



United Nations
Convention to Combat
Desertification

Sustainable Land Use Systems:

The path to collectively achieving Land Degradation Neutrality

SCIENCE-POLICY BRIEF

Land is a fundamental resource for life at the interface of nature, human populations, economies and knowledge systems. However, land degradation is widespread, causing food and water insecurity, migration and social conflict, among other challenges.

This report presents science-based evidence concerning sustainable land use systems (SLUS) and the potential of the SLUS approach to achieve land degradation neutrality (LDN) targets, reduce inequalities, achieve social justice, improve economic viability and, consequently, help achieve multiple United Nations sustainable development goals (SDGs) and targets. It aims to guide countries to use SLUS to apply more effective management of natural resources and the environment.



LAND AT THE INTERSECTION OF HUMAN WELL-BEING AND ECOSYSTEM HEALTH

Land is highly diverse with respect to its physical and biological attributes, including climate, biomes, soils and topography. Land has fundamental but complex links to ecosystem functions, biodiversity conservation, food and water security, peacebuilding and human well-being. However, in regions around the world, especially in drylands, land degradation is widespread, causing food and water insecurity, migration and social conflict, among other challenges. Complex interactions between social, economic and environmental factors drive land degradation. Measures to address land degradation will only be successful when land is understood as a social-ecological system, and land policies and interventions are devised at landscape scale.

Due to the unique position of land at the intersection of human well-being and ecosystem health, applying a systems approach to land management contributes to holistic understanding and more effective management of land resources enabling multiple environmental, social and economic benefits to be co-delivered. Land can be the entry point to create transformative sustainable solutions that reverse land degradation, mitigate climate change, support climate change adaptation, enhance food security, halt biodiversity loss and build peace by developing SLUS.

WHY DO WE NEED SLUS?

Individuals, communities, decision-makers, institutions and legislators need clear guidance on the path forward—a path defined by transformative changes in how we approach and address land-use issues. Understanding the complexities and dynamics of these linked social-ecological systems is crucial to decision-making, adequate social-environmental policymaking and sustainable development.

Social, economic and environmental problems that increasingly affect ecosystem health and human well-being are highly complex and influenced by multiple factors simultaneously. These factors interact, and their combined effects can cause unprecedented changes in land-use-system dynamics. Awareness of systemic connections and feedbacks opens new opportunities for effective interventions to achieve goals, including LDN, net biodiversity gain and climate change mitigation.

Systems thinking requires acknowledging and understanding the interactions between the actions, activities, actors and the many other elements that characterize social-ecological systems.

Systems thinking in a land-use context enables transformative action by encouraging land users, planners and decision-makers to frame issues, problems and solutions in a holistic manner, considering the whole rather than individual issues of immediate interest.

SUSTAINABLE LAND USE SYSTEMS (SLUS)

SLUS are dynamic mosaics of integrated land uses located within a landscape that balance many, sometimes-competing land-use demands to support environmental sustainability, social justice and economic viability, particularly for those who live or support their livelihoods there. Achieving SLUS requires a social-ecological, systems-based approach and inclusive, participatory governance to foster the equitable, resilient, sustainable use of land across local, subregional or national scales.

The objectives of SLUS are to simultaneously achieve environmental sustainability, economic viability and social justice. These can jointly lead to social-ecological resilience, transformative change and, ultimately, to achieving sustainable development goals.

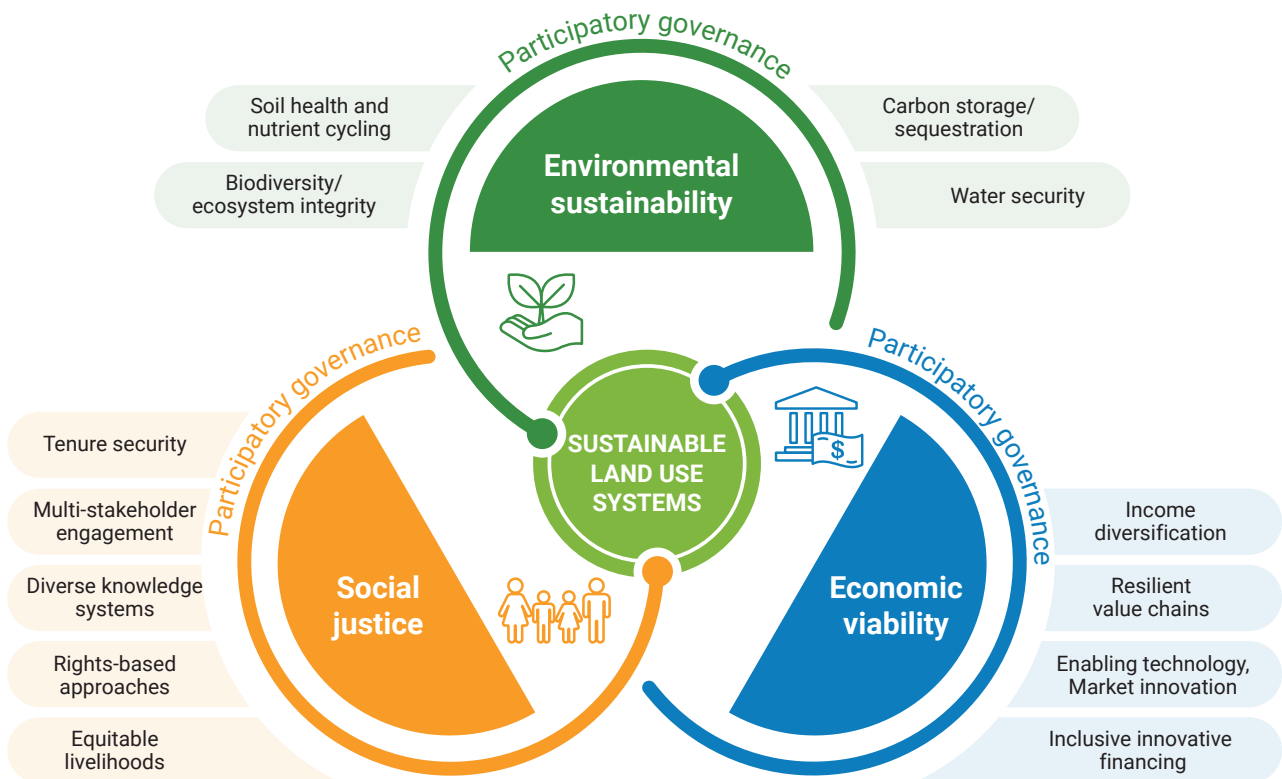
WHAT ARE SLUS?

The SLUS approach

- applies and builds on the familiar concepts of sustainable land management (SLM), integrated landscape management (ILM) and integrated land use planning (ILUP). The SLUS framework elevates social elements and deepens the consideration of social-ecological systems. It aims to empower communities by inclusive participation in multi-stakeholder partnerships to adaptively plan and manage land.
- integrates land resources, land access, land uses and land users, resulting in greater collective contributions to sustainability than can be obtained from isolated interventions and policies.
- provides additional value to existing approaches through a) moving beyond site-level practices to applicability across locations, land uses and policy environments, b) adaptive capacity for scaling up, scaling down or scaling out and c) support from multiple stakeholders.
- encourages UNCCD Parties to achieve multiple SDGs, because the approach takes a system's perspective, integrating the consideration of all facets of land relevant to ecosystem health and human well-being into land use planning and land management.

OBJECTIVES AND ELEMENTS OF SLUS

Social justice, economic viability and environmental sustainability are key objectives of SLUS. Social justice results from the diverse interlinkages between effective governance, capacity-building, co-learning and knowledge sharing. Economic viability is a characteristic resulting from productivity enhancement, market generation and other factors. Environmental sustainability, meanwhile, is a product of measures that maintain and enhance ecosystem functions and services and conserve biodiversity. Combining these elements delivers vital outcomes including food security.



PRINCIPLES OF SLUS

1. Apply a social-ecological systems approach.
2. Integrate land uses at a landscape level to balance across economic, social and environmental sustainability, managing competing demands for land.
3. Maintain or enhance natural and social capital.
4. Apply a participatory and inclusive process, enabling local communities to lead in designing, implementing and assessing SLUS.
5. Base SLUS planning and implementation on multi-variable assessments, considering land potential, land condition, resilience, social, cultural and economic factors.
6. Integrate planning and implementation of SLUS into existing land-use planning and land management processes.
7. Apply responsible governance, protect human rights, including tenure, and ensure accountability and transparency.
8. Monitor the effectiveness of SLUS using relevant indicators and apply a continuous learning approach.

FOUR WAYS THE SLUS APPROACH SUPPORTS PARTIES TO THE UNCCD TO ACHIEVE AND MAINTAIN LDN

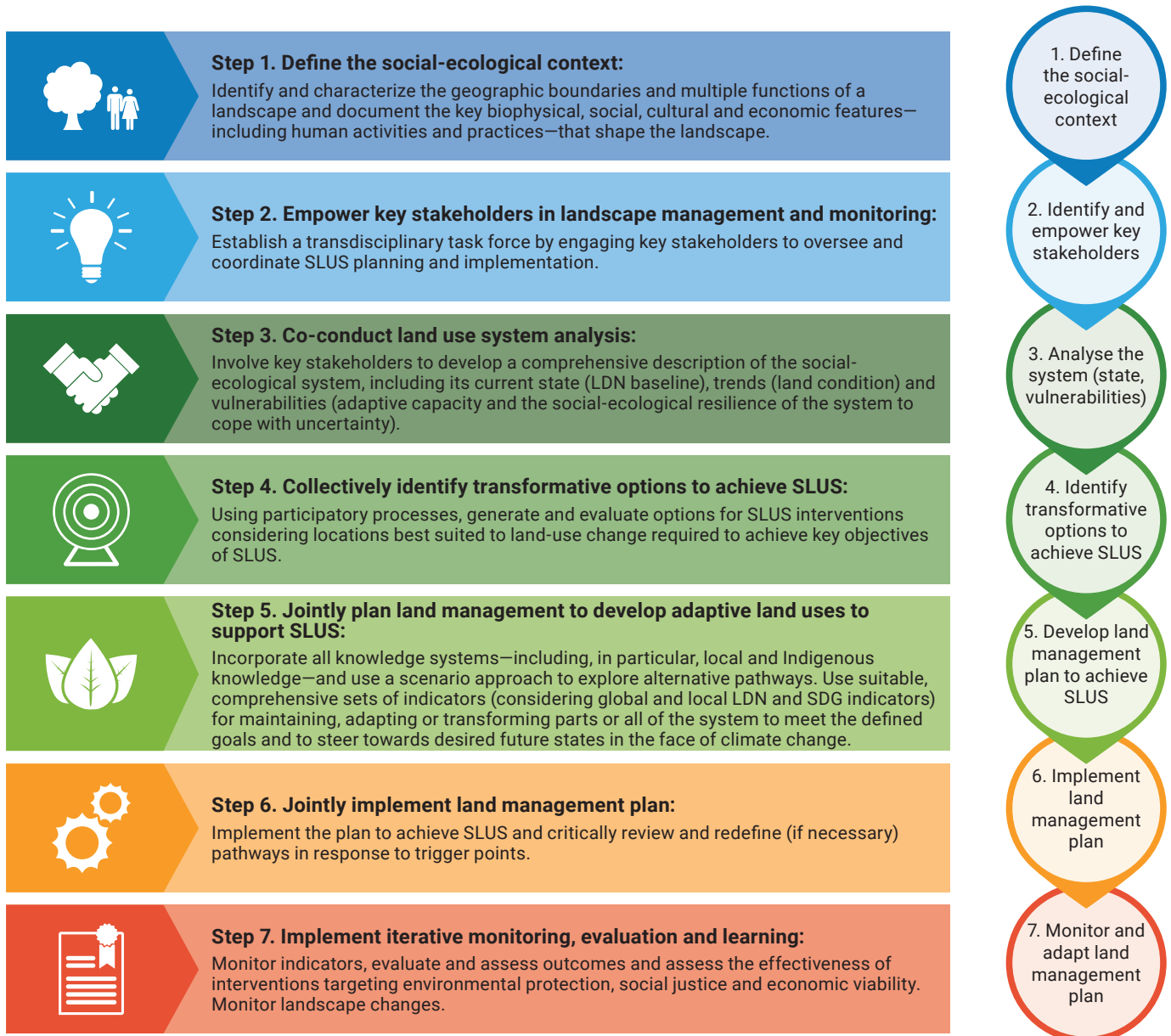
1. The SLUS approach considers the impacts that land use and management decisions at each location can have on other parts of the landscape and encourages analysis of these decision impacts at multiple scales.
2. The SLUS approach considers the importance of resilience in evaluating alternative solutions to ensure the development of resilient land use systems.
3. The SLUS approach embeds participatory governance, encouraging buy-in across communities and at all levels of government to ensure enabling policies and interventions are sustainable.
4. The SLUS approach encourages social and technological innovation, for instance, through the adoption of new digital technologies.

SEVEN STEPS TO IMPLEMENT SLUS: PUTTING THE ELEMENTS IN PLACE

The planning and achievement of SLUS necessitate assessing the biophysical and socioeconomic context and the challenges hampering the sustainable use of land resources. One often-challenging aspect of implementing SLUS relates to reaching agreement between stakeholders and decision-makers regarding the acceptance of the proposed activities and the goals that SLUS can achieve for beneficiaries.

Several tools and approaches exist that can be used to support SLUS, including i) those supporting the prevention, avoidance and reduction of land degradation and ii) those focussing on the recovery of degraded lands. Several tools and approaches are available to assess the biophysical drivers of degradation as well as the socioeconomic challenges.

The UNCCD SPI report, *Sustainable Land Use Systems: The path to collectively achieving Land Degradation Neutrality*, provides a practical, stepwise guide to applying the SLUS approach, identifying resources and tools that support the development and achievement of SLUS:



WHAT CAN POLICY MAKERS DO?

1. Refine current approaches for LDN planning and implementation by incorporating the SLUS approach to focus effort on transformative projects that enhance land productivity and food security, and maintain equitable livelihoods while ensuring the long-term, effective provision of ecosystem services and community well-being, addressing land degradation proactively through SLM practices and implementing strategic restoration/rehabilitation efforts to achieve LDN targets.
2. Integrate collective planning for SLUS into existing national and local land management systems, and refine these systems where necessary to deliver multiple objectives efficiently at multiple scales.
3. Embed the SLUS approach into land use planning and land management.
4. Base land use planning and land management on an understanding of the land potential of land types in the target region and on the key processes and drivers of the social-ecological system in which the land is situated.
5. Build the technical capacity to assess land potential and to track the state and trend of individual land use systems and identify key areas for intervention at local scale.

6. Ensure the sustainability of policy initiatives through institutionalization of SLUS planning and implementation processes to provide confidence to investors and ensure longevity of interventions.
7. Create an enabling environment for SLUS by
 - fostering multi-stakeholder partnerships by encouraging collaborations between government, the private sector and community stakeholders to develop and implement comprehensive land-use and land-management plans prioritizing sustainable land use and incorporating local and Indigenous knowledge;
 - establishing participatory governance in planning, implementing, monitoring and evaluating the outcome of SLUS policies to increase security of land access, support social and environmental justice and ensure the engagement of all legitimate tenure rights holders and land users in cooperative land use planning and land management;
 - increasing multisectoral coordination at all levels to ensure synergies and harmonization of agricultural, environmental, economic and developmental policies, integrating SLUS principles and approaches wherever relevant and avoiding contradictory efforts;
 - creating incentives that encourage long-term investments in underpinning transdisciplinary research, collaborative monitoring and the provision of data and tools to support the development and implementation of SLUS and investment in on-the-ground demonstrations of SLUS;
 - identifying and supporting community leaders who will adaptively sustain SLUS into the future;
 - co-producing and managing knowledge on a systems approach to sustainable land use for local decision-making;
 - facilitating transformative multi-stakeholder learning to cope with uncertainty, barriers and change; and
 - sharing local experience and knowledge to support upscaling and national LDN efforts.

**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
E-mail: secretariat@unccd.int
Website: www.unccd.int

Download the corresponding
Science-Policy Brief here:



Science-Policy Brief link here



United Nations
Convention to Combat
Desertification

Science-Policy
Interface