cacao (ASOACASAN)	**Formal partner.** Association of cocoa producers in the municipality of San José del Fragua.	Influence
● Participant (anonymous) ● Participant (anonymous) ● Participant (anonymous) ● Participant (anonymous)	Cocoa producers, and members of the board of directors of cocoa producer organizations	**Community.** Provided information for the tool's assessment. Potential front-end users.	Influence
● Participant (anonymous)	Puerto Rico Municipality	**Formal government partner.** Participated in strategic meetings and workshops.	Influence

Indonesia participants

Name	Organisation	Type of Stakeholder	Sphere
● Tri Padukan Purba ● Hendri Ziasmono ● Doddy Aryadi ● Tubagus M. Siagian	Rainforest Alliance Indonesia	**Formal partner and implementer**	Control
● SJ Wihastuti (Secretary-General)	Sintang Civil Society Communication Forum (FKMS)	**Formal partner and implementer**, and part of the LandScale assessment team. Coalition of non-governmental organizations (NGOs) and civil society organizations (CSOs) in Sintang District,	Control
● Hipolitus Januar Pogo	District Association for Sustainability (LTKL)	**Formal partner and implementer**, and part of the landscape management team. Indonesian association of district governments committed to achieving sustainable development that balances environmental protection with community welfare through collaborative efforts.	Control

● Kurniawan (Head of Regional Development Planning Agency, Bappeda ● Deddy Irawan (Secretary of Bappeda) ● Bobby Oktavianus (Head of Economic & Natural Resources, Bappeda) ● Muhammad Iqbal (Environmental Agency)	Sintang district Government	**Formal partner**. Responsible for the administration and development of the district, encompassing governance, public services, infrastructure, education, and economic growth.	Influence
● M&E Team of LTKL ● Dedy Wahyudy (Coordinator of Social development of WWF Indonesia) ● Alponsus Alpiadi (District Coordinator of USAID SEGAR ● Jaka Kembara (Swandiri Initiative Sintang)	Sintang District Joint Secretariat (SekBer) members	**Government and multi-stakeholder forum (MSF)** with representatives from local governments, NGOs/Civil Societies, IPLCs, and the private sector. ● USAID Sustainable Environmental Governance Across Regions (SEGAR) is a five-year (2021–2026) initiative supporting Indonesia in balancing biodiversity conservation, sustainable land use, and economic development through improved governance. ● WWF Indonesia is an NGO focused on environmental conservation, sustainable development and biodiversity protection. ● Swandiri Inisiatif Sintang is a civil society organization dedicated to empowering civil society towards social justice and environmental sustainability.	Influence
● Dessy Ratnasari	The Kalimantan Forest (KalFor) Project	**Formal partner.** A collaboration initiative between Indonesia's Ministry of Environment and Forestry and UNDP, aimed at preserving forests within non-state forest areas (APL) in Kalimantan by integrating conservation into land-use planning and estate crop development.	Influence
● Rahmat Arif Wibowo	PT Forestwise Wild Keepers	**Private sector.** PT Forestwise Wild Keepers is an Indonesian subsidiary of Forestwise, a Netherlands-based business, dedicated to preventing deforestation by sustainably	Influence

		producing and exporting non-timber rainforest products while supporting local communities in West Kalimantan.	
● Antonius Antong (Chairman)	Aliansi Masyarakat Adat Nusantara (AMAN)	**Community.** Independent organization comprising Indigenous communities from across the Indonesian archipelago, established to advocate for the recognition and protection of Indigenous peoples' rights.	Impact
● Suratno Warsito	● Rimba Harapan Production Cooperative	**Community.** A group of independent smallholder oil palm farmers in Sintang, West Kalimantan, that achieved RSPO certification in 2022, demonstrating their commitment to sustainable palm oil production and environmental conservation.	Impact

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Annex III - Landscape-level Findings in Lamas Province (Peru)

About the Lamas landscape initiative

The Peruvian case study focuses on the landscape of Lamas province, located in the San Martin region, northeast part of the country. The Lamas landscape is made up of 11 Districts, namely: Alonso de Alvarado, Barranquita, Caynarachi, Cuñumbuqui, Lamas, Pinto Recodo, Rumisapa, San Roque de Cumbaza, Shanao, Tabalosos and Zapatero.

The Lamas landscape in San Martin is for 19% part of the Cordillera Escalera Regional Conservation Area (ACR-CE), which is home to diverse species of flora and fauna, along with indigenous territories. The ACR-CE aims to protect key species such as orchids, collared peccaries, and the South American tapir. The landscape supports 53,534 inhabitants, of which 10.4% are indigenous living in eight native communities. Agriculture is the primary economic activity, followed by livestock, tourism, and timber forestry. Lower-altitude areas are used for crops and pastures, while upper-altitude areas are forested, with coffee being a major crop grown in shaded areas. However, deforestation, driven by agriculture and cattle ranching, has led to the loss of 170.16 km² of forest since 2001. This has negatively impacted biodiversity, water quality, poverty levels, and the productivity of crops like coffee and cocoa. Migration and the expansion of coffee farming into higher-altitude, ecologically-sensitive forests continue to pressure the landscape, as farmers seek better-quality coffee areas. Without changes in production systems, climate change may drive more deforestation in high-altitude zones, threatening both the environment and local livelihoods.

The Lamas Landscape Initiative is in a progressed stage of maturity. It has its landscape boundaries defined and a formal partnership established with Conservation International and Cooperativa de Ahorro y Crédito Norandino. Shared goals and an Action Plan have been developed with various stakeholders who also participate in the implementation. The general goal is to create a resilient rural economy for all, reducing poverty, and improving practices and standards of sustainable agroforestry businesses at the landscape level. A LandScale baseline assessment has been conducted, which was led by Rainforest Alliance and conducted by a group of experts, and is published on the LandScale platform. To obtain feedback and validation of the assessment metrics, the partners involved and consulted members of academia (such as the National University of San Martin and the Peruvian Amazon Research Institute), the private sector (Volcafé and Norandino), NGOs (Conservation International, Helvetas Peru, and Earth Innovation Institute), the public sector (municipalities of the 6 districts, Special Project Huallaga Central and Bajo Mayo, Regional Environmental Authority and the Management of Economic Development) and native communities (FEPIKRESAM).

Data Collation Matrix

Topics	Data Collation	Finding Statements
Use Cases and Engagement Incentives	**Importance of LandScale Across Stakeholders** Stakeholders across different sectors recognize LandScale as a valuable tool for governance, advocacy, and decision-making. Its georeferenced data helps diagnose territorial priorities, align production practices with sustainability goals, and reduce negative environmental impacts. The platform fosters collaboration between public and private actors and informs land-use planning, strengthening governance at multiple levels. However, stakeholders emphasize the need for improved usability and consistent integration with existing frameworks. **Existing Use Cases** ● **Public Authorities and Governance Bodies** ○ **Land-Use Planning and Environmental Policy**: Local authorities use LandScale data to inform sustainable land use policies and monitor deforestation trends. ○ **Territorial Prioritization**: Public sector actors use LandScale's georeferenced data to identify key governance and environmental priorities in their regions.. ○ **Public-Private Coordination**: Government agencies leverage the platform to strengthen collaboration with businesses and municipalities for shared governance initiatives. ● **Private Sector and Cooperatives** ○ **Sustainable Production and Supply Chain Management**: Cooperatives and businesses integrate LandScale insights into their production practices to align with sustainability goals and reduce environmental impacts. ○ **Corporate Social Responsibility (CSR) and Investment**: Private companies use the platform to track their environmental and social contributions, improving stakeholder transparency and reporting. ● **Local and Indigenous Communities** ○ **Community Resource Management**: LandScale enables communities to track local ecosystem changes and manage natural resources more effectively. ○ **Advocacy and Land Rights**: Community organizations use LandScale-generated	**Use Cases** ● LandScale enables data-driven decision-making, supporting land-use planning, sustainability reporting, and governance improvements. ● Evidence from LandScale has facilitated leadership development and intergenerational knowledge transfer. ● Communities and organizations have used LandScale to formalize land titles and promote sustainable resource use. ● Municipalities, private companies, and government agencies use LandScale to facilitate more coordinated governance and decision-making processes. ● LandScale promotes product traceability, specially when local producers - cacao and coffee- are applying to eco-certification and access to eco-markets **Engagement** ● LandScale fosters multi-stakeholder collaboration and long-term planning by aligning governance, business, and community priorities. ● Workshops have improved stakeholder collaboration but have not fully addressed gaps in technical understanding. ● Technical complexity and challenges in data validation reduce engagement quality and the

	evidence to support land tenure claims and push for stronger environmental protections. ○ **Knowledge Sharing and Leadership Development**: Peer learning sessions have helped build local capacity, fostering stronger engagement in governance and land management. **Missing or Partially Realized Use Cases** ● **Public Authorities and Governance Bodies** ○ **Limited Integration with Policy Frameworks**: While LandScale data is valuable for policy discussions, its integration into national and regional governance frameworks remains inconsistent. Long-term alignment with official planning and investment strategies is still a work in progress. ○ **Underutilization by Local Governments**: Many municipal and regional governments have limited familiarity with the platform, leading to uneven adoption and missed opportunities for evidence-based decision-making. ● **Private Sector and Cooperatives** ○ **Limited Access for Small-Scale Producers**: While some cooperative leaders actively use LandScale to inform sustainability strategies, small-scale producers often lack the technical capacity or access to fully engage with the platform. ○ **Incomplete Metrics for Corporate Impact Reporting**: Private sector actors note that LandScale's current indicators do not fully align with corporate sustainability reporting standards, limiting its utility for CSR tracking and investor engagement. ● **Local and Indigenous Communities** ○ **Barriers to Participation in Data Collection**: The exclusion of locally generated data and rigid metric structures prevent communities from fully contributing to evidence generation, reducing the tool's relevance to their needs. ○ **Gaps in Training and Support**: Many community members, especially in indigenous and rural areas, lack the technical knowledge to engage meaningfully with LandScale. Insufficient training resources and localized materials have restricted wider adoption.	perceived reliability of evidence. ● While LandScale has facilitated some stakeholder involvement, gaps remain in training and data localization, which could increase engagement and trust in the platform.
Functionality and business viability	The data suggests that LandScale holds strong potential as a governance, advocacy, and decision-making tool, but its long-term viability depends on addressing key usability, adoption,	**Functionality and Viability** ● Stakeholders report difficulties navigating the

	and integration challenges. Participants suggested the following improvements to LandScale functionality: ● **Simplified and Accessible Outputs:** Stakeholders emphasize the need for user-friendly outputs, such as visual summaries, localized materials, and non-technical explanations, to improve accessibility, particularly for indigenous and local communities. ● **Enhanced Usability and Training:** Improved user guidance, simplified dashboards, and sustained capacity-building programs are needed to overcome technical barriers and increase adoption. ● **Peer Learning as a Capacity-Building Mechanism:** Expanding peer learning and knowledge exchange programs could increase engagement, particularly among local stakeholders who benefit from shared experiences. ● **More Reliable Data Updates and Validation:** Stakeholders are frustrated by inconsistent updates and data validation processes, which reduce trust and usability for real-time decision-making. ● **Better Integration with Local Governance:** LandScale needs stronger connections to local governance frameworks and land management tools to ensure its data translates into actionable policies. ● **Expanding Training Programs and Partnerships:** More structured training initiatives and regional partnerships could help scale adoption and address knowledge gaps, ensuring the tool is effectively used across different stakeholder groups.	platform, understanding its functionality, and accessing updates, which limits broader adoption and effective use of LandScale. ● Simplifying outputs, strengthening training, and integrating localized data could enhance accessibility and increase stakeholder buy-in. ● Gaps in data granularity and accessibility limit the platform's full potential, especially for local and indigenous communities. ● Technical complexity, costs, and limited localized resources hinder broader adoption, particularly among small-scale users. ● Effective implementation and data validation require significant external mediation and support, emphasizing the need for clearer processes and resources. ● Expanding policy integration and improving the usability of LandScale's tools are key to ensuring long-term adoption.
Engagement of local and/or indigenous communities	**Effective Community Engagement** ● **Recognition of Local Knowledge:** LandScale activities have increasingly integrated indigenous and local knowledge into assessments, incorporating insights on traditional land use practices and environmental changes, enhancing data relevance and accuracy. ● **Participatory Approaches:** Community members have been actively involved through consultations, workshops, and participatory data collection, enabling engagement in decision-making on sustainable landscape management. ● **Peer Learning:** The exchange of experiences among stakeholders has been highly beneficial, fostering collaboration and encouraging the adoption of improved practices by both technical teams and farmers. ● **Collaborative Relationships:** Participation in LandScale activities has strengthened	**Enabling Effective Community Engagement** ● **Active Involvement in Data Collection and Discussions:** Communities have been increasingly engaged in data collection and participatory discussions about landscape management, fostering a more inclusive process. ● **Integration of Traditional Knowledge:** The incorporation of indigenous and local knowledge into assessments has enhanced the relevance and applicability of LandScale outputs. ● **Challenges in Understanding Data:** The technical

	connections between communities, governments, and external actors, while also increasing community visibility in regional and global decision-making spaces. **Benefits of LandScale for Local/Indigenous Communities** ● **Improved Understanding of Landscape Dynamics**: Communities have gained clearer insights into environmental changes and governance challenges, enabling them to advocate more effectively for sustainable practices. ● **Increased Market Positioning and Investment**: Hard data and sustainability progress reports have helped communities showcase their efforts to external partners and buyers, improving their market positioning and attracting sustainability-focused investments. ● **Sustainable Livelihood Opportunities**: Communities have identified ways to promote sustainable agriculture, such as cacao agroforestry, aligning external investments with their sustainability goals. ● **Soft Data for Advocacy**: Testimonials and stories of change have been valuable for advocacy, market promotion, and strategic planning, offering a more relatable perspective on the impact of sustainability initiatives. **Opportunities to Enhance Community Participation** ● **Strengthening Capacity for Engagement**: Targeted training and capacity-building programs can enhance community ability to interpret data and contribute meaningfully to LandScale processes. ● **Simplified Data Formats and Localized Tools**: Communities require data in accessible formats, such as visual summaries, printed materials, and resources in indigenous languages, to improve usability and engagement. ● **Formalizing Indigenous Knowledge**: Integrating culturally relevant indicators and adapting communication strategies to local contexts can increase inclusiveness and impact. ● **Greater Ownership of Outcomes**: Encouraging community-led interventions based on LandScale data could strengthen local ownership of landscape management efforts. **Remaining Barriers to Effective Participation** ● **Technical Complexity of Data**: Many stakeholders lack the expertise to interpret	complexity of LandScale data remains a significant barrier, limiting community members' ability to interpret findings and engage meaningfully in decision-making. ● **Concerns About Tokenistic Participation:** Some communities feel their involvement is symbolic rather than substantive, as external actors still dominate decision-making processes. ● **Capacity-Building and Localized Training:** Targeted training programs can equip communities with the skills needed to interpret and apply LandScale data effectively. ● **Simplified Outputs and Translations:** Providing visual summaries, non-digital materials, and translations into indigenous languages will improve accessibility and engagement. ● **Greater Integration of Culturally Relevant Indicators:** Strengthening the inclusion of culturally relevant knowledge and indicators can increase local ownership and active participation in LandScale processes. **Enhancing Benefits and Impact for Communities** ● **Improved Understanding of Environmental and Governance Dynamics:** Communities have gained a clearer insight into environmental changes and governance issues affecting their landscapes and livelihoods. ● **Increased Visibility and Collaboration:** Participation in LandScale has strengthened community relationships with governments and external actors, enhancing their role in decision-making spaces.

	technical data, limiting their ability to meaningfully engage in assessments and planning. ● **Limited Accessibility of Data**: While summaries and visualizations improve accessibility, the continued reliance on digital formats excludes rural producers with limited technological access. ● **Unequal Power Dynamics**: Some community actors feel their participation is tokenistic, with decisions still driven by external organizations, undermining trust and ownership. ● **Governance Challenges**: Competing voices within communities create representation issues, making it difficult to ensure all perspectives are equitably included. ● **Lack of Capacity-Building Support**: There is a significant gap in technical training and guidance, leaving communities ill-equipped to engage fully in data generation and analysis.	● **Opportunities for Sustainable Livelihoods:** LandScale has helped communities identify opportunities such as agroforestry initiatives and investment prospects aligned with sustainability goals. ● **Technical Data Complexity:** Many stakeholders struggle to interpret and use LandScale data due to its highly technical nature. ● **Limited Access to Localized Formats:** The lack of non-digital formats, translated materials, and simplified summaries excludes some communities from fully benefiting from LandScale outputs. ● **Power Imbalances and Decision-Making Limitations:** Communities express frustration over persistent power imbalances, as external organizations often drive key decisions, undermining local trust and ownership.

Annex IV - Landscape-level Findings in Sierra de Tapalpa (Mexico)

About the Sierra de Tapalpa landscape initiative

The Mexico case study focuses on the Sierra de Tapalpa Landscape in southern Jalisco, composed of four municipalities: San Gabriel, Chiquillistan, Tapalpa, and Atemajac de Brizuela.

The Sierra de Tapalpa in southern Jalisco, Mexico, spans 1,963 km² with diverse microclimates due to its wide altitudinal range, which supports a variety of vegetation types (incl. coniferous, oak, and tropical forests) and serves as a crucial biological corridor connecting protected areas like the Nevado de Colima Volcano National Park and Sierra de Manantlán. Home to 48,430 people, the region is evenly split between rural and urban populations, and it supports rich biodiversity (incl. important mammal, bird, reptile, amphibian, and insect species, and an extensive variety of flora with some endemic species). However, economic activities such as agriculture and tourism are threatening the area's ecological balance. The expansion of high-value crops has changed land use and increased water demand, while unregulated tourist activities have raised fire risks and disrupted biological connectivity. Urban expansion and growing rural tourism together with agri-food expansion have led to rising populations and improvements in human development, but are also putting further pressure on the region's natural and social environment (incl. rural displacement and increasing prices for products and services).

The Landscape Initiative is at an progressed stage of maturity, with a formalized partnership between local government, civil society, private sector actors and funders. The landscape boundaries have been defined, a LandScale baseline assessment conducted, and the metrics for the LandScale assessments are nearing validation. Although the digital LandScale platform does not yet include a work plan and goals, the RA local team has completed both, has presented them before the local committee and is preparing to upload them. One of the most significant achievements of this initiative is the creation of the **Biocultural Landscape Model**, a community-led effort that emerged from the LandScale process and has since been elevated to public policy. This model guides the sustainable economic use of the territory while prioritizing the conservation of natural resources, biodiversity, and cultural heritage. This achievement highlights how the LandScale initiative has fostered meaningful collaboration and serves as a blueprint for integrating biocultural approaches into public policy.

Data Collation Matrix

Topics	Data Collation	Finding Statements
Use Cases and Engagement Incentives	**Importance of LandScale** ● **Facilitates Multi-Stakeholder Collaboration and Governance** ○ LandScale fosters a multi-actor dialogue (e.g., private firms, government, communities), serving as a neutral space for discussing development. This leads to a more collaborative vision and enhanced social fabric in territories such as Tapalpa. Stakeholders see value in convening around LandScale's assessments and data to forge partnerships (e.g., identifying co-financing or aligning project objectives). ○ By offering a structured framework, LandScale helps align stakeholders on a collective territorial vision, for instance, in creating and operationalizing the Biocultural Landscape model. By providing robust information and hosting collaborative workshops, LandScale has helped local actors, such as smallholder producers and intermunicipal boards, better understand each other's roles and contributions. This leads to increased trust and coordination in territorial governance. [State Government, Local Communities Tapalpa, Landscape Management Team]. ● **Empowers Local Communities & Especially Women** ○ Women's groups (e.g., "Happy Egg" producers) gained voice and visibility through LandScale activities, building confidence and challenging cultural barriers like machismo. ○ Families bring children to workshops, helping them see future opportunities and building a pipeline of youth leadership. [Local Communities Tapalpa] ● **Enables Data-Driven Policy and Investment Decisions** ○ Government officials note that collecting robust landscape data is expensive, but LandScale consolidates it in a credible, accessible format they can use to inform decisions and direct resources. ○ Investors, including government bodies and private sector players, rely on LandScale metrics to evaluate risks and opportunities, thereby improving their confidence in financing sustainability projects. ○ Local government officials in Tapalpa and other regions have used LandScale findings to inform action plans and budgets, thus linking policy goals to tangible sustainability outcomes. ● **Identifies Financing Opportunities:** With credible data on climate, land use, and local conditions, LandScale supports authorities and producers in attracting funds for water distribution, reforestation, etc. [State Government, Municipal Governance]	**Attracting Public Funds and Climate Finance** ● **Government Support**: Producers who demonstrate credible sustainability practices, supported by LandScale data, have accessed resources from agencies like FIPRODEFO and the Secretary of Agriculture. ● **Climate Finance Potential**: Verified metrics on reforestation, carbon sequestration, or water conservation can position initiatives for climate-related funding. **Enhancing Market Access and Competitiveness** ● **Sustainable Branding**: Berry and avocado producers in Jalisco leverage LandScale's framework to show sustainable practices, appealing to international buyers concerned with environmental and social performance. ● **Differentiation in Global Supply Chains**: Companies and

	● **Builds Awareness of Environmental & Socioeconomic Interdependence** ○ As individuals realize how environmental degradation affects their livelihoods, they are more motivated to adopt sustainable practices (e.g., reforestation, reducing chemical use). ○ People see tangible results—like fewer pest-affected trees or more structured waste management—and are more willing to engage. [Landscape Management Team, Local Communities Tapalpa] **Existing Use Cases** ● **Monitoring & Reporting on Sustainability Baselines** LandScale assesses ecosystem health, well-being, governance, and production benefits, guiding planning and highlighting where issues lie (e.g., deforestation, water overuse). ● **Community Engagement via Field Schools** ○ Through practical peer-learning (Field Schools), producers unify around common challenges, design relevant curricula, and implement better practices. ○ This organized approach and technical assistance helped attract funding from FIPRODEFO and the Secretary of Agriculture. [Local Communities Tapalpa] ● **Identifying Carbon Credit Projects & Forest Service Payments** ○ Youth Reforestation Initiative (40,000 plants) in El Jazmín funded by carbon credits. LandScale's data/structure helped uncover these opportunities. ○ While not automated, the current platform signals where forest services/payment schemes might be viable. ● **Transparency & Coordination for a Biocultural Landscape** LandScale fosters transparent governance structures, enabling local committees to see who is doing what and align on strategic objectives (e.g., reforestation, waste management). ● **Attracting Local Government & Private Sector Funds** Credible data and structured monitoring made it easier for FIPRODEFO (1.5M MXN) and Jalisco's Secretary of Agriculture (200K MXN) to co-invest. [State Government]	cooperatives using LandScale can demonstrate compliance with emerging sustainability requirements, improving their standing in premium markets. **Opportunities for Landscape-Level Investment** ● **Cross-Sector Partnerships**: Agro-industrial companies, such as Driscoll's, collaborate with local municipalities and producers to co-finance waste management facilities, reforestation efforts, and other joint projects that demonstrate shared value. ● **Local Governance Structures**: Intermunicipal boards (e.g., JIDELAA) foster credibility for joint funding proposals, as they represent multiple municipalities aligned under one sustainability strategy. **Community Empowerment as an Investment Driver** ● **Women-Led Initiatives**: Projects like "Happy Egg" build confidence and social capital, signaling viable community-led enterprise models to potential investors.

	Missing / Partially Realized Use Cases ● **Local & International Investment Claims** "Claims" (declarations/affirmations) are not well-defined in Spanish. There is demand for a function to formalize local claims and *show* ROI to international investors. ● **Risk Management & Safeguards Tool** Tourism, real estate expansion, and water scarcity pose significant threats. Stakeholders want georeferenced risk mapping in LandScale for proactive mitigation. [Local Communities Tapalpa] ● **Marketplace Feature** Ideas like composting chicken manure ("gallinaza"), or spotlighting "Happy Egg" production need a structured Market Place inside LandScale. [Local Producers, Landscape Management Team] ● **Automated Reporting for Results-Based Payments** Could streamline how performance is tracked for results-based funding programs (e.g., reforestation success). ● **Deeper Integration for Investors** Much of the investor matching is done by people, not the platform. The tool could do more to autonomously promote local initiatives and coordinate concurrent investments. ● **Capturing Qualitative & Narrative Data** Long reports deter some. Many participants prefer short narratives, photos, or success stories to understand *why* an issue arises and *how* to solve it.	● **Visible Social Impact**: When local communities see tangible benefits—such as better water distribution or successful reforestation—they are more willing to participate, generating robust engagement data that attracts further investment. **Streamlined Data for Credible ROI Narratives** ● **Shared Baseline Assessments**: LandScale's standardized metrics help package landscape performance information, offering a persuasive "business case" for prospective funders. ● **Transparent Monitoring**: By tracking progress in real-time, investors and donors can verify that their contributions yield measurable impacts, lowering the perceived risk of engagement.
Functionality and business viability	**Improvements to LandScale Functionality** ● **Incorporating Local Knowledge and "Soft Data"** ○ Several stakeholders (e.g., intermunicipal boards, local communities) gather valuable qualitative information—like water collection practices, local meteorological knowledge, and success stories—that LandScale could better accommodate. [Landscape Supporters Guadalajara]	**Barriers in Complexity & Validation** ● LandScale's intricate metrics, lengthy validation requirements, inconsistent data displays, and language barriers create hurdles for communities, businesses, and funders to stay engaged

	○ Many participants prefer photos, anecdotes, and concise “origin of problem/solution” stories instead of lengthy reports. They want to see how local perceptions, lived experiences, and intangible cultural values factor into the official landscape data. [Municipalities, Local Communities Tapalpa] ● **Accessible Interface for Diverse Stakeholders** ○ University partners (ITESO, U. Guadalajara) have used LandScale outputs in Spanish to support training sessions on sustainable agriculture, but clarity of language remains critical for effective adoption by local stakeholders. [Landscape Supporters Guadalajara] ○ Both government representatives (SEMADET, intermunicipal boards) and local communities suggest that LandScale’s interface needs simpler processes for data input and more user-friendly dashboards (e.g., quick metrics on reforestation, waste reduction). [State Government, Municipalities] ● **Enhanced Alignment with Governmental & Policy Frameworks** ○ State agencies want LandScale to better reflect and reinforce official models like the Biocultural Landscape, which is now part of public policy in Jalisco. Clear recognition of the Biocultural operational scheme within LandScale helps attract state funding and fosters continuity beyond political shifts. [State Government] ○ Municipalities highlight the potential for aligning LandScale’s indicators with normative instruments (e.g., local water boards, forest management requirements), thus reducing duplication and improving official buy-in. [Landscape Management Team, Municipalities] ● **Facilitating Investment Coordination & Follow-Through** ○ Local officials and producers see LandScale as a tool that can demonstrate the progress and needs of various projects (e.g., the “Biocultural Landscape,” farmland reforestation, agrochemical container centers), helping them secure resources from state or private actors. [State Government, Municipalities] ○ Concern arises about who will manage and fund the platform once external support diminishes. LandScale should incorporate features or planning guidance to ensure local teams can continue using it independently. [State Government] ○ Examples: Driscoll’s & municipality co-created a regional agrochemical container collection center; FIPRODEFO & intermunicipal boards monitor reforestation. LandScale could systematically capture such partnerships to better showcase collective impact. [Municipalities, Local Communities Tapalpa] ● **Sector-Specific Enhancements** ○ Stakeholders propose a LandScale module focusing on tourism, highlighting ecotourism or “regenerative tourism” opportunities. This would help local providers (e.g., ITESO’s Facebook group	throughout the assessment process. **Demand for Automation & Customization** ● While LandScale provides robust data and frameworks, its value proposition is weakened by a lack of automated or customizable features (e.g., claims mechanisms, ecosystem service valuation) that could strengthen local and global business viability.

	for tourism services) connect with visitors and investors. [Landscape Supporters, Landscape Management Team] ○ Producers want more direct ways to identify business possibilities (e.g., compost from chicken manure, “Happy Egg” marketing, coffee/berry expansions) and show ROI to attract private financing. A localized “marketplace” within LandScale could address this gap. [Local Producers, Landscape Management Team] ● **User Engagement & Ongoing Participation** ○ Communities note that many workshops conflict with day-to-day work (farming, household management). Tools or flexible scheduling could keep participants engaged. [Local Communities Tapalpa] ○ Expanded pedagogy or user guides could deepen local buy-in, ensuring that advanced functionalities (like data uploading or “soft data” entries) don’t remain underused. [Landscape Supporters Guadalajara, Municipalities]	
Engagement of local and/or indigenous communities	**Effective Community Engagement** ● **Growing Participation in Workshops and Committees** Community members report increased attendance at workshops, moving from just 2–5 participants to 30–50. This shift reflects a heightened interest in landscape-level discussions and a broader sense of ownership. [Municipalities, Small Producers/Local Communities Tapalpa, Quilliquistan, Atemajac, San Gabriel] ● **Inclusive Dialogue Among Diverse Stakeholders** LandScale-related gatherings have brought together local authorities, private sector actors (e.g., berry, agave, and avocado companies), and community members to discuss pressing concerns, from real estate development impacts to agricultural water use. [State Government, Landscape Supporters Guadalajara] ● **Peer Learning & Sharing Local Knowledge** Participants mention exchanging practical methods (e.g., rotational grazing using electric fences, water conservation techniques) in a collaborative environment, often discovering or reinforcing sustainable practices from each other. [Small Producers/Local Communities, Landscape Management Team] ● **Emergence of Multi-Actor Platforms** Initiatives like local committees and intermunicipal boards highlight how LandScale fosters a collective space to address challenges. This multi-actor approach is cited as an “essential” step forward in bridging governance gaps. [Landscape Supporters, Private Sector Actors]	**Enabling Effective Community Engagement** ● LandScale-supported workshops and committees have significantly increased participation, with attendance rising from a handful to 30–50 participants, strengthening community ownership and engagement in landscape-level governance. ● LandScale-facilitated multi-actor platforms have enabled dialogue among community members, local authorities, and private sector actors, bridging governance gaps—but key stakeholders, such as real estate developers and

	• **Bringing in Real Estate Developers & Other Key Players** Real estate and infrastructure developers rarely join discussions despite heavily influencing local resources. Inviting them to committees and decision-making spaces would strengthen community engagement. [Small Producers/Local Communities, Landscape Supporters] • **Improving Coordination & Scheduling** Many community members balance multiple livelihood activities, limiting availability for workshops. Flexible times and clear communication can boost attendance and ongoing engagement. [Small Producers/Local Communities] • **Leveraging Local Universities & Digital Platforms** Institutions like ITESO and Uni Guadalajara manage social media groups for tourism services. Expanding these networks could spark new opportunities (e.g., ecotourism tie-ins) and broaden LandScale's reach. [Landscape Supporters Guadalajara] • **Aligning Cultural & Environmental Values** Greater emphasis on a "biocultural" viewpoint can deepen community ownership—harmonizing economic interests (livestock, agro-exports) with cultural heritage (traditional farmland, festivals). [Municipalities, Landscape Management Team] • **Providing Accessible Tools & Pedagogical Mediation** Stakeholders advocate for simpler language, user-friendly dashboards, and local facilitators who can guide participants—enabling a more inclusive approach to data usage and decision-making. [Landscape Management Team] **Benefits for LandScale for Local Communities** • **Increased Awareness of Environmental & Socioeconomic Links** Community members recognize how economic changes (e.g., real estate booms, influx of agri-corporations) can negatively affect forests and water access. LandScale's data and workshops help them see these connections more clearly. [Small Producers Tapalpa & Surrounding Areas] • **Empowerment & Validation of Local Practices** Women entrepreneurs (e.g., "Happy Egg") gained visibility, voice, and potential market links. LandScale-provided spaces contributed to overcoming cultural barriers and reinforcing the idea that local initiatives merit investment and support. [Small Producers/Local Communities] • **Support for Livelihood Diversification** Producers learned techniques like "rotational grazing" or insights on biodigestors—helping them adapt	large agribusiness firms, remain absent, limiting broader impact. • LandScale's engagement approach lacks sufficient flexibility to accommodate the diverse livelihood constraints of community members, making it difficult for them to participate consistently in workshops and decision-making processes. • LandScale's reliance on digital tools presents barriers, as limited internet access and digital literacy hinder some community members' ability to engage with data platforms and advocacy tools effectively. **Enhancing Benefits and Impact for Communities** • LandScale's data and workshops have increased community awareness of environmental and socioeconomic linkages, helping them recognize the impacts of real estate expansion and agribusiness growth on forests and water access. • LandScale-supported initiatives have contributed to livelihood diversification by providing producers with knowledge on

	production methods, reduce costs, and add value to local resources (e.g., compost from chicken manure) for sustainable production. [Local Communities Tapalpa] ● **Shared Data & Advocacy Tools** LandScale outputs (e.g., baseline reports, visual dashboards) provide residents with credible information to negotiate or advocate with local authorities, particularly for water rights, waste management, and reforestation. [State Government, Landscape Management Team] ● **Expanding Economic & Policy Opportunities** By bringing multiple actors together and spotlighting local successes, LandScale helps communities access wider policy discussions and potential funding streams, such as government grants or private investments. [Private Sector Actors; Landscape Management Team] ● **Intergenerational Engagement** Families increasingly involve youth in LandScale-related initiatives, ensuring skill transfer and long-term continuity of sustainable practices within the region. [Small Producers/Local Communities] **Opportunities to Enhance Community Participation** ● **Bringing in Real Estate Developers & Other Key Players** Participants noted that real estate/infrastructure developers are rarely part of the conversation, even though their activities significantly impact local resources. Inviting them to committees would extend community engagement. [Small Producers/Local Communities, Landscape Supporters] ● **Improving Coordination & Scheduling** Many community members juggle multiple jobs or responsibilities, leading to low workshop attendance. More flexible meeting times and better communication can boost engagement. [Small Producers/Local Communities] ● **Leveraging Local Universities & Digital Platforms** ITESO, Uni Guadalajara, and other institutions already manage social media groups (e.g., Facebook groups for tourism services). Tapping these networks could expand outreach and foster new opportunities (e.g., ecotourism tie-ins). [Landscape Supporters] ● **Aligning Cultural & Environmental Values** Encouraging greater emphasis on a “biocultural” perspective can deepen community ownership: bridging economic interests (e.g., livestock, agro-exports) with cultural heritage (e.g., local festivals, traditional farmland). [Municipalities, Landscape Management Team]	sustainable techniques such as rotational grazing and composting, enabling cost reduction and resource efficiency. ● LandScale’s platforms have helped amplify women’s voices, but persistent gender and cultural barriers still limit their participation in decision-making, restricting the full realization of inclusive community benefits. ● LandScale’s long-term impact is uncertain, as political transitions and shifting government priorities threaten the sustainability of local committees and community-driven initiatives beyond external support.

	• **Providing Accessible Tools & Pedagogical Mediation** Stakeholders suggest simpler language, easy-to-navigate dashboards, and local facilitators who can guide participants in using data. [Landscape Management Team] **Remaining Barriers to Effective Participation** • **Time Constraints & Socioeconomic Pressures** Many community members must prioritize basic livelihoods, leading to irregular attendance and limited capacity to engage in extended or frequent sessions. [Small Producers Tapalpa, Landscape Management Team] • **Limited Internet & Technology Access** While WhatsApp and Facebook can help share updates, not everyone has stable connectivity or the skills to fully use digital tools, impacting data collection and platform usage. [Landscape Supporters, Landscape Management Team] • **Cultural & Gender Constraints** Machismo and other cultural factors continue to restrict some women's freedom to participate in workshops or lead initiatives. Though improvements are noted, these challenges persist. [Small Producers] • **Gaps in Reaching External Actors (Developers, Large Agri-Firms)** Although some big companies (e.g., Driscoll's, large avocado/berry firms) do participate, not all external actors are aligned or informed. Potential friction arises around water consumption, land-use changes, and real estate expansions that communities feel underprepared to manage. [State Government, Private Sector Actors] • **Uncertain Continuity & Government Support** Stakeholders express concern about political transitions and the sustainability of local committees after external support (e.g., from RA or LandScale) ends. Government agencies sometimes disengage mid-process due to shifting priorities or limited budgets. [State Government, Landscape Management Team]	

Annex V - Landscape-level Findings in Piedemonte Amazonico (Colombia)

About the Piedemonte Amazonico landscape initiative

The Colombia case study focuses on the landscape around the Amazon Piedmont territories of the Caqueta Department. The landscape comprises eight municipalities sharing similar socio economic characteristics.

The Amazon Piedmont in Caquetá is a critical environmental region, offering key ecosystem services such as carbon storage, water regulation, and supporting biodiversity between the Amazon and Andean regions. It is geographically diverse, ranging from valleys to escarpments and characterized by varying climates and altitudes from 300 to 3,600 meters above sea level. Economically, the region is largely dependent on agriculture, livestock, and forestry, but lacks adequate infrastructure, making production, processing and distribution difficult. Labor is largely informal, families earn scarce subsistence incomes, and the influx of small and medium investors has driven deforestation, causing considerable loss of rainforest and harming the area's rich biodiversity, including the endangered Ocotea quixos species. Around 40% of the landscape is protected under the official Amazon Rainforest Reserve Zone (Zona de Reserva Forestal Amazonica, Law No. 2 of 1959, Colombian National Congress), which limits the legal allocation and redistribution of land only to households settled in the area, and serves as a platform to grant access to public services (incl. economic incentives and access to credit) to those protected by the Law, motivating the population to associate for the collective management of benefits and government subsidies.

Despite international cooperation efforts to improve agricultural practices and increase market competitiveness while maintaining the resilience of the ecosystems, sustainability is at risk due to the expansion of agricultural land and poor production techniques passed down generationally. These practices, combined with weak infrastructure and limited government support, exacerbate environmental degradation. Additionally, the region continues to face socio political challenges, stemming from a history of internal armed conflict, which has contributed to inequality and poverty and the marked differences between rural areas compared to urban areas. The lack of fair market access and threats to community leaders defending the environment add to the socio-environmental risks, complicating efforts to achieve sustainable development in the Amazon Piedmont.

The Amazon Piedmont Landscape Initiative is in a fairly early stage of maturity. It has defined its landscape boundaries, has conducted a LandScale baseline assessment, and is in the process of validating the metrics for the LandScale assessments. The Landscape Initiative is led and managed by the Rainforest Alliance (RA) Landscape Alliance (in Spanish: *Aliaza para el paisaje*) which is hosted by the Rainforest Alliance Business Case (BC) Office in Colombia. The Asoacasan Cocoa Producers' organization is a formal partner of the Landscape Initiative that brings together cocoa farmers in the municipality of San José del Fragua. Additional interested parties and stakeholders are currently in the process of formalizing their participation in the Alliance.

The Landscape baseline assessment using LandScale was conducted in close collaboration with the Earth Innovation Institute, an organization that shared its national and international expertise and experience evaluating landscapes.

Data Collation Matrix

Topics	Data Collation	Finding Statements
Use Cases and Engagement Incentives	**Importance of LandScale Across Stakeholders** Stakeholders consistently emphasized the critical role of georeferenced data and spatial analysis in governance and decision-making, highlighting the platform's ability to generate localized knowledge and actionable insights. LandScale was recognized as a collaborative tool that facilitates the analysis of environmental changes and supports sustainable landscape management. Additionally, it was noted that sharing local and indigenous knowledge enhances the platform's effectiveness and relevance. (Rainforest Alliance, Corpoamazonía, Cocoa Producers) **Existing Use Cases:** ● **Governance and Decision-Making:** LandScale provides critical insights into landscape changes, supporting governance in resource management, land tenure, and environmental sustainability. Spatialized and georeferenced data aids in addressing land-use conflicts and aligning governance strategies with real-time environmental and social dynamics (Local Producers, Rainforest Alliance, Corpoamazonía, LandScale researchers) ● **Collaborative Action and Planning:** LandScale was identified as a collaborative tool for analyzing environmental challenges and providing actionable insights into sustainability issues. The platform helps in governance planning, resource allocation, and addressing ecosystem service challenges. It encourages collective action and fosters trust among community members, local authorities, and private actors by providing a shared space for data sharing and analysis. (Rainforest Alliance, Local Producers, Researchers) ● **Advocacy:** Evidence generated by LandScale supports the creation of evidence-based arguments for improved advocacy, by highlighting ecosystem trends and their impact on livelihoods and social well-being. The platform helps stakeholders engage in policy-making and promotes sustainability by providing quantitative data (e.g. statistics) and qualitative narratives (e.g. community stories) to capture complex landscape dynamics. (Local Producers, Actor Corpoamazonia, Rainforest Alliance)	● **Governance and Advocacy:** LandScale is a vital tool for understanding landscape changes and governance conditions. Its geospatial data and visualization tools help stakeholders align strategies with ecological and social realities, supporting decision-making and sustainability efforts. ● **Collaboration, advocacy, and inclusivity**: The platform fosters collaboration by providing a shared space for diverse stakeholders, strengthening advocacy for sustainability, and building trust. However, power imbalances sometimes limit equitable contributions, affecting inclusive decision-making and evidence generation. ● **Regional Partnerships for Scalability**: Expanding collaborations with regional organizations can increase LandScale's reach, adaptability, and impact. Strengthening local trust and buy-in will further drive engagement and sustainability efforts.

	Missing/Partially Realized Use Cases: ● **Tracking Sustainability Progress:** The platform aids stakeholders in tracking sustainability progress and identifying areas for improvement. But its potential for long-term monitoring and evaluation of sustainability initiatives is not fully utilized. It needs more frequent data updates and better visualization of progress over time to incentivize ongoing engagement. (Rainforest Alliance, Corpoamazonía, Cocoa producers) ● **Empowerment of Local Actors:** LandScale has the potential to empower local communities to participate in landscape management, but barriers remain. A more user-friendly interface, improved access, and capacity building are needed to incentivize broader participation, especially from marginalized groups. (Rainforest Alliance, Corpoamazonía, Cocoa producers). ● **Full integration of Local Knowledge:** While recognized as important, the effective integration of local and indigenous knowledge needs further development. Progress can be made by providing clearer guidelines, simplified tools, and potential incentives for knowledge sharing to encourage contributions from local communities. (Rainforest Alliance, Corpoamazonía)	
Functionality and business viability	**Improvements to Functionality:** ● **Data Quality and Timeliness:** A key limitation is the lack of frequent data updates, reducing the platform's relevance for real-time decision-making. Reliance on outdated public datasets affects accuracy and user confidence. Integrating real-time data sources and alternative datasets (e.g., community-based data, qualitative narratives) would enhance the platform's accuracy and applicability. (Researchers, Corpoamazonia, Rainforest Alliance) ● **Accessibility and Usability:** The platform's complexity, particularly its interface, presents barriers to users with limited technical expertise, such as rural communities and local producers. Simplifying the interface and enhancing usability through localized training and capacity-building could improve accessibility. (Researchers, Corpoamazonia, Local Producers) ● **Data Visualization and Comprehension:** Stakeholders value visual tools, such as dashboards and infographics, which make complex data more comprehensible. These	● **Data limitations and integration challenges**: Infrequent data updates reduce the platform's relevance for tracking changing landscapes and weaken user confidence. Additionally, relying solely on formal datasets creates blind spots, particularly in areas with incomplete or outdated primary data. ● **Usability and accessibility barriers**: The platform's complexity limits engagement, especially for rural and indigenous users with little technical experience or resources. Tailored training programs are essential to enable full participation in evidence generation and landscape governance. ● **Enhancing tools for impact**: Developing interactive dashboards and scenario modeling features would make complex data more accessible

	tools are essential for engagement, decision-making, and communication of insights. Expanding interactive dashboards, scenario modeling features, and infographics would improve data interpretation and accessibility for all users. (Researchers, Corpoamazonia, Rainforest Alliance, Local Producers) ● **Data Integration and Alternative Sources:** Exclusive reliance on formal datasets creates gaps, especially in regions where primary data is incomplete or outdated. Stakeholders emphasized the need for complementary qualitative sources, such as community testimonies, to provide richer insights. Potential Improvement: Incorporating alternative and community-based datasets would enhance evidence reliability and relevance. (Researchers, Corpoamazonia, Rainforest Alliance, Local Producers) ● **Capacity Building and Stakeholder Support:** Technical limitations restrict accessibility for some users, particularly at the community level. Stakeholders identified a need for training to improve engagement with the platform. Implementing tailored training programs, especially for less technologically adept users, would expand the platform's reach and impact. (Researchers, Corpoamazonia, Rainforest Alliance, Local Producers)	and actionable. Standardized guidelines for participatory processes would further improve stakeholder engagement.
Engagement of local and/or indigenous communities	**Effective Community Engagement:** ● **Community Involvement in Evidence Generation**: Strengthening community participation in data collection and analysis fosters a sense of ownership and enhances local governance practices. Participants acknowledged progress in collaboration but emphasized the need for more equitable and inclusive engagement processes to ensure community perspectives are fully integrated. ● **Integration of Hard and Soft Data**: Communities rely on quantitative data for tracking socio-economic and environmental trends, while qualitative insights (e.g., change stories, testimonies) provide a richer understanding of landscape dynamics. Combining these data types is essential for effective governance and advocacy. **Benefits of LandScale for Local/Indigenous Communities:** ● **Knowledge Importance for Advocacy and Decision-Making**: LandScale-generated insights help communities understand environmental changes, governance conditions, and resource management, strengthening advocacy efforts and informing decision-making at the local level. ● **Visualization Tools for Communication**: Dashboards and infographics are critical for	● **Relevance of Knowledge and Evidence**: LandScale insights are critical for understanding environmental changes and governance but must integrate localized data and provide more frequent updates to remain useful for communities. ● **Empowerment Through Engagement**: Community involvement in evidence generation has strengthened collaboration and governance. Expanding capacity-building programs and ensuring equitable participation can deepen this impact. ● **Value of Hard and Soft Data**: Both quantitative data and qualitative insights, such as change stories and testimonies, are essential for advocacy and decision-making. Dashboards and infographics improve communication but need better customization for local contexts. ● **Challenges with Platform Flexibility**: The

	simplifying complex information and improving communication with external stakeholders. These tools make data more accessible and actionable for communities engaged in governance and advocacy. ● **Most Significant Changes in Awareness**: Increased awareness of landscape governance among local communities was reported as a key outcome. Communities now have a better understanding of how governance structures impact their landscapes and livelihoods. **Opportunities to Enhance Community Participation:** ● **Training and Capacity Building**: Communities identified training programs and improved access to tools that integrate qualitative insights with quantitative data as key to improving decision-making. More flexible and localized data collection mechanisms are needed to better reflect community realities. ● **Stronger Localized Data Integration**: Communities aspire to see a greater emphasis on integrating local and informal data sources into LandScale, ensuring that insights reflect on-the-ground realities and allow for more dynamic collaboration. **Remaining Barriers to Effective Participation:** ● **Data Relevance and Customization Challenges**: Communities reported frustrations with data being too generic or outdated, limiting its usefulness for real-time decision-making. The rigid structure of LandScale's metrics often excludes locally generated or informal data, making it less relevant to community-specific contexts. ● **Limited Capacity-Building Initiatives**: While LandScale has increased awareness among communities, limited training and support have restricted deeper engagement in knowledge generation and decision-making processes. ● **Insufficient Customization for Local Contexts**: While the platform effectively highlights existing landscape realities, inadequate customization for community-specific contexts reduces its practical usability at the local level.	exclusion of community-generated data and rigid metrics limit LandScale's adaptability. Addressing these issues is key to making the platform more inclusive and responsive to local needs. ● **Impact of Awareness and Learning**: LandScale has increased awareness of governance and sustainability. Future efforts should focus on integrating dynamic, community-driven tools to enhance its impact.

Annex VI - Landscape-level Findings in Sintang district (Indonesia)

About the Sintang landscape initiative

The Indonesia case study focuses on the landscape of Sintang district in West Kalimantan, which is part of the Heart of Borneo and Kapuas watershed. It is managed by the *Sintang Lestari* Landscape Initiative. The LandScale use by this Initiative is led by the Rainforest Alliance Indonesia Country Office in collaboration with the Sintang Civil Society Communication Forum (FKMS) which is a multi-stakeholder communication forum that aims to accelerate sustainable development through the engagement of government, private sector, and NGO/Civil Society.

The Landscape Initiative is in a fairly progressed stage of maturity, with defined landscape boundaries, a formalized partnership, shared goals and a shared action plan. The partnership includes: Rainforest Alliance Indonesia, the Sintang district government, the Sintang Civil Society Communication Forum (FKMS), the Kalimantan Forest (KalFor) Project, and multiple landscape supporters/funders such as the Climate and Land Use Alliance (CLUA), the Consumer Goods Forum Forest Positive Coalition of Action (CGF FPCoA), and USAID Indonesia. It has conducted a LandScale baseline assessment (not yet published) and has completed the validation of nearly two-thirds of the metrics for the LandScale assessments.

Sintang district spans 2.2 million hectares and has 59% forest cover, including conservation and production forests, with 41% used for agriculture, mainly oil palm and rubber. The district's population of 423,674 relies on natural resource-based sectors like agriculture, forestry, and fisheries, which drive economic growth but also risk forest degradation. A major flood in 2021 affected over 20,000 households, highlighting environmental challenges. The district has implemented action plans such as the Sustainable Palm Oil Regional Action Plan (RAD-KSB) and the Sintang Lestari Regional Action Plan (RAD-SL) to guide sustainable land use and natural resource management. Multi-stakeholder platforms like the Joint Secretariat (SekBer) and the Regional Implementation Team for Sustainable Palm Oil (TPD-KSB) are helping align stakeholders on sustainability goals. These efforts aim to attract sustainable investments, maintain forest integrity, and support economic growth while protecting natural resources.

Data Collation Matrix

Topics	Data Collation	Finding Statements
Use Cases and Engagement Incentives	**Use Cases of LandScale Across Stakeholders** ● **Government:** Recognizes LandScale's potential for enhanced data-driven sustainability planning and environmental monitoring, but stresses the need for data alignments [BAPPEDA, DLH, the Government Regional Development Planning Agency of Sintang] ○ BAPPEDA acknowledges LandScale's potential to support regional planning and policy alignment, particularly for sustainability in RPJMD (Medium-Term Development Plan) and RPJPD (Long-Term Development Plan) but has not formally integrated it yet. ○ DLH (Environmental Agency of the Sintang District Government) considers LandScale data relevant for monitoring environmental indicators such as water quality and land cover, though they still rely on government data sources like BPS (DLH). ○ The Regent's Office has expressed interest in spatial data visualization and infographics from LandScale to support policy decisions but has not yet institutionalized its use. ● **Civil Society:** Used to strengthen multi-stakeholder collaboration, governance advocacy, and conservation initiatives by CSOs [WWF, FKMS, AMAN, RA, LTKL, LandScale Management Team] ○ WWF sees LandScale as a potential tool to measure conservation efforts and jurisdictional land management, particularly for HCP (High Conservation Value) areas and water quality assessments. ○ FKMS (Sintang Community Communication Forum) has used LandScale to identify governance gaps and advocate for inclusive participation of smallholders and indigenous groups. ○ AMAN (Indigenous Peoples Alliance) acknowledges LandScale's relevance in land tenure discussions, but indigenous groups are not directly involved in shaping the assessment process. ○ RA and LTKL have helped align LandScale findings with jurisdictional sustainability frameworks, supporting knowledge-sharing among stakeholders. ● **Private Sector:** Used to support sustainability compliance and market access of supply chains, but lacks full integration with corporate decision-making [PT Forestwise, Palm Oil Cooperatives] ○ PT Forestwise recognizes LandScale as a valuable framework for monitoring deforestation risks and governance improvements, helping businesses comply with sustainability commitments. ○ Palm oil cooperatives use LandScale-related data to improve RSPO certification, advocate for	● The partnership and collaboration between the Sintang Community Forum (FKMS) and government stakeholders have facilitated the contextual implementation of the LandScale Pilot Assessment in Sintang Regency. ● The implementation of the LandScale Assessment by FKMS and government actors has enhanced local capacity to better understand and engage in data-driven landscape management, allowing them to play a more active role in the future. ● The LandScale Assessment has generated locally relevant insights, reflecting local governance, and has facilitated a deep understanding and field verification of conditions when data errors occur. ● The LandScale Assessment strengthens recognition among stakeholders of the various contributions of landscape initiatives, including those from the government, private sector, and civil society in Sintang Regency.

	better pricing, and enhance farmer training on sustainable practices. ○ Companies see gaps in statistical data availability, limiting their ability to use LandScale assessments for decision-making. ● **Communities:** Benefiting from knowledge-sharing for sustainable land management but lacking direct access and involvement in assessments [Farmers, Palm Oil Cooperatives, AMAN, LandScale Management Team] ○ Smallholder farmers have benefited from LandScale-related training on agroforestry, organic fertilizers, and sustainable pest control but have limited access to LandScale data and tools. ○ Indigenous groups acknowledge LandScale's role in highlighting landscape changes but emphasize that economic pressures force them into palm oil expansion despite conservation goals. ○ Community knowledge and stories are not fully integrated into LandScale assessments, limiting its applicability for local advocacy. ● **Development Partners:** Recognizing LandScale's potential for enhanced data-driven decision-making but stressing the need for better local adaptation [USAID, Kalfor, SIS, CSOs, LandScale Management Team] ○ Development partners recognize LandScale as a framework for structuring multi-stakeholder collaboration but stress the need for better contextualization of global indicators to fit Sintang's reality. ○ USAID and Kalfor contributed data but were not fully involved in ongoing assessments, indicating that LandScale still needs stronger integration with existing development initiatives.	
Functionality and business viability	**Key Functionalities and Benefits** ● **Comprehensive Landscape Assessment Tool** [Desk Review, PT Forestwise, Government, Private Sector Stakeholders, WWF] ○ LandScale provides an integrated approach to monitor and assess landscape sustainability across **four key dimensions**: social, economic, environmental, and governance. ○ It simplifies governance by offering structured recommendations for decision-makers, helping the government and stakeholders understand landscape conditions. ○ The tool is flexible, allowing stakeholders to agree on measurement units, dimensions, and criteria based on Sintang's context. ○ Sintang lacks a centralized landscape focus, and LandScale serves as an initial assessment to define key management areas. Deforestation remains a major issue, driven by economic	

	pressures, illegal mining, and land clearing for plantations. Tengkawang harvesting and diversification of livelihood options could mitigate deforestation, but processing requirements for export remain a challenge. Flood-prone areas need infrastructure improvements, particularly in swamps where roads are frequently submerged. ● **Data-Driven Policy and Decision-Making** [Desk Review, Government] ○ LandScale provides verifiable and objective data that informs policy formulation, regulatory decisions, and sustainability planning. ○ The tool supports local governments, such as Bappeda (Development Planning Agency), in achieving sustainability goals in alignment with RPJMD (Regional Medium-Term Development Plan) and other policies. ○ Enables tracking of regulatory impact, such as forest management decrees and conservation policies based on NGO and community-provided evidence. ● **Enhancing Multi-Stakeholder Collaboration** [WWF, LTKL, Landscape Supporters] ○ LandScale fosters collaborative governance by integrating data from government, private sector, NGOs, and local communities. ○ The assessment process helps clarify roles and contributions of different actors in Sintang's sustainability initiatives. ○ It serves as a common reference tool, bridging gaps between civil society data, government standards (BPS), and private sector sustainability commitments. ○ The Civil Society Communication Forum (FKMS) used LandScale data to drive Rimba Gupung recognition, leading to the issuance of 21 decrees supporting indigenous land rights. ○ Data from LandScale supports decision-making for jurisdictional conservation and HCP management, ensuring long-term sustainability efforts. ● **Monitoring Economic and Environmental Impacts** [Private Sector Stakeholders, Government, LTKL] ○ LandScale identifies key economic dependencies on forest resources and suggests sustainable livelihood alternatives (e.g., tengkawang fruit). ○ The tool highlights the risks of deforestation and land-use change, linking them to economic pressures, illegal activities, and climate-related impacts (e.g., flooding in 2021). ○ It tracks community income changes and supports livelihood diversification, showing potential economic benefits from conservation practices. ○ Sintang's river quality monitoring efforts have benefited from LandScale, enabling targeted	

	interventions for fishery development. **Challenges with Data Management, Alignment, and Visualization** ● Challenges in **integrating LandScale with government data** exist—as government agencies rely on official data sources from BPS (Statistics Indonesia) and SDI (One Data Indonesia, i.e. official data standardization and integration for accurate, accountable, and accessible governance.)—limiting LandScale's influence on policy making. [DLH] ● WWF and the government see LandScale as a **potential tool for multi-stakeholder monitoring**, though alignment with government-mandated tools is still under discussion. [WWF] ● **Data quality and verification** remain critical concerns, requiring: [RA Office] ○ Adjustments to align LandScale indicators with the 5-year regional development plan (RPJMD) and 20-year regional development vision (RPJPD) periods. ○ Contextualization of public and community data sources. ○ Independent local reviewers for verification. ● **Visualization tools**, including dashboards and infographics, could significantly improve data accessibility and policy advocacy, meeting government preferences for simplified data presentation. [BAPPEDA] **Challenges with LandScale Implementation** ● Limited **funding support** for LandScale implementation slows progress, especially in Steps 4 and 5. [RA Office] ● Challenges exist in **interpreting global standards** within the Sintang context, requiring adjustments to metrics and methodologies. [RA Office] ● **Capacity-building** efforts are necessary, particularly in: [RA Office] ○ Developing Reference Guides for data collection and verification. ○ Providing training for stakeholders on data standards. ● LandScale's influence on governance decisions remains limited, and additional efforts are required to ensure its findings are formally integrated into government policies. There is a need for better **communication of LandScale's role** within the government's existing monitoring and planning frameworks. [WWF] ● **Community engagement** is indirect and lacks accessibility: [Palm Oil Cooperatives, FKMS, LandScale Management Team]	

	○ Indigenous and smallholder communities are represented through intermediaries, but not directly involved in shaping assessments. ○ LandScale findings are not easily accessible to local communities, as data is not available in simplified formats (e.g., infographics, community radio, offline tools). ● **LandScale's business case for businesses** is not fully developed: [PT Forestwise, [LandScale Management Team] ○ Companies struggle to see clear financial or operational benefits from participating in LandScale assessments. ○ There are no direct financial incentives (e.g., green financing, preferential market access) for LandScale adoption, limiting corporate uptake. ○ LandScale lacks premium services for businesses, such as custom risk reports, ESG dashboards, or market compliance tools—e.g.: ■ **Supply Chain Risk Dashboards:** Live tracking of deforestation and land-use changes. ■ **ESG Compliance Reports:** Offering clear, structured, and easy-to-use outputs that companies can directly apply to their reporting, risk management, and sustainability compliance—for example: standardized landscape sustainability summaries, and jurisdictional risk profiles with simple scoring (e.g., high, medium, low risk for deforestation, community conflict, water quality, etc.). ■ **Green Finance & Carbon Market Tools:** Supports impact investment and carbon credit tracking. ■ **Business Advisory & API Integration:** Helps companies use LandScale data in corporate systems.	
Engagement of local and/or indigenous communities	**Effective Community Engagement in LandScale** ● Indigenous communities and smallholder farmers are represented through FKMS (Sintang Community Communication Forum) and cooperatives, ensuring that some local voices are included in discussions on landscape management. [LandScale Management Team] ● Farmers' cooperatives have actively participated in collecting production-related data, demonstrating local capacity to contribute to knowledge generation and assessment processes. [Communities, Palm Oil Cooperatives] ● Customary Schools (AMAN) provide an important knowledge-sharing space for indigenous communities, strengthening understanding of governance, land rights, and sustainability, which aligns with the goals of LandScale. [AMAN Sintang]	● Representation of indigenous communities, oil palm farmers, and other sectors helps to complete important data on changes in the landscape environment that cannot be met by public data in the LandScale assessment. ● LandScale provides data needed by indigenous communities and farmer communities to improve the

	● The RSPO certification process has helped smallholder farmers improve their governance practices and align with sustainable agriculture principles, increasing their access to better markets and financial incentives. [Communities, Palm Oil Cooperatives] ● LandScale assessments align with existing community-driven knowledge-sharing, which can be expanded to ensure that local communities are actively involved in shaping and utilizing the data. [LandScale Management Team] **Benefits of LandScale for Local/Indigenous Communities** ● Strengthening Sustainable Farming Practices [Communities, Palm Oil Cooperatives] ○ Farmers involved in RSPO certification and WWF training have gained valuable knowledge about sustainable farming techniques, such as organic fertilizers, reduced chemical inputs, and agroforestry. ○ Some cooperatives have used LandScale-related insights to advocate for sustainable palm oil production, leading to better market access and improved economic opportunities. ○ Farmers have adopted cost-saving techniques such as replacing chemical herbicides with mechanical weed control, reducing environmental impact while improving productivity. ● Knowledge for Governance and Policy Influence [Communities, Palm Oil Cooperatives] ○ Communities recognize the value of data for engaging with government and businesses, particularly in regulating commodity prices, securing land tenure rights, and improving environmental conservation efforts. ○ Indigenous cooperatives and farmer groups use data to engage in advocacy efforts, such as submitting proposals for fertilizer and herbicide subsidies and lobbying for fair pricing policies. ○ Some farmer groups have successfully used LandScale-aligned assessments to improve decision-making within their cooperatives, supporting better governance structures and long-term sustainability. ○ The adoption of organic farming methods and land restoration efforts are helping farmers reduce costs and protect their environment while securing long-term agricultural productivity. **Opportunities to Enhance Community Participation** ● Expanding Direct Engagement in LandScale Processes [LandScale Management Team, AMAN] ○ Establishing a direct feedback loop between indigenous groups, farmer cooperatives, and LandScale assessments would help ensure that local perspectives shape decision-making and	management of five main superior commodities in Sintang Regency.

	policy implementation. ○ Creating a participatory platform within LandScale where communities can upload and review data would encourage co-ownership of findings and strengthen trust between local stakeholders and policymakers. ● Using Community-Preferred Knowledge Sharing Methods [Communities, Palm Oil Cooperatives, AMAN Sintang] ○ Providing visual and storytelling-based communication (infographics, community videos, radio broadcasts) would make LandScale findings more accessible to non-technical audiences, especially indigenous communities. ○ Training local leaders in data interpretation would enable communities to translate findings into practical advocacy and policy influence. ● Aligning LandScale with Economic Incentives for Conservation [AMAN Sintang] ○ Encouraging government and businesses to provide financial support for farmers practicing sustainable agriculture would help address the economic pressures driving land conversion. Connecting indigenous conservation efforts to formal incentive structures, such as payment for ecosystem services or green financing, would ensure long-term benefits for communities engaged in environmental protection. ● Enhancing Community Involvement in Data Collection and Governance [LandScale Management Team, AMAN Sintang] ○ Training community members as data collectors and integrating traditional knowledge into LandScale assessments would improve data accuracy and ensure that indigenous perspectives are reflected in decision-making. ○ Recognizing indigenous mapping and customary land-use systems within LandScale indicators would validate and strengthen traditional governance models for sustainable land management. **Remaining Barriers to Effective Participation** ● Limited Direct Involvement in Decision-Making [LandScale Management Team, AMAN Sintang] ○ While communities contribute data through cooperatives, they are not formally included in shaping LandScale indicators or methodologies, limiting their influence over key decisions. ○ Indigenous perspectives on environmental governance and land rights are not yet fully incorporated into LandScale assessments, reducing the tool's ability to capture their unique experiences.	

	● Economic Pressures Limiting Sustainable Practices [Communities, Palm Oil Cooperatives, AMAN] ○ Many indigenous farmers feel forced to shift to palm oil production due to declining rubber and other commodity prices, as well as the lack of alternative economic incentives for conservation. ○ LandScale's sustainability goals do not yet align with economic realities for many smallholders, making conservation efforts difficult to sustain without additional financial support. ● Limited Access to LandScale Data and Tools [Desk Review, LandScale Management Team, Communities, Palm Oil Cooperatives] ○ Many farmers and indigenous groups do not have direct access to LandScale assessments, making it difficult for them to use the findings to advocate for policy changes. ○ The lack of accessible formats (infographics, dashboards, community presentations) for LandScale data limits its usability for non-technical stakeholders. ○ Internet access and digital literacy remain challenges for many community members, reinforcing the need for alternative ways of sharing findings, such as radio broadcasts and village meetings. **Conclusion: Strengthening Community Engagement for Greater Impact** ● The engagement of local and indigenous communities in LandScale has provided important learning opportunities, particularly in sustainable agriculture and governance. ● Some farmer cooperatives and indigenous groups have successfully used LandScale-aligned knowledge to advocate for better market access, financial support, and policy changes. ● There is strong potential to expand the role of communities in data collection and decision-making by improving direct engagement mechanisms and knowledge-sharing tools. ● Strengthening the alignment between LandScale and economic incentives for conservation would help ensure that sustainable practices are financially viable for smallholders. ● Making LandScale results more accessible through visual and community-driven formats would enhance participation and ensure that findings translate into meaningful action for local communities. ● With targeted improvements, LandScale can become a more inclusive and effective tool for empowering local and indigenous communities to take an active role in sustainable landscape management.	

Annex VII - Global Findings

About the global LandScale partnership

LandScale operates through dynamic partnerships to drive sustainable landscape management globally. Collaborating with influential organizations like Conservation International, Rainforest Alliance, and the Landscape Finance Lab, LandScale creates a robust ecosystem that addresses climate, biodiversity, and human well-being challenges. Partnerships such as the 1,000 Landscapes for 1 Billion People initiative further enhance LandScale's ability to scale up holistic sustainability solutions, fostering cross-sector collaboration. These alliances bridge expertise, resources, and advocacy to ensure that LandScale's tools remain effective, adaptable, and relevant across diverse geographies. By aligning with evolving global reporting standards such as CDP and Science-Based Targets Network (SBTN), LandScale ensures its assessments meet the growing needs of businesses, governments, and financial institutions, empowering them to invest in credible, landscape-scale sustainability initiatives.

LandScale's partnerships are vital for strengthening user engagement and delivering impact at scale. Local landscape initiatives play a critical role in driving grassroots-level transformations, and LandScale provides tailored solutions that align with specific regional challenges and opportunities. To bolster the adoption of its platform, LandScale increasingly collaborates with global entities like SourceUp and CDP to ensure compatibility with recognized reporting and monitoring frameworks—which is a focus for the new LandScale 2.0 version (forthcoming in 2025). Additionally, initiatives like the Access Fund, supported by the Walmart Foundation, demonstrate LandScale's commitment to inclusivity by lowering financial barriers for under-resourced landscapes to conduct validated assessments. These partnerships amplify LandScale's visibility, credibility, and effectiveness, enabling it to position itself as a trusted platform for facilitating multi-stakeholder investments, fostering transparency, and delivering tangible results for people, nature, and economies worldwide.

Data Collation Matrix

UVP Canvas	Cross-cases analysis	References	Global Inquiry analysis	References
Functionality: Gains	LandScale provides an integrated platform that consolidates diverse data sources to aid sustainable governance and decision-making. In Peru, the platform enhances agroforestry programs by enhancing readiness for certification and market access for producers like Cooperativa Oro Verde. In Mexico, it supports biodiversity conservation by aligning stakeholder efforts in biocultural landscapes. In Indonesia, it strengthens governance frameworks and local sustainability projects by integrating tools that facilitate collaboration between public and private sector actors.	Cooperativa Oro Verde (Peru), APEAJAL (Mexico), Sintang Regency Collaborative Landscape Action Plan (Indonesia)	LandScale serves as a comprehensive framework that integrates agriculture, governance, and social well-being, enabling diverse stakeholders to address sustainability goals effectively. Organizations like Unilever praise its searchable database of tools and indicators for streamlining assessments and aligning with global standards. The platform's adaptability is highlighted in initiatives such as '1,000 Landscapes for 1 Billion People,' supporting varied geographies while fostering collaboration and impact tracking (RA, EcoAgri).	RA, EcoAgri, Conservation International, Unilever
Functionality: Pains	Accessibility barriers limit LandScale's adoption. In Peru, HELVETAS faced issues with technical validation processes, leading to withdrawal from certain initiatives. Indonesia's FKMS team reported bugs and usability issues, especially in regions beyond key commodity focus areas. In Mexico, visualization gaps, such as mapping agrochemical recycling efforts, were highlighted. These challenges emphasize the need for culturally relevant, simplified interfaces and data formats that reduce complexity and encourage broader stakeholder participation.	HELVETAS (Peru), FKMS (Indonesia), JIRA (Mexico)	The requirement for comprehensive baselines and verification creates accessibility challenges, particularly for initiatives evolving incrementally. Stakeholders like Proforest noted that baseline assessments can take years, reducing engagement. Language barriers, as seen in Indonesia with its English-based interface, also hinder adoption. These issues emphasize the need for modularity, phased approaches, and localized tools to lower entry barriers and expand usability for resource-limited users (Proforest, CI).	Proforest, CI, IUCN, Landscape Lab

Functionality: Jobs	LandScale serves to provide actionable insights and tools that address regional sustainability challenges. In Peru, this includes supporting 'Paisajes sostenibles del cocoa,' which integrates agroforestry practices with conservation goals. Mexico leverages LandScale to align urban conservation efforts, such as biocultural biodiversity programs in Tapalpa. Indonesia focuses on collaborative governance, utilizing the platform to guide sustainable practices like mercury-free fisheries and support economic activities aligned with environmental goals.	Paisajes sostenibles del cocoa' project (Peru), ITESO tourism campaigns (Mexico), Sintang Regency public-private initiatives (Indonesia)	LandScale provides structured methodologies for assessing and tracking sustainability. Conservation International uses it to monitor biodiversity and livelihoods across landscapes in Vietnam, Peru, and Kenya. Its role in enabling both technical assessments and multi-stakeholder discussions enhances its appeal as a tool for governance alignment. For private-sector actors, its adaptability for commodity-focused initiatives supports incremental adoption, linking sustainability goals with business priorities (CI, RA).	CI, RA, Landscape Lab, Proforest
Use Case: Gains	LandScale enables stakeholders to improve decision-making and enhance alignment across various landscapes. In Mexico, the platform aids FIPRODEFO in promoting compliance with sustainability standards through targeted investments in farmer groups. Indonesia's FKMS and SSL utilize LandScale to streamline livelihood initiatives, including fish processing and mercury-free lake identification. In Peru, the platform integrates seamlessly into agroforestry strategies, promoting market access and creating synergies between community stakeholders and regional governance frameworks.	FIPRODEFO sustainability standards (Mexico), FKMS and SSL livelihood strategies (Indonesia), HELVETAS policy alignment (Peru)	Stakeholders value LandScale's ability to align sustainability indicators with investment goals, making it a 'powerful instrument' for fostering sustainable landscapes. In Guyana, it facilitated balanced discussions across environmental and economic dimensions. The stepwise guidance framework helps clarify roles and reduce ambiguity, while GIS tools in the upcoming 2.0 version are expected to streamline workflows and enhance user accessibility. These improvements boost its relevance for diverse user groups and contexts (Proforest, Landscape Lab).	Proforest, Landscape Lab, EcoAgri, CPD
Use Case: Pains	Challenges in adapting LandScale to local contexts hinder its broader usability. Mexico's JIRA identified issues with mapping and visualizing master plans, affecting planning efficiency. Indonesia's FKMS noted limited adoption due to English-based interfaces and insufficient alignment with local policy terminology. In Peru, HELVETAS withdrew from some projects due to complex technical requirements. Simplified tools, localized metrics, and culturally adapted materials are essential to overcoming these pain points and driving user engagement.	JIRA (Mexico), FKMS technical usability challenges (Indonesia), HELVETAS withdrawal due to complexity (Peru)	Stakeholders report challenges like time-intensive baseline requirements and technical complexities. In Guyana, extended assessment durations led to engagement fatigue, while in Indonesia, usability issues restricted broader adoption. The lack of modularity and customizable options to align with local needs limits LandScale's appeal for smaller or resource-constrained initiatives. Addressing these concerns through streamlined tools and improved guidance could foster wider adoption across varying landscapes (RA, IUCN).	RA, IUCN, Landscape Lab, CI

Use Case: Jobs	Key applications of LandScale include demonstrating sustainability practices for certification, supporting governance, and driving local economic growth. Peru utilizes the platform to boost readiness for certification for coffee and cocoa, improving access to eco-friendly markets. Mexico links sustainable farming practices, like avocado production, to premium global markets. Indonesia integrates LandScale into fisheries management, aligning it with mercury-free environmental policies and providing actionable insights to enhance governance and collaborative landscape planning.	Cooperativa Oro Verde ecocertification (Peru), APEAJAL market access (Mexico), FKMS sustainable fisheries (Indonesia)	LandScale helps organizations demonstrate compliance with global sustainability frameworks like TCFD and TNFD. Its integration with tools like SourceUp enhances credibility for self-reporting while supporting phased verification for private-sector actors. It enables peer-to-peer learning and aligns with corporate disclosure needs, helping businesses showcase tangible sustainability impacts. By connecting local stakeholders with global investment frameworks, it bridges governance and financial sustainability priorities effectively (Proforest, CI).	Proforest, CI, TCFD, TNFD, SourceUp

Annex VIII - Global Sensemaking Notes

A global sensemaking workshop was organized on 20 January 2025, in which participants from the global and landscape-level evaluation inquiries participated in a 3-hour discussion to collectively cross-validate the evaluation findings and recommendations. A total of 42 invitations were sent, of which 19 and 17 participated. The list of participants is added at the end of this annex.

The objectives of the sensemaking workshop were the following:

- Leverage interest and support for local action
- Celebrate achievements
- Cross-validate findings and recommendations
- Propose actions for prioritised recommendations

In the first 75 minutes, following a brief introduction and overview of LandScale's background and journey by Rainforest Alliance, the consultants shared the evaluation findings. The participants identified and celebrated major achievements. After a 15-minute break, recommendations that emerged from the local sensemaking events and global consultations were presented, and participants discussed and cross-validated the findings in two mixed teams—one Spanish team and one English team—for those recommendations they found most important. Back in plenary, the teams shared feedback and proposed next steps. Below are the notes from the team discussions.

Notes from the English Team

The English team prioritised **Recommendations 2, 4 5, and 7**. The team's reflections were the following.

Rec.	Cross Validation of findings	What can I contribute?	When could this happen?	Other?
2	Conflict between customization and standardization. Need to ask for a wishlist to identify essential needs for customization and self-reporting while retaining holistic framing and flexibility. Customization could aid discussions with the government.	Balance customization and self-reporting while aligning with standard approaches.	Requires discussions with stakeholders and clear identification of needs	Align customization and governmental dialogues.
4	Use cases of LandScale assessments in some countries show potential for policy dialogue and action. Needs clarification on costs for monitoring, governance objectives, and how the public sector can communicate impacts at landscape level.	Showcase use cases to drive policy dialogue and align governance objectives with regional-national dynamics.	Requires alignment with governance objectives and stakeholder engagement.	Consider regional-national dynamics and their influence on policy actions.
5	Need to ensure meaningful participation, make the tool and interface more accessible. Scoping is required to identify key steps and priorities, as not everything can be addressed.	Define clear systems and processes for meaningful participation and accessibility.	Requires scoping and priority identification.	Balance system development with the tool's accessibility goals.
7	A participant explained that they are testing with Source Up. Field teams are exploring LandScale use as a global	Develop monitoring and evaluation	Requires integration with existing	Clarify LandScale's dual role as a baseline

	baseline and SourceUp as a reporting tool. Ongoing uncertainty whether LandScale is only a baseline or can also serve as a monitoring tool post-assessment.	systems integrating LandScale for continuous use after assessments.	monitoring frameworks).	and monitoring tool.

Notes from the Spanish Team

The Spanish team prioritized **Recommendations 1, 2, and 5**. The team's reflections were the following.

Rec No.	Cross Validation of findings	What can I contribute?	When could this happen?	Other?
1	Create a link to connect product offerings with market demand. Clarify the project's scope on the platform to better manage projects in the territory.		Up to RA to decide	Provide contact details and the websites of companies offering solutions.
2	To improve the offer, it is necessary to clearly define which ones are the "assets" in the assessments and the results (claims) that generate interest and value in the impact market. Example: Carbon is a clearly defined asset. However, in the case of LS, we do not measure tons of carbon. Proposals to attract interest: -We offer productive restoration in X hectares. -We offer capacity building in key areas. It is essential to determine how to present these offers in an attractive way and align them with the expectations of the impact market.	So, what could we define and measure with LS to promote in the market? Community empowerment? Ecosystem restoration? This question must be asked to establish the steps to follow.	Should we define specific assets for this or not?	
5	To ensure that all voices are heard, it should be considered using a system of "quotas" by age, ethnicity, origin, etc. For example, 50-50% gender parity, and actively expand participation of women, youth, and children. Ensure that the feedback is meaningful to the people: if water data is collected, the people should understand, "What does this mean for me?" This motivates continued engagement in the process. Review compliance with local safeguards (where applicable). Safeguards "are understood as social and environmental principles, conditions	Participants will contribute to making sure that this process is effective. With Hilda's leadership, she will encourage more participation. The company can contribute to water access improvement, and especially in those cases and	Should be done very quickly, Immediately	The latest update of LS includes the "Sustainable Landscape Association," which facilitates the participation process for local actors. It's already in place and encourages community involvement.

	or criteria that guide the design and implementation of policies, programs and other actions[27].” For the private sector it is important to participate actively in the communities activities, and support the needs of the local population	situations where there is scarcity. They can include these actions in their CSR strategies		

Participants

Name	Organization	Country	Team
Mike Senior	Proforest	Global	English team
Bruno Montesinos	Conservation International	Global	English team
Norma Pedroza Arceo	CDP	Global	English team
Renata Lozano Giral	Verra	Global	English team
Sarah Lupberger	Rainforest Alliance	Global	English team
Alice Gottesman	Rainforest Alliance	Global	English team
Edita Chavez	Rainforest Alliance	Global	Spanish team
Henk Gilhuis	Rainforest Alliance	Global	English team
Heather Elgar	Rainforest Alliance	Global	English team
Hannah Grice	RA LandScale	Global	Spanish team
Santiago Machado Macías	Rainforest Alliance Mexico- Director	Mexico	Spanish team
Gustavo Rojas	Rainforest Alliance Mexico -Sustainable Landscapes Manager	Mexico	English team
Susana Salmerón Hermosillo	Rainforest Alliance Mexico - Sustainable Landscapes Associate	Mexico	Spanish team
Armando García	Grupo Los Cerritos Mexico - Private Sector	Mexico	Spanish team
Hilda Eleazer Guzman Salgado	Farmer-producer Mexico	Mexico	Spanish team
Vanessa Coronado	Rainforest Alliance	Colombia	English team
Rosa Céspeedes	Rainforest Alliance Peru	Peru	Spanish team

[27] Definition taken from the Mexican government´s Website of the National Forestry Commission (CONAFOR).

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