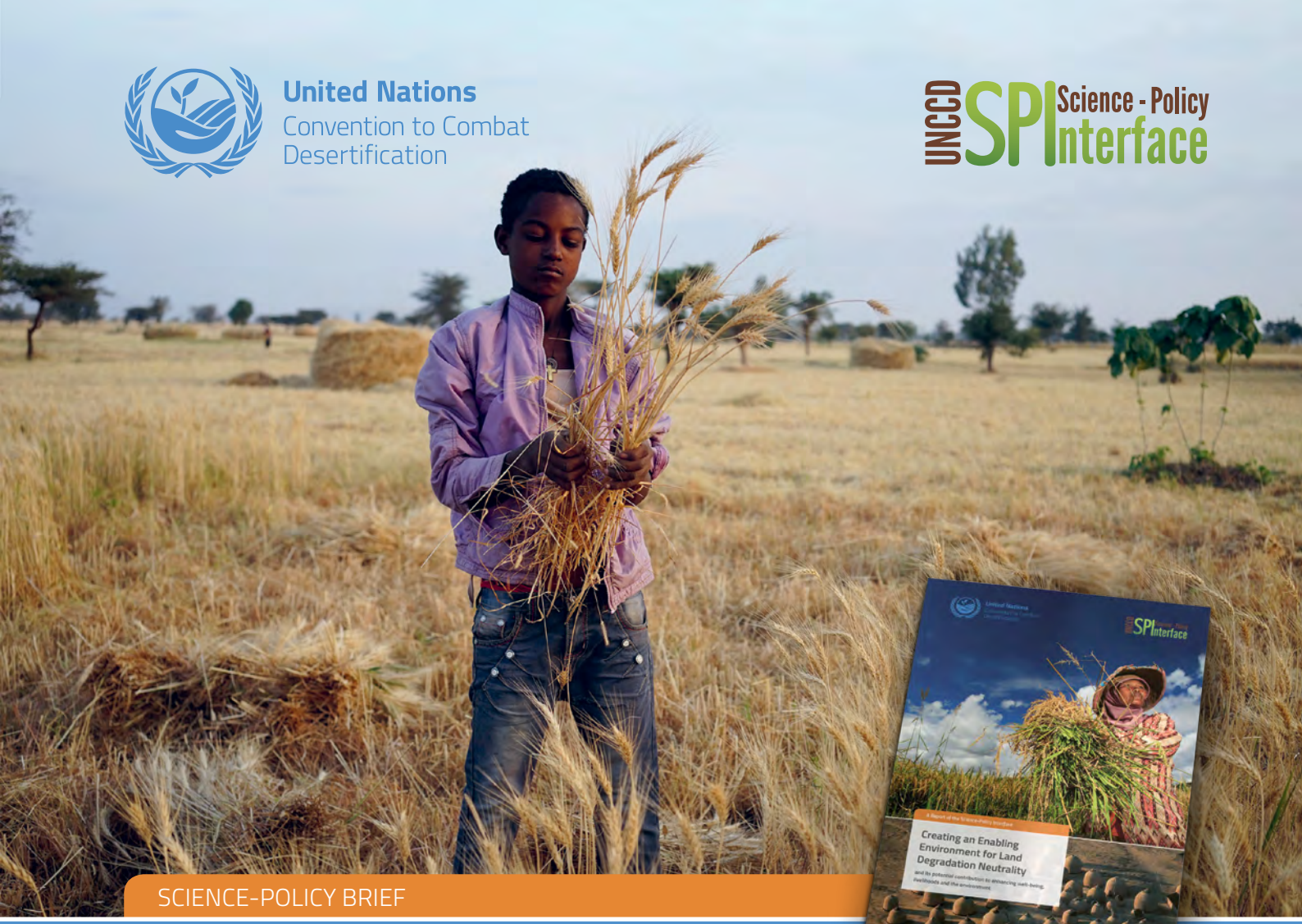
United Nations
Convention to Combat Desertification

UNCCD SPI Science - Policy Interface



SCIENCE-POLICY BRIEF

Shaping an Enabling Environment for Land Degradation Neutrality

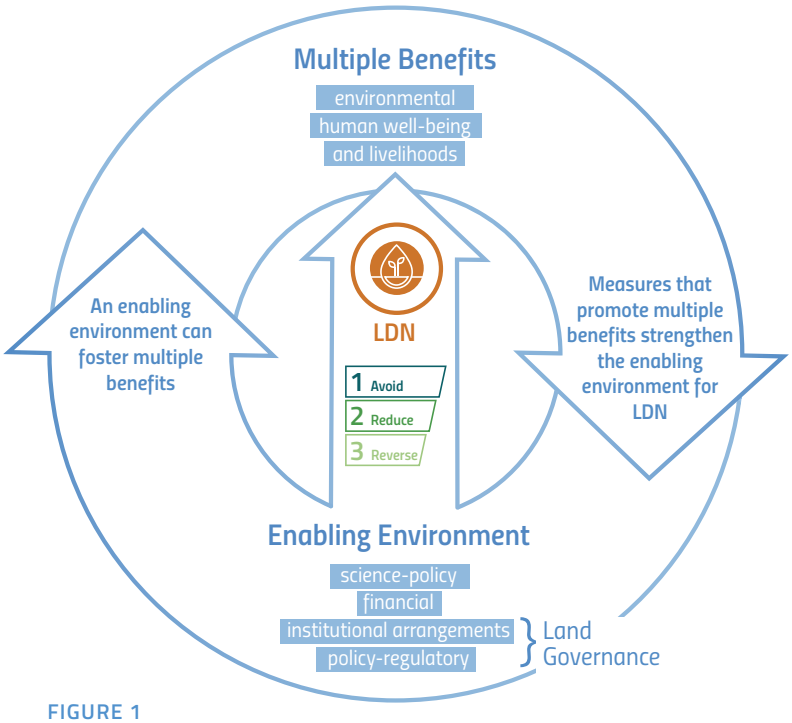


FIGURE 1
Conceptual framework of the linkages between land degradation neutrality (LDN), the enabling environment and the achievement of multiple benefits.

The challenge: Land degradation neutrality calls for an enabling environment

Avoiding, reducing and reversing land degradation is as much a policy challenge as it is a technical challenge. Policy-makers may question how best to support the adoption of sustainable land management; how to organize relevant agencies to be effective at scale; how to develop land use plans or identify and remove constraints for implementation of land degradation neutrality (LDN).

These questions are addressed in the concept of an enabling environment, defined as a conducive institutional, policy, regulatory and financial setting for progress to be made towards LDN.

The four dimensions of an enabling environment for LDN should be considered:

1. Science-policy interface: given the complex and multifaceted nature of the land degradation issue, a continuous dialogue between policy-makers, scientists and practitioners is of great importance;

2. Financial: securing and streamlining financial resources;

3. Institutional: addressing challenges associated with mainstreaming LDN, including to organise the often-fragmented responsible agencies towards increased efficiency, and remove constraints related to insecure land tenure and access;

4. Policy and regulatory: developing effective and widely supported land regulations.

Contribution to debate: good practice for an LDN enabling environment

This science-policy brief provides – in a nutshell – guidance for policy-makers, to support countries in their efforts to create an enabling environment for LDN planning and implementation.

LDN measures that are designed based on the response hierarchy (avoid > reduce > reverse) can bolster multiple environmental, social and economic benefits (Figure 1). These multiple benefits strengthen the enabling environment, and at the same time, the enabling environment can foster multiple benefits. The above described four dimensions of an enabling environment are pivotal, with land governance given specific attention.

Effective land governance[1] is a critical cross-cutting element for shaping an enabling environment (Figure 2). To avoid, reduce and reverse land degradation, the land management practices of different actors exercising tenure over land need to be steered towards sustainability. This requires inclusive and responsible land governance to ensure the development of effective laws and regulations, maximizing the potential of land tenure security improvements to foster sustainability, to concurrently enhance co-benefits of improved livelihoods and well-being.

Box 1

LDN stakeholders have high expectations of synergies with other land-based targets, but these are highly context-specific. Science-based approaches can help to inform land use planning processes, to target interventions and to avoid potential conflicts.

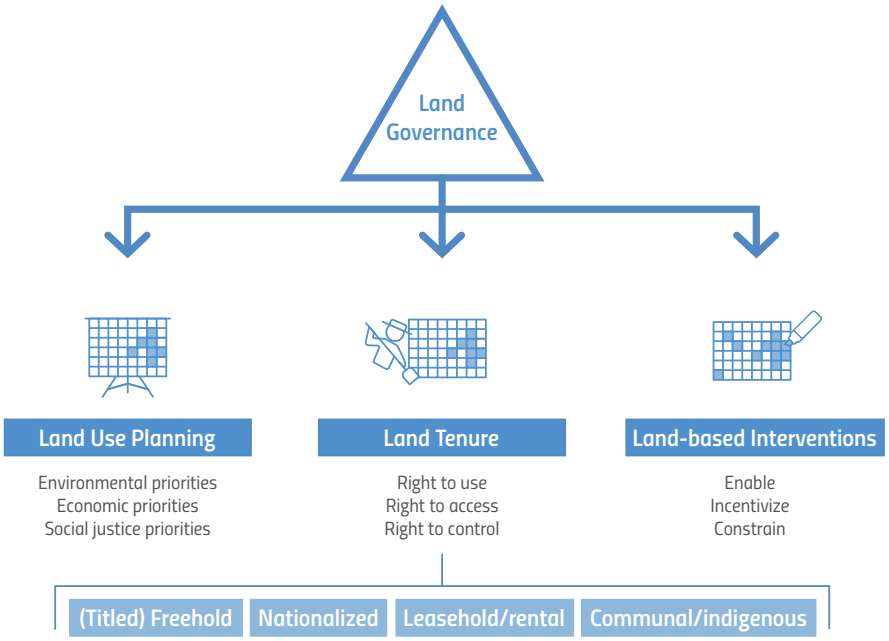


FIGURE 2
Attaining LDN constitutes a major land governance challenge, as issues of land use planning, land tenure, and land-based interventions converge.

Integrated land use planning is a way to balance environmental, economic and social priorities, with LDN affecting and contributing to all these priorities. The way land tenure is organized, and the extent to which it is secured has fundamental repercussions for LDN. Land-based interventions need to be context-specific to enable, incentivize or limit actions of land managers.

1 Land governance is the process by which decisions are made regarding the access to and use of land, the manner in which those decisions are implemented and the way conflicting interests in land are reconciled.

Integrated land use planning is also required to upscale actions towards sustainable land management, and to allow for a coordinated national LDN strategy.

Box 2
New actors, new partners: new threats or opportunities?

Land governance arrangements have changed over the past decades. Increased integration of land users in global value chains has amplified the role of private actors in land governance. These include those involved in large-scale land acquisitions, scale enlargement and commercialization of farming, distant land ownership and contract farming, but also agricultural cooperatives.

Corporate entities are leveraging their increasingly important role in land governance towards sustainability, using agricultural training, codes of conduct, eco-certification, roundtables and other instruments. Preliminary scientific evidence suggests that, through partnerships with actors in global value chains, progress can be brokered at scale. In spite of these new opportunities, the new land governance arrangements may also threaten the achievement of LDN targets as they expand a highly intensive, often unsustainable mode of agriculture.

Further action is needed to make environmentally and socially degrading enterprises accountable. Engagement of these actors, and consumers, is key towards transforming degrading global agricultural supply chains into sustainable land-based value chains through regulated sustainability standards and integrated land use planning for achieving LDN.

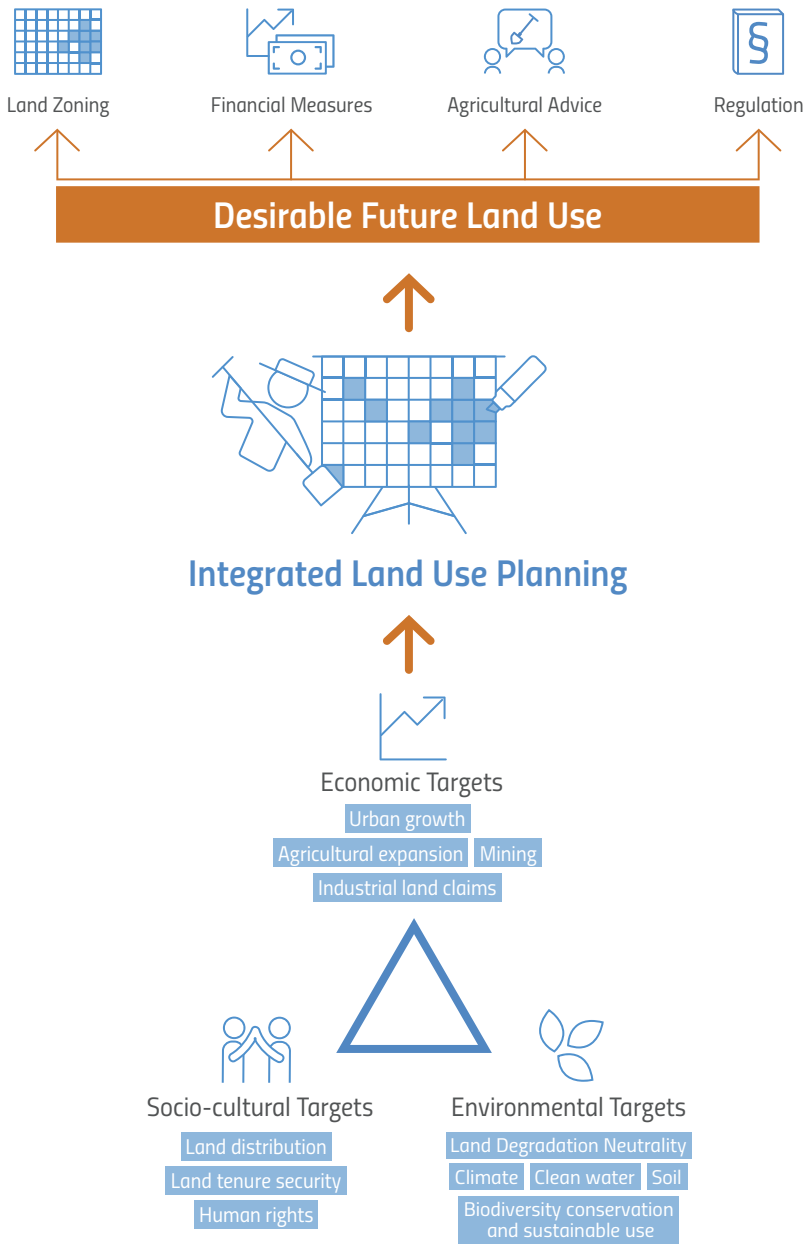


FIGURE 3
Integrated land use planning as a balancing approach between three bundles of priorities.

Key messages

Shaping an LDN enabling environment requires attention to four dimensions:

Science-policy dimension of an enabling environment

- Countries are using the three global land-based indicators for LDN[1]; however, gaps remain in national capacities to set baselines and track progress, particularly for land productivity dynamics and soil organic carbon (SOC).

In most cases, national data systems are adequate for making data available for land use planning decisions.

Financial dimension of an enabling environment

- There is a mismatch between the strong belief (amongst stakeholders) that there should be a national budget for LDN and the relative absence of such budgets.
- Only a few countries that committed to LDN have assessed financial needs or secured finance to that end.
- Co-benefits with other sustainable development goals and objectives should be explored to effectively leverage (sub) national budgets and regional funding opportunities as well as development grants and loans.

Institutional: Land tenure security, responsible land governance, and sustainable land management

- A long-term national vision and commitment to LDN is critical to its attainment. Mainstreaming of LDN targets, enhanced vertical coordination between government agencies, and alignment with competing development priorities need to be explicitly addressed.
- Effective LDN initiatives should account for the ways land governance is organized in a specific context. This implies awareness of: a) diverse interests of stakeholders towards land, b) the multiple and often fragmented agencies of relevance, c) the legislative framework, d) the level of decentralization, e) the importance of customary land governance, and; f) the various land management regimes (including different forms of sedentary agriculture, pastoralism, and management of natural resources by forest reliant rural dwellers).
- Land tenure security forms the backbone of inclusive and responsible land governance and is of fundamental importance to the attainment of LDN because: a) it enables land managers to be effective agents towards sustainability; b) lack of land tenure security can cause degrading land management practices; c) many land-based interventions to avoid, reduce or reverse land degradation, such as payments for ecosystem services, cannot work under insecure land tenure conditions.
- National progress to address land tenure issues or the capacity to do so remains low. Importantly, land tenure security is different from mere, and often context-blind, land titling: to address land tenure insecurity, the sources of insecurity should be identified and addressed.

Policy and regulatory dimensions of an enabling environment

Integrated land use planning (ILUP) is a critical component of land governance (Figure 2) and essential to achieving LDN. As LDN goes beyond the implementation of sustainable land management practices, integrated land use planning is required to implement the response hierarchy. The capacity of land administrations to facilitate integrated land use planning needs to be strengthened or built, in many countries.

- The efficiency of LDN implementation within land use planning processes can be increased by managing trade-offs and synergies with other land-based targets. ILUP can reconcile LDN and other targets in a political process that shapes a desirable future land use (Figure 3).
- Of the range of available integrated land use planning instruments, governments opt mostly for agricultural advisory services and financial incentives, either embedded within broad agricultural policies or targeted in the form of payments for ecosystem services.
- Agricultural advisory/extension services can provide land users with the necessary information to implement LDN. This can be effective insofar as a lack of information is the only limiting factor to the adoption of sustainable land management (SLM). Prolonged and participatory engagement may be necessary to achieve results, while in other contexts, tailored on-demand advice may be more appropriate.
- Land zoning or specific land management regulations are used to a lesser extent but are important to attain the neutrality target. Greater use of such instruments may be required to reach the LDN objectives and explicitly address trade-offs between multiple objectives.

In addition to SLM and LDN interventions targeted at smallholder farmers, there is an unfulfilled need for land-based measures to better account for new private actors in land governance (Box 2).

2 In order to estimate the proportion of degraded land over total land area (SDG indicator 15.3.1), the UNCCD COP adopted the following three sub-indicators: trends in land cover, land productivity and soil organic carbon.

What can policy-makers do right now in support of an LDN enabling environment?

(1) Ensure that LDN targets are mainstreamed in national strategies and UNCCD National Action Programmes, to raise the profile of LDN in national policy agendas.

Measures include:

1. Institutionalizing horizontal and multi-stakeholder coordination mechanisms in support of LDN mainstreaming and implementation beyond the LDN Ttarget setting programme (TSP);
2. Strengthening and/or developing vertical integration mechanisms that support LDN implementation and enforcement to better coordinate top-down and bottom-up actions related to LDN.

(2) Assess finance and capacity development needs in collaboration with technical and financial partners.

Measures include:

1. Accounting for costs of measures in budgets at all levels. Where possible, leverage existing or planned investments, to also pursue LDN. Accounting should include short, medium and long-term financing needs, covering operational, monitoring and enforcement costs;
2. Investing in capacity building for LDN monitoring based on national data availability and local expertise.

(3) Consider land tenure and land use planning conditions to create an enabling policy and regulatory environment.

Measures include:

1. Integrating land tenure security into national strategies to achieve LDN. Where land tenure is insecure, evaluate the sources of insecurity and addressing these sources appropriately as a first step;
2. Ensuring that LDN interventions are context-adapted by taking stock of the various interests in land, the multiple and often fragmented agencies of relevance, the legislative framework, customary land governance institutions, and the various land management types;
3. Enhancing national capacities and multi-stakeholder participation for effective implementation of integrated land use planning and applying the LDN response hierarchy for measures to avoid, reduce and/or reverse land degradation.

(4) Account for private actors in land governance.

Measures include:

1. Accounting for actors involved in private land governance, such as large-scale land acquisitions, contract farmers and agribusinesses, who have an increasingly prominent role in shaping land governance, is important to achieving LDN;
2. Adapting LDN implementation to account for the globalization of value chains of the agricultural and forest sectors. Hybrid land governance, where private and public actors complement each other, could instigate progress at scale.

(5) Work on science-policy aspects aimed at raising awareness and understanding of LDN.

Measures include:

1. Supporting research and development initiatives to develop novel context-sensitive land governance mechanisms capable of avoiding, reducing and reversing land degradation while managing trade-offs that may arise;
2. Building national capacity for improved assessment and monitoring of LDN, including global and national indicators, benefits and trade-offs to support integrated land use planning.

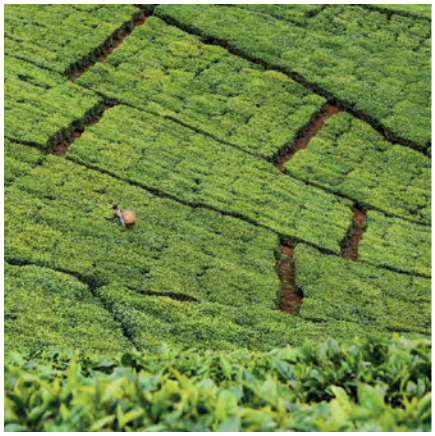
(6) Engage in achieving environmental, social and economic benefits in the context of LDN.

Measures include:

1. Synthesizing and applying available scientific tools and approaches to help build national and subnational capacities to evaluate environmental, economic and social benefits;
2. Engaging early with local communities and affected stakeholders to ensure that well-being and livelihood needs and outcomes, as well as potential benefits and trade-offs, are effectively identified, discussed, and prioritized.

Box 3

Take-home message: ILUP as well as inclusive and responsible land governance are key enablers of LDN; achieving LDN requires an enabling environment which fosters multiple environmental, social and economic benefits.



Tea farms, Tana River watershed, Kenya
© Georgina Smith/CIAT

Women involved in community meeting to discuss village reconstruction, Yogyakarta, Indonesia
© Nugroho Nurdikiawan Sunjoyo/World Bank

A mosaic of terraced fields in the Sultanate of Oman
© Yann Arthus-Bertrand/GoodPlanet Foundation

Shaping an enabling environment for Land Degradation Neutrality (LDN) calls for integrated land use planning, inclusive and environmentally sound land access and governance, major reconfigurations of current institutional settings, financial backing, and ongoing dialogue between policy-makers, practitioners, and the scientific community.

UNCCD-SPI related publications:

- P. H. Verburg, G. Metternicht, C. Allen, N. Debonne, M. Akhtar-Schuster, M. Inácio da Cunha, Z. Karim, A. Pilon, O. Raja, M. Sánchez Santivañez and A. Senyaz. 2019. Creating an Enabling Environment for Land Degradation Neutrality and its Potential Contribution to Enhancing Well-being, Livelihoods and the Environment. A Report of the Science-Policy Interface. United Nations Convention to Combat Desertification (UNCCD), Bonn, Germany.
- J. L. Chotte, E. Aynekulu, A. Cowie, E. Campbell, P. Vlek, R. Lal, M. Kapović-Solomun, G. von Maltitz, G. Kust, N. Barger, R. Vargas and S. Gastrow. 2019. Realising the Carbon Benefits of Sustainable Land Management Practices: Guidelines for Estimation of Soil Organic Carbon in the Context of Land Degradation Neutrality Planning and Monitoring. A report of the Science-Policy Interface. United Nations Convention to Combat Desertification (UNCCD), Bonn Germany.
- A. Reichhuber, N. Gerber, A. Mirzabaev, M. Svoboda, A. López Santos, V. Graw, R. Stefanski, J. Davies, A. Vuković, M. A. Fernández García, C. Fiati and X. Jia. 2019. The Land-Drought Nexus: Enhancing the Role of Land-Based Interventions in Drought Mitigation and Risk Management. A Report of the Science-Policy Interface. United Nations Convention to Combat Desertification (UNCCD), Bonn, Germany.
- B. J. Orr, A. L. Cowie, V. M. Castillo Sanchez, P. Chasek, N. D. Crossman, A. Erlewein, G. Louwagie, M. Maron, G. I. Metternicht, S. Minelli, A. E. Tengberg, S. Walter and S. Welton. 2017. Scientific Conceptual Framework for Land Degradation Neutrality. A Report of the Science-Policy Interface. United Nations Convention to Combat Desertification (UNCCD), Bonn, Germany.
- M. J. Sanz, J. de Vente, J.-L. Chotte, M. Bernoux, G. Kust, I. Ruiz, M. Almagro, J.-A. Alloza, R. Vallejo, V. Castillo, A. Hebel, and M. Akhtar-Schuster. 2017. Sustainable Land Management contribution to successful land-based climate change adaptation and mitigation. A Report of the Science-Policy Interface. United Nations Convention to Combat Desertification (UNCCD), Bonn, Germany

How to cite this brief:
UNCCD/Science-Policy Interface (2019). Shaping an Enabling Environment for Land Degradation Neutrality. Science-Policy Brief No: 5. September 2019. United Nations Convention to Combat Desertification (UNCCD), Bonn, Germany.

978-92-95117-75-4 (hard copy)
978-92-95117-76-1 (electronic copy)

Download the corresponding SPI Technical Report and supplementary materials here:

United Nations
Convention to Combat Desertification

Platz der Vereinten Nationen 1, 53113 Bonn, Germany
Postal Address: PO Box 260129, 53153 Bonn, Germany
Tel. +49 (0) 228 815 2800 — Fax: +49 (0) 228 815 2898/99
E-mail: secretariat@unccd.int — Website: www.unccd.int

UNCCD SPI Science - Policy Interface

The mission of the UNCCD Science-Policy Interface (SPI) is to facilitate a two-way dialogue between scientists and policy makers in order to ensure the delivery of science-based, policy-relevant information, knowledge and advice.

Photo credits cover: Gadulla village, Mojo, Ethiopia © P. Lowe/CIMMYT; Woman working on rice plant farm, Southeast Sulawesi, Indonesia © Yusuf Ahmad/ICRAF; Traditional Village, Tahoua, Niger © Yann Arthus-Bertrand/GoodPlanet Foundation