



**THE GLOBAL
MECHANISM**
United Nations Convention
to Combat Desertification



LAND DEGRADATION NEUTRALITY TARGET SETTING IN THE KINGDOM OF LESOTHO

SUMMARY REPORT

2019



1



This document has been prepared with the support of the Land Degradation Neutrality Target Setting Programme (LDN TSP), a partnership initiative implemented by the Secretariat and the Global Mechanism of the UNCCD, with support of the following partners: France, Germany, Luxembourg, Republic of Korea, Spain, Trinidad and Tobago, Turkey, Venezuela, the European Space Agency, Food and Agriculture Organization of the United Nations, Global Environment Facility, ISRIC – World Soil Information, International Union for Conservation of Nature, Joint Research Centre of the European Commission, Soil Leadership Academy, United Nations Development Programme, United Nations Environment Programme, World Resources Institute.

The views and content expressed in this document are solely those of the authors of this document and do not necessarily represent the views of the LDN TSP or any of its partners.

Table of contents

1. Introduction	4
2. Leveraging LDN	5
2.1 LDN national working group	5
2.2 LDN leverage plan	5
3. Leveraging LDN	7
3.1 Legal and institutional environment.....	7
3.2 Land degradation trends and drivers.....	8
3.3 LDN baseline	10
4. Lesotho’s LDN targets	12
5. Annex	13
5.1 LDN working group members	13
5.2 Consultation meetings organized during the LDN target setting process.....	14

1. Introduction

Over the last 20 years, Lesotho is reported to have lost over 100 thousand hectares of arable land, resulting in a 25% decrease in usable land for the production of food and fodder¹. The loss of biological diversity, the deterioration of rangelands and poor agricultural and livestock productivity are visible signs of land degradation and the advancement of desertification in Lesotho. Rangeland carrying capacity and quality have declined, which has also affected special and fragile ecosystems in the country's alpine regions. Moreover, climate change continues to make agricultural and livestock production increasingly difficult and uncertain.

Land and soil degradation continue to reduce the land's capacity to store water, with a great impact on the rain-fed agricultural production system that dominates in Lesotho. The country's major highlands watersheds, which are the main sources of water for communities and are the main river tributaries, experience recurrent episodes of drought, leading to the loss the unique plant communities and habitats supporting a variety of endemic species.

Recognising the adverse effects that desertification, land degradation and drought has had on the health and wellbeing of communities and ecosystems, Lesotho has been taking measures to combat DLDD, including the ratification of the United Nations Convention to Combat Desertification (UNCCD) in 1995. As a further measure to combat DLDD and protect biodiversity and ecosystems, Lesotho joined the Land Degradation Neutrality (LDN) Target Setting Programme (TSP) and committed to achieving LDN by 2030, recognising the importance of land as a vital resource for human health and wellbeing.

The process of setting LDN targets in Lesotho was coordinated by the Ministry of Forestry, Range and Soil Conservation, which is the UNCCD national focal point (NFP), and the LDN national working group (NWG) consisting of key stakeholders from the public and private sectors. The process enabled Lesotho to create synergies and establish mechanisms to mainstream the LDN concept into the national agenda. The LDN targets and measures established in Lesotho, designed to avoid, reduce and reverse land degradation, reflect the country's commitments to achieving land degradation neutrality by 2030.

This report provides a summary of the key outputs and outcomes of the LDN target setting process in the Kingdom of Lesotho.

¹Ministry of Forestry, Range and Soil Conservation in the Kingdom of Lesotho, 2015: Lesotho National Action Programme In Natural Resource Management, Combating Desertification And Mitigating The Effects Of Drought.

2. Leveraging LDN

2.1 LDN national working group

Lesotho established a national working group (NWG) as the coordination mechanism responsible for the LDN target setting process. The LDN NWG included over 35 representatives from government, academic, and national and international civil society organisations, and was responsible for the review and validation of outputs related to LDN target setting, including:

- Setting the national LDN baseline;
- Reviewing the land degradation trends and drivers assessments;
- Setting Lesotho's LDN targets and associated measures;
- Identifying opportunities to mainstream LDN in national policy processes.

A number of meetings and workshops took place throughout the target setting process, during which the above issues were discussed and relevant outputs validated by the NWG.

2.2 LDN leverage plan

The leverage plan identifies key entry points (opportunities) for LDN and concrete actions to be undertaken by the UNCCD Focal Point and the NWG to influence ongoing national processes and priorities in the context of the LDN target setting process. Table 1 summarises the leverage plan for Lesotho and the possible entry points for LDN identified by the NWG.

Table 1: Lesotho's LDN leverage plan

Leverage Opportunities		Actions	Responsibilities
Why does LDN matter?			
1.	Creating multiple benefits	<ul style="list-style-type: none"> • Justification of relevance of LDN to Lesotho's development agenda • Linkage of LDN to achievement of other SDGs • Multi-stakeholder involvement in LDN target setting programme 	<ul style="list-style-type: none"> • Ministry of Planning • Ministry of Finance • Ministry of Forestry, Range and Soil Conservation • LDN Consultant
2.	Fostering policy coherence	<ul style="list-style-type: none"> • Integration of LDN and other SDGs in the national development framework • Review relevant policies to assess LDN coherence • Integrate LDN into donor cooperation frameworks • Mainstreaming of LDN into relevant policies and programmes 	<ul style="list-style-type: none"> • Ministry of Planning • NFP/Consultant • Relevant sectors • Donors
3.	Advancing climate action	<ul style="list-style-type: none"> • Integrate LDN into National Adaptation Program of Action • Promote synergistic implementation of the three Rio Conventions • Intensify implementation of NAPA 	<ul style="list-style-type: none"> • Lesotho Meteorological Services • UNCCD NFP, CBD NFP and UNFCCC NFP • All relevant sectors
4.	Tapping financing opportunities	<ul style="list-style-type: none"> • Implement the National Climate Change Investment Plan • Build capacity to effectively utilise existing UNCCD funding windows • Develop fundable transformative LDN project 	<ul style="list-style-type: none"> • Relevant sectors • UNCCD NFP • Ministry of Finance, Ministry of Planning

		<ul style="list-style-type: none"> proposals to access the LDN Fund • Include LDN in the national budget and allocate adequate resources to LDN related sectors 	
WHAT to leverage?			
5.	National development programmes, priorities and objectives	<ul style="list-style-type: none"> • Sustainable Development Goals • National Strategic Development Programme • Relevant sectoral policies • LDN related programmes and projects 	<ul style="list-style-type: none"> • Ministry of Finance, • Ministry of Planning • Relevant sectors • Different project implementers
6.	Country commitments and engagements	<ul style="list-style-type: none"> • UNCCD, CBD and UNFCCC 	<ul style="list-style-type: none"> • Ministry of Forestry, Range and Soil Conservation • Department of Environment • Lesotho Meteorological Services • Forestry Departments • Other relevant sectors
WHO to engage to create leverage?			
7.	Senior government	<ul style="list-style-type: none"> • Office of the Prime Minister • Ministries responsible for Finance, and Planning • Ministry of Forestry, Range and Soil Conservation • Ministry of Agriculture and Food Security • Ministry Tourism, Environment and Culture • Principal Secretaries of all relevant ministries • Heads of Departments and Directors 	<ul style="list-style-type: none"> • Ministry of Forestry, Range and Soil Conservation • Principal Secretary Forestry, Range and Soil Conservation • Director of Soil Conservation (NFP) • Director of Forestry • Director of Range
8.	National coordination mechanisms	<ul style="list-style-type: none"> • UNCCD Steering Committee • National Biodiversity Conservation Steering Committee • National Climate Change Steering Committee 	<ul style="list-style-type: none"> • Principal Secretary Ministry of Forestry, Range and Soil Conservation • Director of Soil Conservation (NFP) • National Consultant
9.	International development partners	<ul style="list-style-type: none"> • United Nations Development Programme • Food and Agriculture Organization • World Bank 	<ul style="list-style-type: none"> • Director of Soil Conservation (NFP) • National Consultant
10.	National and International non-governmental stakeholders	<ul style="list-style-type: none"> • LENAFU • Serumula • World Vision • Red Cross Society • World Vision International 	<ul style="list-style-type: none"> • National Consultant
11	Academic and Research institutions including CGIRs	<ul style="list-style-type: none"> • National University of Lesotho • Lesotho Agricultural College • Agricultural Research 	<ul style="list-style-type: none"> • NFP • National Consultant

The NWG also identified other related national coordination mechanisms and how LDN can be brought into their agenda. Some of these mechanisms, their mandates, and how LDN can provide synergies, are summarised in Table 2.

Table 2: Existing Relevant Coordination Mechanisms and their relevance to LDN

Name of the Coordinating Mechanism	Sector	Mandate	Relation to LDN and how they can bring in LDN agenda
UNCCD Steering Committee	Forestry/Land use sector	Coordinating implementation of UNCCD National Action Programme (NAP) and other related activities	Mainstreaming of LDN into the NAP
National Biodiversity Committee	Environment	Coordination of the National Biodiversity Conservation Strategy	Link LDN to biodiversity management and conservation
National Climate Change Steering Committee	Climate	Coordination of all climate change related projects	Adaptation, mitigation and resilience building initiatives most are land based and amenable to LDN

3. Leveraging LDN

3.1 Legal and institutional environment

As part of the LDN target setting process, Lesotho undertook a review of the linkages between the legal and institutional environment in Lesotho and the country's commitment to achieve LDN. The analysis included the identification and review of relevant documentation, including national policies, laws and regulations related to land use, land tenure and economic development.

Policies, regulations and frameworks identified by the NWG for the analysis included the country's UNCCD National Action Programme to Combat Desertification; the Forestry Policy (1997); the Range Resources Management Policy (2014); and the Soil and Water Conservation policy (draft, 2013). The review included a strengths, weaknesses, opportunities and threats (SWOT) analysis on the legal and institutional environment (Table 3).

Table 3: Results of the SWOT analysis on achieving LDN in Lesotho

STRENGTHS	WEAKNESSES
<p>Legal</p> <ul style="list-style-type: none"> All environmentally related policies show a lot of focus on environmental management and planning. Processes of policy formulation, enactments, formation of regulations and strategic frameworks are all transparent legally relevant. Assessed variously, the land-related policies contain all that is necessary to protect Lesotho land resources from degradation. <p>Institutional</p> <ul style="list-style-type: none"> All environment-related issues including land use planning, management and protection are led by the Department of Environment At least three Departments (Forestry, Range Management and Soil Conservation) are under the same ministry. 	<p>Legal</p> <ul style="list-style-type: none"> There is near total lack of cross-referencing among laws and policies promoting land use and management There is no land use policy to guide land allocation and appropriation Land allocation laws do not oblige caring for the land Majority of Lesotho land is used communally and suffers from the “tragedy of commons”. <p>Institutional</p> <ul style="list-style-type: none"> National Focal Points for the three Rio Conventions are in different ministries, causing very limited coordination among them. Key departments and ministries have not harmonised their vision on land issues. As a result, they operate in silos.
OPPORTUNITIES	THREATS
<p>Legal</p> <ul style="list-style-type: none"> The environment policy (1998) offers opportunities for collaboration among key government departments and ministries. Lesotho’s signatory to the three UN Conventions helps her to keep abreast with the rest of the world. <p>Institutional</p> <ul style="list-style-type: none"> International development partners (e.g. FAO, GEF, UNDP, EU, GIZ) extend a helping hand on land management and protection issues. This opportunity needs to be seized and take seriously. 	<p>Legal</p> <ul style="list-style-type: none"> While contributing to employment, increasing mining concessions can lead to soil erosion and loss of land cover and biodiversity. Non-enforcement of law calculated to accommodate the poor may compromise efforts to fight land degradation. <p>Institutional</p> <ul style="list-style-type: none"> Political interference in land issues suppresses positive efforts to enforce legislature protecting land against degradation The balance between socio-economic considerations and environmental sustainability is more difficult in poor countries.

3.2 Land degradation trends and drivers

Lesotho’s assessment of the land degradation trends and drivers was conducted by the LDN NWG using the country’s four distinct ecological zones (the Highlands, Foothills Lowlands and the Senqu Valley) as the basis of analysis (Table 4).

The Highlands is a mountainous terrain dominated by grassland vegetation and therefore generally used as rangeland. Due to steep slopes, this zone is subjected to high soil erosion. The Foothills are dominated by young fertile soils used for mixed farming of crops and animals. The Lowlands is composed mainly of gently rolling terrain with deep valley soils and is used mainly for crop farming. The Senqu Valley is a comparatively low elevation zone in the Lesotho Highlands, and while crop farming is generally poor because of low rainfall, the area has high biodiversity.

Table 4: LDN trends and drivers in Lesotho

Indirect drivers that are not associated with particular land use type	
<ul style="list-style-type: none"> • Lack of policy coherence among government ministries which are responsible for land allocation, use, conservation and protection • Lack of decentralization and evolvment of power to local areas results in lack of enforcement of land laws • Total absence of land use policy means people can change land use as they wish • High poverty rates mean most Basotho have little alternative but to depend on biomass resources for fuel • Majority of population resides in rural areas where their only means of livelihood is agriculture. However, with low farming skills, lack of or poor extension services, land highly susceptible to degradation • Climate change with sequence of flooding and droughts makes increases management costs of land resources 	
Lesotho Lowlands (land that is predominantly used for crop farming)	
Direct Drivers	Indirect Drivers
<ul style="list-style-type: none"> • Poor tillage and cropping systems results in gully and sheet erosion of the soil; • Poor management of the croplands makes it susceptible to natural physical processes that degrade the soil; • Animals are still used extensively for tillage and the trample on the soil to destroy its structure; • High poverty rates mean people depend heavily on biomass from croplands and lowlands forested areas for fuel; • Poor workmanship in infrastructure development (e.g. roads) subjects the soil to high rates of erosion. 	<ul style="list-style-type: none"> • Fragmentation in land allocation leaves a lot of land in between in nobody's particular care and susceptible to degradation; • Poor land tenure system means allottees hang on to land ownership for too long even if they cannot use it properly; • Croplands are used communally for grazing after winter harvest, subjecting them to high trampling by animals; • Majority of cropland is in the hands of the rural people who are also uneducated and unaware of proper usage of land; • Agricultural extension services are generally poor and lacking where they are need most; • Climate change impacts are on the rise and most land allottees lack skills and resources for resilience to the impacts.
Foothills of Lesotho	
<ul style="list-style-type: none"> • A lot of terrain here is steep and unsuitably used for crop farming; • Higher rainfall than the lowlands means higher rates of soil erosion; • Poor tillage and cropping systems result in gully and sheet erosion of the soil; • High encroachment of unsuitable croplands into rangelands results in overstocking and overgrazing. 	<ul style="list-style-type: none"> • Farming here is mixed (animal and crop) with large numbers of animals depending on croplands and little range resources as their only means of feeding; • Low farming skills and lack of farming resources subjects the soil to degradation.
Lesotho Highlands (mostly rangelands)	
<ul style="list-style-type: none"> • Overstocking and overgrazing result in land degradation; • Lack of empowerment of local authorities results in poor enforcement of grazing controls; • Steep slopes and high intensity rainfall result high runoff rates and soil erosion; • Settlements and croplands are allowed to encroach into steep sloping rangelands causing high soil erosion rates; • Uncontrolled harvesting of plants for medicinal use results in depletion of biodiversity and erosion of soil. 	<ul style="list-style-type: none"> • Grazing rights and control is not based on rangeland carrying capacity; • Department of Range Resources lacks capacity to enforce Range Resources Policy.
Senqu Valley (cropping and animal farming)	
<ul style="list-style-type: none"> • Poor land management combined with low rainfalls 	<ul style="list-style-type: none"> • Soils of this region are generally poor and susceptible to

and climate change result in erosion and depletion of rich biodiversity in this area; <ul style="list-style-type: none"> • Overgrazing subjects soils to erosion. 	erosion; <ul style="list-style-type: none"> • Poverty makes people reliant on vegetative resources for livelihoods.
Forests (scattered throughout the country)	
<ul style="list-style-type: none"> • Overharvesting of forest resources for fuel; • Burning of forests by arsonists; • Overgrazing on forest lands. 	<ul style="list-style-type: none"> • Lack of alternative sources of energy for the rural poor means heavy dependence on wood; • Climate change has begun having visible toll of forests.

3.3 LDN baseline

LDN baseline refers to the current status and conditions of land-based natural capital and the ecosystem services that flow from that land base, and is the initial numerical value of the minimum set of indicators used as proxies of the land-based natural capital:

- land cover;
- land productivity (metric: net primary productivity);
- carbon stocks above and below ground (metric: soil organic carbon (SOC) stock).

These indicators correspond to the UNCCD progress indicators and have been adopted as sub-indicators for the indicator 15.3.1, “Proportion of land that is degraded over total land area”, to measure progress toward the SDG target 15.3.

As part of the LDN TSP, Lesotho was provided with default tier 1 data derived from global data sources provided by the UNCCD secretariat. Lesotho used the default data to establish its LDN baseline in the absence of national data (Table 5).

Table 5: Presentation of national basic data using the LDN indicators framework (source UNCCD default data)

Land Use/Cover Category	Area (2000)	Area (2010)	Net area change (2000-2010)	Net land productivity dynamics (NetLPD)** (sq km)						Soil organic carbon (2000)**
	sq. km*	sq. km	sq. km	Declining	Early signs of	Stable but	Stable not	Increasing	No	ton/ha
Forest	611	603	-9	0	54	33	444	71	0	77.0
Shrubs, grasslands and sparsely vegetated areas	24029	24037	8	209	3742	1270	18103	695	18	75.0
Croplands	5590	5590	1	97	337	267	4684	202	4	61.2
Wetlands	0	0	0	0	0	0	0.3	0		54.0
Artificial areas	70	70	0	3	13	2	52	0	0.5	56.9
Bare land and other areas	2	2	0		0.3		1	0		60.3
SOC average (ton/ha)										72.5
Percent of total land area				1%	14%	5%	77%	3%	0.1%	
Total (sq. km)	30301	30301	0	309	4145	1571	23285	969	22	
(*) sq. km. stands for square kilometer or km ² . To convert sq km to hectares (ha) x100.										
(**) Values for NetLPD and SOC are only for areas where Land Use/Cover is unchanged from 2000-2010.										
(***) 'No Data' includes snow, ice, desert areas, water bodies and missing pixels										
(****) Change in SOC due to changing Land Use/Cover derived from IPCC Good Practice Guidance for LULUCF (2006).										
(*****) The areas corresponding to marine and other major international water bodies are excluded as out of LDN TSP scope which concerns degradation on terrestrial ecosystems only.										
Wetlands and smaller sweet water bodies are included as they are an integral part of the surrounding terrestrial areas that deliver the corresponding ecosystem services.										
(^) Where LPD totals differ from the Net area change (2000-2010) in Table 3, the differences are due to LPD No Data values being excluded from Table 2										

4. Lesotho's LDN targets

Lesotho's national voluntary targets and measures were validated by the LDN NWG on 16th May 2017 and adopted by the government, through the Ministry of Forestry, Range and Soil Conservation, in August 2017.

Lesotho's LDN targets

National target:

Achieve LDN by 2030 as compared to the 2015 baseline and an improvement of 5% of the land. The improvement is expected mainly in the Lowlands and Foothills of Lesotho where the majority of the land is used for cropping. The target is to also improve soil organic carbon in all land classes.

Specific targets to avoid, minimise and reverse land degradation:

- Improve productivity and SOC stocks by 1% in all land classes by 2030 as compared to 2015;
- Rehabilitate 600,000 hectares of degraded land to functionality by 2030;
- Convert 135,600 ha of bush land back to rangeland by 2030 as compared to 2015;
- Halt the conversion of forests and wetlands to other land cover classes by 2022;
- Increase forest cover by 61,325 ha by 2030 as compared to 2015;
- Reduce the rate of soil erosion and sealing (conversion to artificial land cover) by 20% by 2030 as compared to 2015.

Outline of policy measures to integrate LDN into selected national priorities, such as sustainable development and poverty reduction:

- Integrate LDN into sectoral policies to ensure that the LDN hierarchy (avoid, reduce, reverse) is owned by all sectors;
- Strengthen the decentralisation processes to ensure active participation of local communities in the management of their land;
- Restore grazing fees as an effective means of range management;
- Develop and update legal instruments to facilitate law enforcement;
- Promote alternative forms of energy for supply to rural areas to avert overdependence on forest wood ;
- Promote agroforestry to create more diverse, productive, ecologically sound, and sustainable land-use systems.

5. Annex

5.1 LDN working group members

Name of organisation	Name of representative	Sector
Department of Forestry	Sekoati Sekaleli	Government
Bureau of Statistics	Mantoa Mabele	Government
National Environment Secretariat	Lisebo Motjotji	Government
Department of Range Management	Clement Ratsele	Government
Department of Range Management	Sauli Ramatla	Government
Department of Soil Conservation	Refuoe Boose	Government
Ministry of Agriculture & Food Security	Lebona Molahlehi	Government
Lesotho Meteorological Services	Reginah Neko	Government
Ministry of Local Govt. & Chieftainship	Remaketse Mochochoko	Government
Ministry of Development Planning	M. Motia	Government
Ministry of Water Affairs	Ntiea Letsapo	Government
Ministry of Water Affairs	Makomoreng Fanana	Government
MFRSC (department of range)	Sauli Ramatla	Government
Ministry of mining	Kelebone letsie	Government
Ministry of development planning	'Mabereng Mpooa Makhetha	Government
Ministry of energy & meteorological services	'Mabafokeng Mahahabisa	Government
Department of environment	Stanley Damane	Government
Department of agricultural research	Selebalo Ramakhanna	Government
Ministry of Agriculture & Food Security	Mphasa Rampete	Government
Ministry of Agriculture & Food Security	J.S Moeketsi	Government
Department of Soil Conservation	Koetlisi koetlisi	Government
Lesotho Agricultural College	Tlotliso Ramanyaka	Science
National University of Lesotho	Botle Mapeshoane	Science
National University of Lesotho	Makoala Marake	Science
National University of Lesotho	Joalane Marunye	Science
National University of Lesotho	Ntahane Takalimane	Science
National University of Lesotho	Khoboso Seutloali	Science
Department of agricultural research	Selebalo ramakhanna	Science
LENAFU	Bore Motsamai	Civil Society
CBA	Mantsiea Ntaile	Civil Society
PELUM Lesotho	Mamotebang Moeketsi	Civil Society
Serumula	Bonang Mosiuoa	Civil Society
World Vision	Makhera kalele	Civil Society
Wool & mohair promotion project	Itumeleng Bulane	Civil Society
Strengthening Capacity for Climate	James Tsilane	Civil Society
UNDP	Limomane Peshoane	International
FAO	Mokitinyane Nthimo	International
SADP	Retsélisitsoe Pheko	Regional

5.2 Consultation meetings organized during the LDN target setting process

Meeting	Date
LDN TSP inception workshop	February 2017
LDN baseline validation workshop	May 2017