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CDE CENTRE FOR DEVELOPMENT AND ENVIRONMENT



Sustainable landscapes: How can the private sector contribute?

CDE POLICY BRIEF

Pressures on landscapes and people driven by soaring global consumption call for innovative solutions to enable sustainability. Many consumption-related harms are especially acute in countries of the global South where commodities are produced. Given their role as main suppliers of global consumption, businesses – especially multinational companies – have major potential to enable more sustainable use of landscapes, in collaboration with the public sector. This policy brief highlights the promise and challenges of sustainability-oriented landscape approaches involving the private sector, as well as how existing landscape initiatives might be improved.

Resource pressures and the private sector

Across the globe, pressures on land, water, and related ecosystems continue to rise at an alarming rate as producers of diverse commodities strive to meet the soaring demands of human consumption. Ever more people are competing over dwindling natural resources. Meanwhile, the compounding threats of climate change, environmental degradation, food insecurity, and poverty make it increasingly difficult to identify workable paths forward to achieve the 2030 Agenda for Sustainable Development.

Private-sector actors – especially multinational companies – stand at the forefront of these challenges. Through the international supply chains of highly sought-after commodities – such as soy, rubber, palm oil, cocoa, or coffee – private-sector business decisions in the global North significantly shape landscapes in the global South where commodities are sourced. Of course, these business decisions can create opportunities

KEY MESSAGES

- Landscape approaches hold promise as an innovative solution to safeguard ecosystems while balancing the claims and needs of different stakeholders, including local people in commodity-producing countries and global consumers linked via export markets.
- Private-sector actors, especially multinational companies, increasingly engage in landscape initiatives. But many of these initiatives have key design gaps that must be addressed.
- Landscape initiatives should look beyond individual value chain activities and sourcing areas in a landscape. They should support diverse land uses and ecosystem services in a given landscape and foster effective collaboration among all relevant stakeholders.
- The quality of landscape initiatives could be improved if businesses collaborated more with outside experts – including scientists and development specialists.



The research featured here is focused globally.

Key terms

A **landscape** is a geographic area that can vary in size from hundreds to thousands of square kilometres. Its borders may be defined according to natural features (e.g. mountains, watersheds, ecosystems), administrative boundaries (e.g. jurisdiction, territory), or a combination of both. A single landscape may contain various types of land cover and natural resources – e.g. forest, pasture, cropland, settlements, lakes – that serve different uses or "functions" for different actors.⁴ Examples of these functions include subsistence agriculture or for-profit commodity production, biodiversity conservation, recreation, and shelter.⁵

A **landscape approach** is a collaborative way of managing the natural resources in a landscape to harmonize the needs of people and the environment.⁶ It brings together diverse public and private actors, or land users, to jointly define a common vision for the future. This shared vision should emphasize sustainability, balance people's competing demands, maximize synergies, and lead to creation of a practical implementation and monitoring plan.⁷

Jurisdictional approaches are a specific type of landscape approach that follow administrative boundaries and typically include the strong involvement of local government.⁸

The **private sector** refers to that part of the national economy that is not subject to direct state control. It encompasses a wide variety of for-profit businesses, ranging from small family businesses to multinational corporations. In our analytical conception, it also includes NGOs that work with companies to improve sustainability, as well as standard setters, business associations, and others. like jobs in affected areas. But they can also create risks in impacted regions, including risks of deforestation, biodiversity loss, and social fragmentation. As a result, businesses face mounting pressure to transform their practices towards greater sustainability. In response, many companies have pledged their commitment to sustainable development and responsible sourcing, applying selected sustainability standards or their own codes of conduct.

However, the urgent sustainability challenges arising from commodity production cannot be tackled by individual businesses or investors acting alone – nor by public or civic actors who often operate in sectoral silos.¹ Instead, evidence suggests that such challenges are better addressed at the landscape level, in a cooperative manner that encourages all landscape-scale resource users and interested parties to work from the same script.²

Recognizing the need for more collaborative and spatially comprehensive solutions, prominent multinational companies (e.g. commodity producers and processors) and other private-sector actors are now actively investing in the establishment of sustainable sourcing regions – and doing so in the framework of so-called *landscape* or *jurisdictional* initiatives. In one key recent private-sector survey (CDP Forests), the number of companies claiming to engage in landscape approaches rose 74% (to 47 in total) between 2020 and 2021.³

Landscapes in focus

Indeed, landscapes are increasingly viewed as the most appropriate or practical scale

Design principles	Priv	ate se	ector s	strate	gies f	or lar	ıdscap	oe ini	tiative	es (n=10)
Engaging multiple stakeholders	2	2	2	2	2	2	2	2	2	2
Evaluating progress	2	2	2	2	2	2	2	2	2	2
Establishing common concern entry points	2	2	2	2	2	2	2		2	2
Evolving from panacea solutions	2	2	2	2	2	2	2	2	2	2
Establishing good governance	2	2	2	2	2	2	2	2	2	2
Defining theories of change	2	2	2	2	2	2	2	2	2	2
Embracing dynamic processes	2	2	2	2	2	2	2	2	2	
Ensured financing	2	2	2	2	2	2	2	2	2	2
Establishing conflict resolution mech.	2	2	2	2	2	2	2	2	2	2
Integration into planning of the locality	2	2	2	2	2	2	2	2	2	2
Considering multiple scales	2	2	2	2	2	2	2	2	2	2
Considering multifunctionality	2	2	2	2	2	2	2	2	2	2
businesses & business coalitions	s & mult	of design principle by & multi-stakeholder ms (n=5) Non-uptake of design principle								
Figure 1. Design principles for landscape approaches recommended by scientists; and their uptake										

(or lack of uptake, i.e. "gaps") in strategies for landscape initiatives by private-sector actors.

at which to manage today's interconnected local, national, and global resource demands and work to steer them towards sustainability.⁹ Based on this, there have been growing calls by sustainability scientists and others to adopt so-called (*integrated*) *landscape approaches* to confront global and local pressures on ecosystems.¹⁰ While a variety of definitions exist, most science-based understandings of the approach emphasize the following key elements¹¹:

- *holistic management* of sustainable landscapes;
- multifunctionality, or explicit recognition of the rich tapestry of land uses within a landscape and the diverse set of services it provides;
- participatory processes that facilitate collaboration between (often competing) resource users and other stakeholders from various sectors, disciplines, communities, and hands-on fields; and
- balancing of goals and trade-offs related to nature conservation, economic development, climate change mitigation, and ensuring human well-being.

Given the growing involvement of powerful business actors in landscape initiatives, questions arise about the quality of the design and implementation of such efforts.¹² Their origins in inter- and transdisciplinary scientific work suggest that – done right – they have the potential to enable real progress in addressing today's grave sustainability challenges.

Gaps in design of initiatives

Against this backdrop, researchers at CDE conducted an exploratory analysis of private-sector landscape initiatives (see Box 1). They synthesized design principles for landscape initiatives recommended in the scientific literature¹³ and compared them with the strategic documents of private-sector actors (businesses and NGOs) participating in landscape initiatives. The analysis showed that certain design principles were sufficiently addressed (e.g. progress evaluation), whereas others received less attention or were missing entirely (Figure 1). Key gaps identified include:

Considering multifunctionality. Despite their landscape focus, the private-sector initiatives tended to emphasize their own production areas while overlooking other land uses or ecosystem services supported by the wider landscape as a whole. This contradicts the holistic view recommended by scientific advocates of integrated landscape approaches. **Comprehensive inclusiveness.** The strategic documents of most initiatives cited the need for engagement with a broad cross-section of stakeholders. However, our sample also revealed a tendency to focus primarily on actors directly linked to the respective company supply chains. This approach risks excluding important stakeholders with competing interests or claims – among them vulnerable groups (e.g. indigenous communities).

Conflict resolution. Relatedly, mechanisms for solving grievances or tensions among stakeholders were scarcely mentioned. This too is concerning due to the power imbalances frequently present between outside business interests and local actors.

Local integration. Also absent was mention of the need to harmonize landscape initiatives with the existing (spatial) planning of local government agencies and the policies of relevant jurisdictional authorities. But without the buy-in of such authorities, landscape initiatives are unlikely to succeed in the medium- to long-term.¹⁴

Secure financing. The question of lasting funding often remains insufficiently addressed. Private actors understandably try to target their investment, delimit its time horizon, and safeguard their own returns. But ensuring healthy landscapes demands more innovative, coordinated, long-view funding that brings together private, public, and civic actors in sharing costs, assuming risks, and benefitting from investment returns – the latter including the appraised value of ecosystem services.¹⁵

Multi-scale integration. Finally, there was little discussion of the need to consider linkages between landscapes regionally, nationally, and globally – going beyond the boundaries of a given value chain. In our networked world, however, landscapes are connected through various flows (e.g. worker migration, trade, or financial flows).¹⁶ Also, interventions in one landscape can impact other landscapes near and far through leakage effects.¹⁷

Openings for specialists

Importantly, the gaps identified suggest that scientists and development practitioners could play a central role in enabling private-sector landscape initiatives to realize their full potential. Our comparison of science-based design principles with strategic documents of selected landscape initiatives suggests that specialists from these expert communities could contribute in several key ways: **Capturing multifunctionality.** The many land uses and ecosystem services supported by individual landscapes can be captured by specialists using geographic information systems, remote sensing (e.g. satellite imagery), and co-creation of maps with stakeholders.¹⁸ Experts can also obtain rich information from land users and other stakeholders by means of biophysical and socio-economic surveys, focus group discussions, and household interviews.

Facilitating platforms for effective

stakeholder participation. To enable the participation of all relevant stakeholders – including indigenous communities, local authorities, and competing land users – experts in facilitating platforms for joint visioning, planning, and decision-making could be brought in. Examples from CDE research and practice include structured multi-day workshops to select and test tools of sustainable land management – e.g. WOCAT tools and methods¹⁹ – as well as "learning watersheds" in Ethiopia (see Box 2).²⁰

Monitoring, evaluation, and learning.

Scientists and practitioners can play a key role as independent observers on behalf of quality assurance and impact assessment. This can include "ground truthing" efforts (e.g. targeted impact studies), broader evaluations of the success of landscape initiatives (e.g. meta-analyses of impact studies), or the provision of standardized methodologies and assessment frameworks to survey their effectiveness.²¹

Identifying big-picture links. Finally, scientific work on "telecoupled" landscapes can enable the implementers of landscape initiatives to better understand and manage the social-ecological ripple effects of their activities – locally, regionally, and globally.²² These patterns of interconnections can be usefully visualized as flows of goods, webs of links between actors, networks of actions, and more.²³

Box 1. Analysis of private-sector supported landscape initiatives

The insights and recommendations outlined in this brief are based on an exploratory analysis aimed at finding ways to improve landscape initiatives involving the private sector. The analysis was carried out as part of the CDE project "Enabling Private Sector Strategies for Sustainable Development". First, CDE researchers conducted a review and synthesis of the literature on science-based design principles for integrated landscape approaches. Second, they selected ten exemplary strategic documents from private-sector actors focusing on their engagement in landscape initiatives (five led by businesses or business coalitions; five led by NGOs). They then carefully assessed whether these strategic documents incorporated the design elements recommended by experts. Due to the small sample size, the results of this desk-based analysis are only indicative. More information on the analysis can be found at: https://boris.unibe.ch/id/ eprint/190273.

Box 2. Featured case study: Learning watersheds in Ethiopia

In collaboration with the Water and Land Resource Centre (WLRC) at Addis Ababa University, CDE has helped to implement so-called "learning watersheds" - a kind of landscape approach - in Ethiopia's Upper Blue Nile Basin. This region of the agricultural-dependent country comprises landscapes characterized by fragile ecosystems. Using the watershed approach, a combination of sustainable land management and livelihood-improving practices were applied in the landscapes. In some cases, private-sector actors supplied agricultural equipment and provided market access for resulting products (e.g. fruits, vegetables, milk, honey). Afterwards, knowledge gained from the learning watersheds was used to support the design of landscape initiatives involving multinational companies in the landscapes of Sululta and Kunzila in Ethiopia.

Box 3. Key practitioner resources on implementation of landscape approach²⁴

- Scherr et al. 2017. Business for Sustainable Landscapes: An Action Agenda to Advance Landscape Partnerships for Sustainable Development.
- TFA, WWF, Proforest. 2020. Landscape Scale Action for Forests, People and Sustainable Production: A Practical Guide for Companies.
- ISEAL. 2022. Effective Company Actions in Landscapes and Jurisdictions: Guiding Practices.

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Policy implications

Responsibility for sustainable landscapes is shared by all – including the private sector

All landscape stakeholders have a responsibility to ensure sustainable use of resources. But given their superior financial resources and their key role as suppliers of global consumption, private-sector actors – especially multinational companies – have a lot of potential leverage to enable sustainable landscapes. They can realize this potential by implementing evidence-based landscape approaches in close collaboration with other stakeholders, including the public sector, civic actors, other businesses, and communities living in or near sourcing landscapes. Local governments must play a central role, given their responsibility and authority as facilitators of landscape planning and management.

Well-designed landscape approaches enable collaboration for sustainability

Science offers detailed principles for the design of effective landscape approaches. The private sector can use them to co-create effective initiatives. The design process should involve comprehensive discussions with all stakeholders, addressing key elements like good governance and conflict resolution. In the process, private-sector actors should make clear commitments to ensure accountability in the future. It is also crucial to establish robust governance frameworks²⁵ and a financing strategy capable of ensuring long-term success.

Holistic design should be adhered to in practice

Of course, even the most well-designed approach is nothing without proper implementation. In practice, landscape management should be comprehensive and go beyond the needs of individual value chains to include other land uses or ecosystem services supported by specific landscapes. To ensure the quality of landscape initiatives from start to finish, outside experts can be brought in.²⁶ They can help to document the multifunctionality of particular landscapes and facilitate platforms for joint visioning, planning, and decision-making regarding sustainable practices. They can also assist with monitoring, ground truthing, and evaluation of implemented activities as well as big-picture links.

Suggested further reading

ISEAL [International Social and Environmental Accreditation and Labelling Alliance]. 2022/2023. Series of Joint Landscape Position Papers. London, UK: ISEAL.

https://www.isealalliance.org/get-involved/resources/joint-landscape-position-papers-20222023 Pedroza-Arceo NM, Weber N, Ortega-Argueta A. 2022. A knowledge review on integrated landscape approaches. *Forests* 13(2):312. https://doi.org/10.3390/f13020312

Reed J, Ickowitz A, Chervier C, Djoudi H, Moombe K, Ros-Tonen M, Yanou M, Yuliani L, Sunderland T. 2020. Integrated landscape approaches in the tropics: A brief stock-take. *Land Use Policy* 99:104822. https://doi.org/10.1016/j.landusepol.2020.104822

Sayer J, Sunderland T, Ghazoul J, Pfund JL, Sheil D, Meijaard E, Venter M, Boedhihartono AK, Day M, Garcia C, Van Oosten C. 2013. Ten principles for a landscape approach to reconciling agriculture, conservation, and other competing land uses. *Proceedings of the National Academy of Sciences* 110(21):8349-8356. https://doi.org/10.1073/pnas.1210595110

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Keywords: Landscape approach, jurisdictional approach, design principles, private sector, commodities, global South

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²³Sonderegger G, Oberlack C, Llopis JC, Verburg PH, Heinimann A. 2020. Telecoupling visualizations through a network lens: A systematic review. *Ecology & Society 25*. https://doi.org/10.5751/ES-11830-250447

²⁴A number of resources have been developed by practitioners and scientists to guide the design and implementation of landscape initiatives. Good examples include the following:

Reed J, Ickowitz A, Chervier C, Djoudi H, Moombe K, Ros-Tonen M, Yanou M, Yuliani L, Sunderland T. 2020. Integrated landscape approaches in the tropics: A brief stock-take. *Land Use Policy* 99:104822. https://www.mdpi.com/1999-4907/13/2/312;

Sayer J, Sunderland T, Ghazoul J, Pfund JL, Sheil D, Meijaard E, Venter M, Boedhihartono AK, Day M, Garcia C, Van Oosten C. 2013. Ten principles for a landscape approach to reconciling agriculture, conservation, and other competing land uses. *Proceedings of the National Academy of Sciences* 110(21):8349-8356. https://doi.org/10.1073/pnas.1210595110;

Sayer J, Margules C, Boedhihartono AK, Dale A, Sunderland T, Supriatna J, Saryanthi R. 2015. Landscape approaches; what are the pre-conditions for success? *Sustainability Science*. 10(2):345–355. https://link.springer.com/article/10.1007/s11625-014-0281-5;

Scherr SJ, Shames S, Gross L, Borges MA, Bos G, Brasser A. 2017. *Business for Sustainable Landscapes: An Action Agenda to Advance Landscape Partnerships for Sustainable Development*. Washington, USA: EcoAgriculture Partners, International Union for Conservation of Nature (IUCN): https://bit.ly/3MT8iYY;

TFA [Tropical Forest Alliance], WWF [World Wide Fund for Nature], Proforest. 2020. Landscape Scale Action for Forests, People and Sustainable Production: A Practical Guide for Companies. Cologny, Switzerland; Zurich, Switzerland; Oxford, UK: TFA, WWF, Proforest. https://jaresourcehub.org/resources/guidance-for-companies/interventions/;

ISEAL [International Social and Environmental Accreditation and Labelling Alliance]. 2022. *Effective Company Actions in Landscapes and Jurisdictions: Guiding Practices*. London, UK: ISEAL. https://www.isealalliance.org/get-involved/resources/ effective-company-actions-landscapes-and-jurisdictions-guiding-practices;

ISEAL [International Social and Environmental Accreditation and Labelling Alliance]. 2022/2023. Series of Joint Landscape Position Papers. London, UK: ISEAL.

https://www.isealalliance.org/get-involved/resources/joint-landscape-position-papers-20222023

²⁵ Bürgi Bonanomi E, Schäli J, editors. 2024. Federal Act for Sustainable Trade in Agriculture? A Proposal for the Implementation of Art. 104a lit. d of the Swiss Federal Constitution. Edition DIKE.

²⁶ Bürgi M, Ali P, Chowdhury A, Heinimann A, Hett C, Kienast F, Mondal MK, Upreti BR, Verburg PH. 2017. Integrated landscape approach: Closing the gap between theory and application. *Sustainability* 9(8):1371. https://www.mdpi.com/2071-1050/9/8/1371