INTRODUCTION TO LDN, LDN TARGET SETTING AND ITS BUILDING BLOCKS
Outline of the presentation

1. Background

2. LDN TSP: 4 building blocks

3. Nexus FLR & LDN
Background: land degradation, LDN and SDGs
Estimates indicate that up to 25% of all land is currently highly degraded, 36% is slightly or moderately degraded but in stable condition, while only 10% is improving.

UNCCD and SDGs

SDG 15 “to protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss”

Target 15.3 - “By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world”

Indicator 15.3.1 - “Proportion of land that is degraded over total land area”
UNCCD COP.12

- Endorsed target 15.3. and LDN as strong vehicle for driving the implementation of the Convention
- Invited all country Parties to “formulate voluntary targets to achieve LDN” and to incorporate them in UNCCD NAPs

COP 12 also:

- Requested UNCCD bodies to:
  - provide guidance for formulating national LDN targets
  - facilitate the use of UNCCD indicator frameworks to monitor LDN targets

- Decided that affected country Parties should provide feedback on the default data and the proposed methodology to formulate national voluntary LDN targets
LDN Conceptual Framework

LDN aims to maintain or enhance the land based natural capital and associated ecosystem functions and services.

Neutrality = “no net loss” (at least)

Requires: balance between losses and gains

In terms of land degradation: Counterbalance ongoing land degradation (loss) with restoration of degraded land (gain)
LDN Target Setting Programme:

4 Building Blocks
1. Leveraging LDN
   Engage decision makers and stakeholders involved in land management

2. Assessing LDN
   Making informed decisions on what action to take by assessing the current state of land and its drivers of degradation

3. Setting LDN targets & associated measures
   Define country’s ambitions in terms of combatting land degradation by defining LDN targets and measures

4. Achieving LDN
   Create an enabling environment by integrating LDN into national policies and identifying transformative LDN programmes and projects
10 Steps that provide operational guidance on how to define national LDN baselines and to identify voluntary LDN targets and associated measures

- Step 1: Government leadership and stakeholder engagement – creating leverage
- Step 2: Setting the LDN baseline
- Step 3 + 4: Assessing trends and drivers of land degradation
- Step 5: Defining national voluntary LDN targets
- Step 6: Mainstreaming LDN in land use planning
- Step 7: Identifying measures to achieve LDN targets
- Step 8: Facilitating action towards LDN – Policies and transformative projects
- Step 9 + 10: Monitoring and reporting on LDN
**Status of LDN TSP**

- **106 participating countries (incl. 12 Silva Mediterranea member countries)**
- **Multi-partner initiative established**
  - Financial support by France, Germany, the Republic of Korea, Luxembourg, Spain, Turkey, Trinidad and Tobago, GEF/IUCN, GEF/UNEP, UNDP
  - Wide range of technical partners (e.g. ESA, JRC, ISRIC)
- **Key documents/frameworks prepared** (e.g. draft technical guide, leverage plan, monitoring & evaluation system)
- **4 regional inception workshops organized for Regional Implementation Annexes I, II, III, IV and V**
  - Familiarize participating countries with the LDN target setting process
  - Identify opportunities for leverage
  - Create a mutual understanding of the LDN target setting process
- **Objective:** Countries enabled to establish national LDN targets
Nexus FLR & LDN
LDN indicators

Sub-Indicators
UNCCD (CBD, UNFCCC)
Reporting Mechanisms

Land Productivity

Carbon Stocks above/below ground

Land Cover and Land Cover Change
The LDN response hierarchy: “Prevention is better than the cure”

**Avoid** – Many forms of land degradation can be avoided through proactive measures to confer resilience and prevent adverse change in the quality of non-degraded land via appropriate regulation, planning or activity design.

**Minimize** – Land degradation can be mitigated through reactive practical actions that minimize *in situ* impacts on land currently undergoing degrading use (e.g., sustainable land management).

**Reverse** – Where feasible, some (but rarely all) of the productive potential and ecological services of degraded land can be restored or rehabilitated through actively assisting the recovery of ecosystem functions.

Forest and Landscape Restoration (FLR) role
Intersectoral coordination & landscape approach

Building Block 1: Leveraging LDN
Stakeholder engagement: the LDN working group

The LDN working group

- Key line ministries
- Input suppliers
  - Energy providers
- Global funds
- Private service providers
- Pastoralists
  - Farmers
  - Forest harvesters
- Land users
- Development partners
- Development banks
- Indigenous people
- NGOs
  - Trade unions
  - Foundations
- Private companies
- Research institutes & academia
- Civil society organizations
- Government agencies
- Banks, manufacturers
  - & chambers of commerce
LDN corrective measures

Technical measures: Sustainable Land Management (SLM)

Usually address the **direct** drivers of land degradation, such as:

- **Agronomic measures**: measures that improve soil cover (e.g. green cover, mulch), measures that enhance organic matter/soil fertility (e.g. manuring), soil surface treatment (e.g. conservation tillage), subsurface treatment (e.g. deep ripping).

- **Vegetative measures**: plantation/reseeding of tree and shrub species (e.g. live fences, tree crows), grasses and perennial herbaceous plants (e.g. grass strips).

- **Structural measures**: terraces (bench, forward/backward sloping), bunds, banks (level, graded), dams, pans, ditches (level, graded), walls, barriers, palisades.

- **Management measures**: change of land use type (e.g. area enclosure), change of management/intensity level (e.g. from grazing to cut-and-carry), major change in the timing of activities, control/change of species composition.

Source: WOCAT
LDN target setting exercise is a nationally driven process which can support intersectoral planning for Forest & Landscape Restoration.

In some cases FLR strategies may go beyond ‘no net loss’ (neutrality) and drive for net gains.

It seems relevant to combine the LDN target setting exercise (based on precise data sets and quantitative analyses) with other (ongoing) FLR opportunities assessments (e.g. ROAM) which are more qualitative.

Necessary partnerships with ongoing restoration initiatives especially for country level support, e.g. with FERI/CBD, FAO FLRM, etc.
THANK YOU !!

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Annexes
Achieving Land Degradation Neutrality at the country level
Building blocks for LDN target setting

1. Leveraging LDN
2. Assessing LDN
3. Setting LDN targets & associated measures
4. Achieving LDN

THE GLOBAL MECHANISM
United Nations Convention to Combat Desertification
BUILDING BLOCK 1

Step 1 – Government leadership & engaging stakeholders
Creating leverage

- **WHY?** LDN business case
- **WHAT?** National policies & commitments
- **WHO?** Stakeholders
- **HOW?** Leverage game plan

**Building Block 1: Leveraging LDN**

- **WHY?** LDN Leverage Plan
  - *WHY does LDN matter?*
    - Multiple benefits
    - Policy coherence
    - Climate action
    - Financing opportunities
  - *WHO to engage?*
    - Senior government
    - National coordination mechanisms
    - International development partners
    - National stakeholders
  - *WHAT to leverage?*
    - National development priorities
    - Country commitments and engagements
 WHY?

The multiple benefits of LDN

Opportunities for all
- Green investment, green jobs
- Employment for women

Clean water
- SLM for effective water use
- Reducing LDN in catchment

Doing more and better with less
- Pan-European global land footprint

Fuel for life
- Safeguarding fuelwood
- Sustainable hydropower
WHAT? National policies & commitments

- National development program & targets
- National policies across sectors (incl. agriculture, climate)
- Country commitments (e.g. INDC, Bonn Challenge, Aichi Targets)
WHO? Stakeholders

- Most senior Government representatives
- National councils & coordination mechanisms
- Development partners
- Private sector umbrella organizations
- National financing institutions & mechanisms
HOW? Leverage game plan

- Country tailored
- Focused
- NFP lead
- TSP technical & political support

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<th>Leverage Opportunities</th>
<th>Actions and Responsibilities</th>
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<td><strong>Why does LDN matter?</strong></td>
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<td>1. Creating multiple benefits</td>
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<td>2. Fostering policy coherence</td>
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<td>3. Advancing climate action</td>
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<td>4. Tapping financing opportunities</td>
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**WHAT to leverage?**

| 5. National development programmes, priorities and objectives |                                        |
| 6. Country commitments and engagements |                                         |

**WHO to engage to create leverage?**

| 7. Senior government |                              |
| 8. National coordination mechanisms |                              |
| 9. International development partners |                              |
| 10. National non-governmental stakeholders |                              |
LDN National Working Group

Objective:
Steer the LDN target setting process and promote LDN mainstreaming

Possible tasks:
- Mobilize to key stakeholders
- Platform for the national stakeholder consultations
- Road map and endorsement of national LDN target setting
- Identify LDN measures and facilitate political commitment
- Support for LDN mainstreaming
- Review and validation of national reports
- Support for national outreach activities
LDN National Working Group – Possible members

Building Block 1: Leveraging LDN Stakeholder engagement: the LDN working group

The LDN working group

- Government agencies
- Banks, manufacturers & chambers of commerce
- Development banks
- Indigenous people
- NGOs trade unions foundations
- Civil society organizations
- Key line ministries
- Input suppliers energy providers
- Global funds
- Private service providers
- Pastoralists farmers & forest harvesters
- Private companies
- Land users
- Research institutes & academia
1. Leveraging LDN

OUTCOMES

*National Leverage Plan established*

Senior government and major international partners *mobilized*

Multi-Stakeholder engagement *secured*
Step 2 – Setting up the LDN baseline
BB2: SETTING LDN BASELINE

What is a LDN baseline?

- LDN = no net loss = the land based natural capital is maintained or enhanced relative to a reference state (i.e. baseline)
- Therefore the baseline state becomes the target to be achieved, in order to maintain neutrality
- LDN is a minimum target: some countries may decide to aim higher than neutrality, that is, to improve the land-based natural capital above the baseline
What is the baseline period?

- The assumption is that, for most countries, the baseline depends on the current situation and conditions (i.e. 2015).
- The condition of land is highly variable due to climate variability and the variety of human activities on the land.
- Therefore, the baseline should be calculated, for each indicator, as an average across 10-15 years (depending on data availability).
BB2: SETTING LDN BASELINE

How to calculate the baseline?

Sub-Indicators
UNCCD (CBD, UNFCCC)
Reporting Mechanisms

Land Productivity
Carbon Stocks above/below ground
Land Cover and Land Cover Change

Official Statistics and Earth Observation
Land Use and Management Practices
Surveys, Sampling and Citizen Sourcing

Data from multiple sources
FAO, GEF and other Reporting Mechanisms
Which data source to use?

- **Primarily comparable and standardised national official data sources**
- **Global data sources** in the absence of, or to complement and enhance, national data sources.
- **Tiered approach** (from default method to the most detail method):
  - Tier 1: Global/regional Earth observation, geospatial information, modelling
  - Tier 2: National statistics and Earth observations
  - Tier 3: Field surveys, assessments and ground measurements
Step 3 – Assessing trends of land degradation
What is land degradation and how do we assess it?

- **Land degradation** is defined as “reduction or loss of the biological or economic productivity and complexity of rainfed cropland, irrigated cropland, range, pasture, forest and woodlands resulting from land uses or from a process or combination of processes, including those arising from human activities and habitation patterns, such as:
  - (i) soil erosion caused by wind and/or water;
  - (ii) deterioration of the physical, chemical and biological or economic properties of soil; and
  - (iii) long-term loss of natural vegetation”.

- **Land degradation** can be more readily detected as a change in the values of a specific set of consistently measured indicators.
BB2: ASSESSING LAND DEGRADATION TRENDS

How do we assess land degradation trends?

- **The same three indicators** used for setting the baseline (i.e. land cover, land productivity and soil organic carbon) **to be used to assess trends.**
- **A retrospective trend analysis** requires an observation of the changes in the value of the indicators over a 10-15 years (i.e. 2000-2015)
- These indicators should be analysed separately. However, **land cover** should also be used to **stratify the other two indicators.**
- **Degradation is generally considered to occur** when:
  - land productivity shows a significant negative trend; or
  - SOC shows a significant negative trend; or
  - negative land cover change occurs; or
  - a negative change occurs in another nationally relevant indicator.
Step 4 – Assessing the drivers of land degradation
Building Block 2: Assessing LDN – Land Degradation drivers

- Land degradation processes/causes

1. Soil erosion by water
2. Soil erosion by wind
3. Chemical soil deterioration
4. Physical soil deterioration
5. Water degradation
6. Biological degradation
### Building Block 2: Assessing LDN – Land Degradation drivers

**Main direct and indirect drivers of land degradation**

<table>
<thead>
<tr>
<th>Direct drivers of land degradation</th>
<th>Indirect drivers of land degradation</th>
</tr>
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<tbody>
<tr>
<td>• Poor agricultural practices</td>
<td>• Population pressure</td>
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<tr>
<td>• Deforestation</td>
<td>• Land tenure</td>
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<tr>
<td>• Over-exploitation for domestic use</td>
<td>• Poverty/wealth</td>
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<tr>
<td>• Overgrazing</td>
<td>• Labour availability</td>
</tr>
<tr>
<td>• Industrial activities, waste and mining</td>
<td>• Inputs (including access to credit/financing) and infrastructure</td>
</tr>
<tr>
<td>• Urbanisation and infrastructure</td>
<td>• Education, access to knowledge and support services</td>
</tr>
<tr>
<td>• Discharges of effluents</td>
<td>• War and conflict</td>
</tr>
<tr>
<td>• Release of airborne pollutants</td>
<td>• Governance, institutional settings and policies (including taxes, subsidies, incentives, territorial master plans)</td>
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<tr>
<td>• Disturbance of water cycle</td>
<td></td>
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<tr>
<td>• Over-abstraction of water</td>
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<tr>
<td>• Natural causes</td>
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</tbody>
</table>
2. Assessing LDN

OUTCOMES

LDN baseline established & mapped

LDN drivers & trends identified

LDN legal and institutional environment analyzed
BUILDING BLOCK 3

Step 5 – Setting up voluntary LDN targets
What is a LDN target?

- LDN target setting = defining the level of ambition on LDN
- LDN targets (WHAT is to be achieved) vs. LDN measures (HOW to achieve it)
- LDN targets are broad, yet clear and measurable objectives

LDN Target

Political decision-making process

Information basis: analysis of land degradation trends and drivers, other assessments
Types of LDN targets

Neutrality targets

LDN at the national scale: no net loss (or better) in the whole country and in all land cover classes. All losses will need to be balanced by gains.

National LDN target setting may be complemented by setting

⇒ Sub-national LDN targets

⇒ Specific targets for specific (e.g. for land cover classes) to avoid, minimize and reverse land degradation (e.g. country commitments to global/regional processes such as Bonn Challenge)
What is the time reference for LDN targets?

Proposed baseline (starting point): 2015

Proposed time horizon for achieving LDN targets: 2030
LDN target examples

- **Neutrality targets (at national scale and complementary at sub-national)**
  - LDN is achieved by 2030 as compared to 2015 (no net loss)
  - LDN is achieved by 2030 as compared to 2015 and an additional 10% of the national territory has improved (net gain)

- **Specific targets to avoid, reduce and reverse land degradation**
  - Improve productivity and SOC stocks in cropland and grasslands by 2030 as compared to 2015
  - Halt the conversion of forests and wetlands to other land cover classes by 2020
  - Reduce the rate of soil sealing (conversion to artificial land cover) by 50% by 2030 as compared to 2015
BUILDING BLOCK 3

Step 7 – Identifying measures to achieve LDN targets
What are measures to achieve LDN targets?

- LDN is a policy goal and a planning principle. But LDN does not propose any new technical measures.
- Whole range of possible interventions to avoid, minimise or reverse land degradation.
- At all levels: national to local.

Measures need to address the direct or indirect driver.
Policy measures

- Usually address *indirect* drivers of land degradation, such as:
  - Regulatory measures to ensure sustainable land use (e.g. prescribe land use practices in certain areas)
  - Financial incentives to encourage sustainable land use or disencourage unsustainable land use (e.g. taxation, tax exemption)
  - Reforms to improve land access and tenure

Need to integrate measures into existing policies, programmes and plans
Technical measures: Sustainable Land Management (SLM)

Usually address the **direct** drivers of land degradation, such as:

**Agronomic measures:** measures that improve soil cover (e.g. green cover, mulch), measures that enhance organic matter/soil fertility (e.g. manuring), soil surface treatment (e.g. conservation tillage), subsurface treatment (e.g. deep ripping).

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**Management measures:** change of land use type (e.g. area enclosure), change of management/intensity level (e.g. from grazing to cut-and-carry), major change in the timing of activities, control/change of species composition.

Source: WOCAT
Example: LDN target and measures

WHAT is to be achieved?
LDN target: “LDN is achieved by 2030 as compared to 2015 and an additional 10% of the national territory has improved”

HOW to achieve the target?
- Mainstream the LDN planning principle in land use planning
- Regulatory measures to stop deforestation in 2020
- Annually rehabilitate 75,000ha of highly degraded grassland
- Annually reforest 25,000ha with local species
- Rewet 15,000ha of degraded wetlands
- Create financial incentives to promote SLM on 200,000ha
3. Setting LDN targets & associated measures

OUTCOMES

LDN targets established

Measures identified

Government high-level note developed
BUILDING BLOCK 4

Step 6 – Mainstreaming LDN targets in land use planning
How to achieve LDN targets?

In general: Mainstream LDN into land use planning

(Step 6)

Specific: Identify and implement measures to achieve LDN targets

Step 7
What does it mean to mainstream LDN in land use planning?

The LDN response hierarchy: “Prevention is better than the cure”

LDN is a planning principle that should be applied in land use planning.
BUILDING BLOCK 4

Step 8 – Facilitating actions towards LDN
Building Block 4: Facilitating actions toward LDN

1. **Translating LDN measures into transformative bankable projects**

- Pre-identification and formulation of transformative LDN proposals for projects and programmes

- Identifying new investment opportunities for financing key measures to achieve LDN is crucial
Multiple and complementary sources of finance are important to sustain the financing of LDN actions.

Major financing mechanisms: national budget, multilateral and bilateral donors, development banks and emerging finance mechanisms (Green Climate Fund (GCF), LDN Fund).

Securing private sector involvement and investments are effective ways to support the development of bankable LDN projects and sustainable financing for LDN.
Building Block 4: Facilitating actions toward LDN

3. Establishing LDN-related partnerships

- Integration of LDN as guiding principle by all land-related ministries and on all levels

- Establishment of public-private partnerships through which private companies invest in sustainable land management practices, including development of bankable LDN projects

- Mobilization of blended finance from a broad spectrum of public and private sources

- Participation in national, regional and global initiatives that promote upscaling SLM and restoration activities to create the synergies required for LDN implementation
BUILDING BLOCK 4

Step 9 & 10 – Monitoring and reporting on LDN
MONITORING LDN

How to monitor progress towards LDN targets?

- **LDN = no net loss =** the land based natural capital is maintained or enhanced relative to a reference state (i.e. baseline)

- In other words, LDN is achieved if **gains** in the land-based natural capital **balance or exceed losses**.

- **STEP 2: baseline =** the initial value (t0) of each indicator (i.e. land cover, land productivity and carbon stocks (SOC))

- The **values of all three indicators must remain stable or improve** for LDN to be achieved
MONITORING LDN

How to measure gains and losses?

- **A gain** is an increase in the land-based natural capital
- **A loss** is a decrease in the land-based natural capital

<table>
<thead>
<tr>
<th>Gain</th>
<th>Loss (i.e. land degradation)</th>
</tr>
</thead>
</table>
| positive land cover change occurs  
OR  
land productivity increases significantly  
OR  
SOC increases significantly  
AND  
no significant negative change in any other nationally relevant indicator | negative land cover change occurs  
OR  
land productivity decreases significantly  
OR  
SOC decreases significantly  
OR  
a negative change occurs in another nationally relevant indicator |

Exception: “false positives”

One out all out principle
MONITORING LDN

What is the area to be monitored?

- The extent of the area to be monitored depends on how the target has been defined (i.e. national target, subnational target, specific land cover class target)

What is the monitoring frequency?

- It is suggested that the monitoring of progress towards LDN targets begins as soon as possible and ideally be repeated every four years until the end of 2030.
REPORTING ON LDN

- Purposes of reporting:
  - communicating progress towards LDN targets at the national and local levels to a wide range of stakeholders, including decision makers
  - share information at the international level on progress made, lessons learned and ongoing challenges

- Countries participating in the LDN TSP should prepare a national report summarizing the achievements and lessons-learned of the LDN target setting process

- Information gathered through the LDN TSP can feed as appropriate into various international reporting and review mechanisms, including national reporting under the UNCCD and the SDG process.
REPORTING ON LDN

- LDN target setting status update (report by July 2017):
  - Using same tool (fillable PDF forms) and platform (PRAIS) than official UNCCD reporting that will take place in 2018.
  - Content of LDN reports and official UNCCD national reports fully coordinated (both in templates and in PRAIS database), so prepopulated UNCCD reporting templates for 2018 can contain data validated in the LDN target setting process.
  - 4 pages with reporting elements based on: LDN-TSP outcomes & outputs, LDN baseline (indicators), and LDN targets & associated measures.
  - Information will be used for the production of official documents for COP13 (October 2017).
4. Achieving LDN

OUTCOMES

LDN is included in selected national policies and commitments

Transformative LDN projects and programmes mapped out
1. Leveraging LDN

**OUTCOMES**
- National Leverage Plan established
- Senior government and major international partners mobilized
- Multi-Stakeholder engagement secured

2. Assessing LDN

**OUTCOMES**
- LDN baseline established & mapped
- LDN drivers & trends identified
- LDN legal and institutional environment analyzed

3. Setting LDN targets & associated measures

**OUTCOMES**
- LDN targets established
- Measures identified
- Government high-level note developed

4. Achieving LDN

**OUTCOMES**
- LDN is included in selected national policies and commitments
- Transformative LDN projects and programmes mapped out

Q & A