



La Neutralité en matière de Dégradation des Terres et la nécessité des options de Gestion Durable des Terres

Richard Thomas, ICARDA

System-based Options by Context



A tool for better investment
decisions in agriculture and
rural development

Projet financé par la GIZ

“Evaluation de l’impact des options de GDT pour l’atteinte de la Neutralité en matière de Dégradation des Terres”

15 LIFE ON LAND



**PROTECT, RESTORE AND PROMOTE
SUSTAINABLE USE OF TERRESTRIAL
ECOSYSTEMS, SUSTAINABLY MANAGE
FORESTS, COMBAT DESERTIFICATION, AND
HALT AND REVERSE LAND DEGRADATION
AND HALT BIODIVERSITY LOSS**

15 LIFE ON LAND

SDG 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.

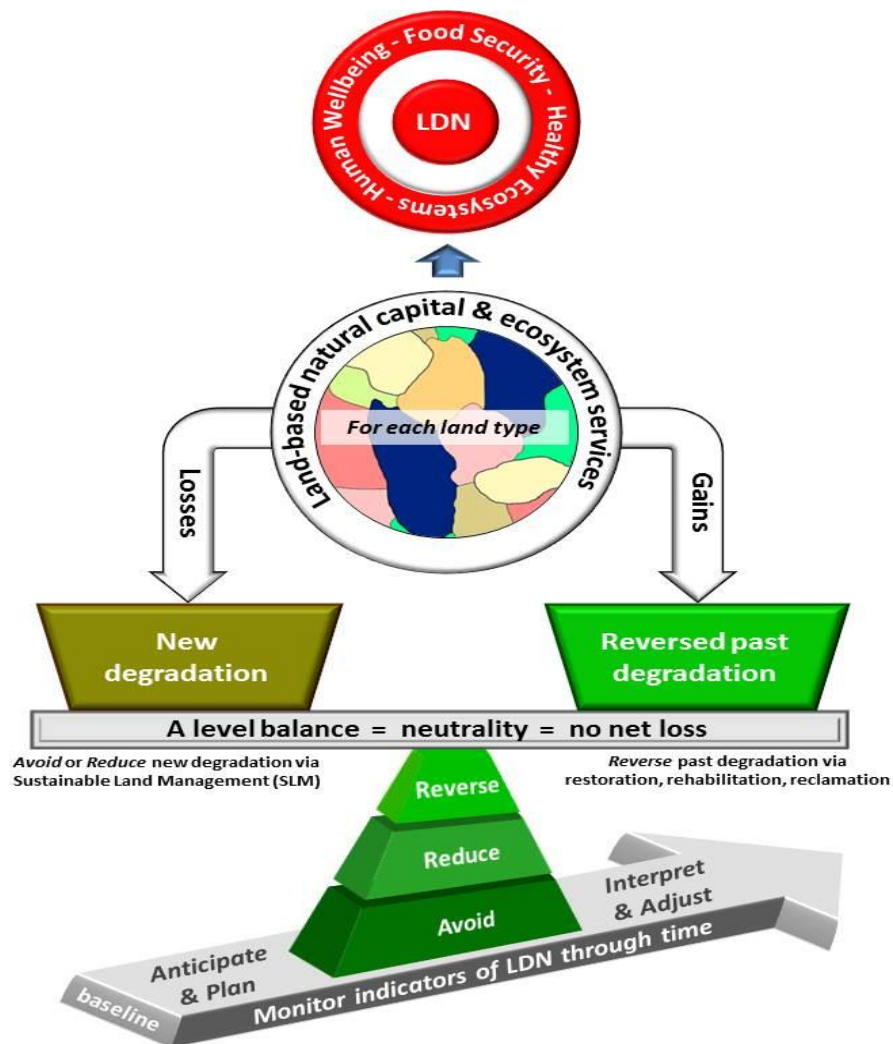
- “A state whereby the amount and quality of land resources necessary to support ecosystem functions and services and enhance food security remain stable or increase within specified temporal and spatial scales and ecosystems”
- UNCCD COP12 October 2015

Origin of LDN

Health and productivity of land is declining

Addressing land degradation gives multiple benefits:

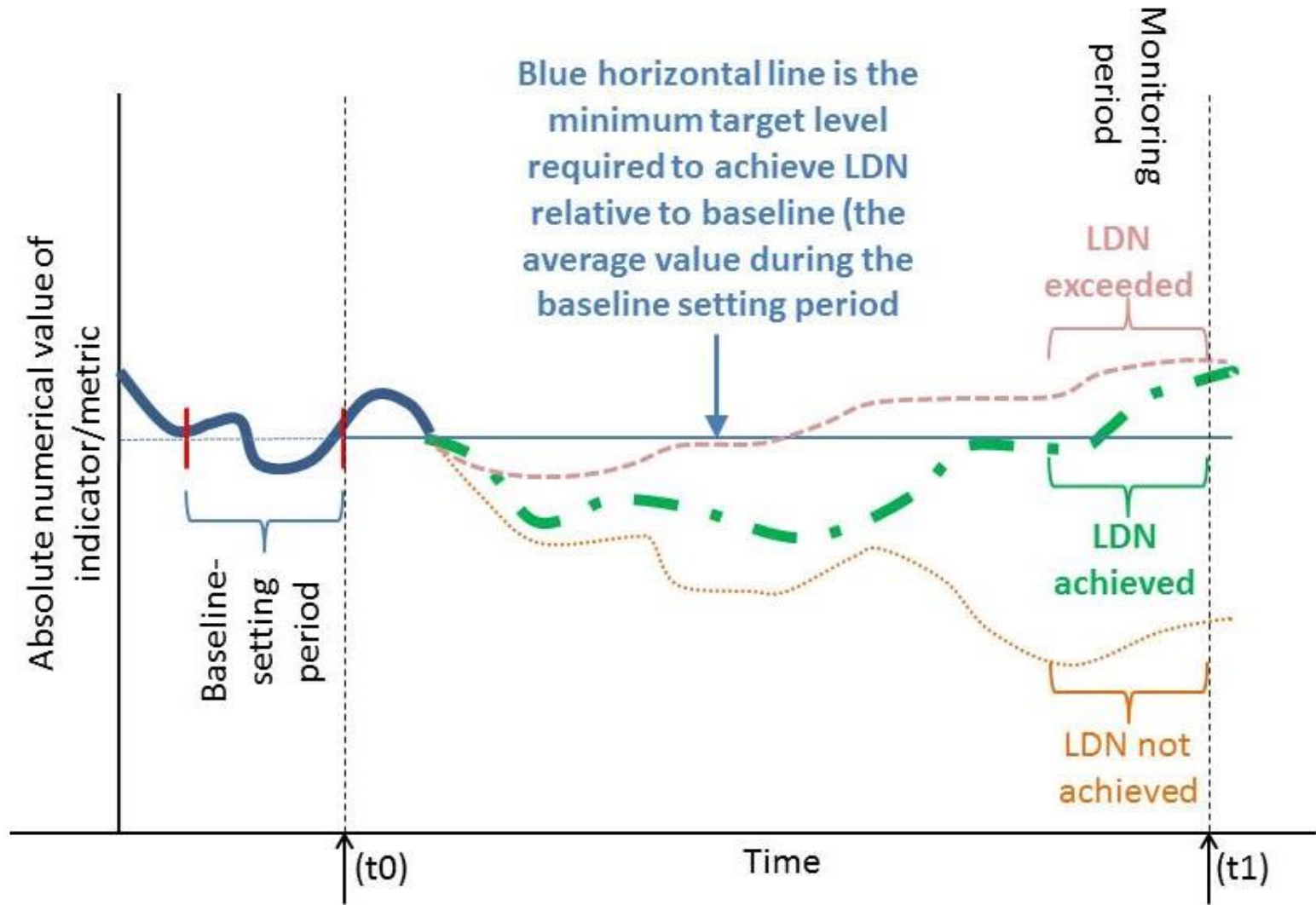
- climate change mitigation, adaptation
- biodiversity conservation
- food security
- sustaining livelihoods
- Rio +20
“Zero net land degradation”
- SDGs (15.3)
- UNCCD COP 12



- **Vision of LDN**
- **to sustain and improve the stocks of land-based natural capital and the associated flows of ecosystem services, in order to support the future prosperity and security of humankind**

- **Mechanism for achieving neutrality**
- **Neutrality = no net loss compared to the reference state**
- **Counterbalancing future land degradation (anticipated losses) through planned measures to achieve equivalent gains elsewhere within the same land type**
- **“like for like”**

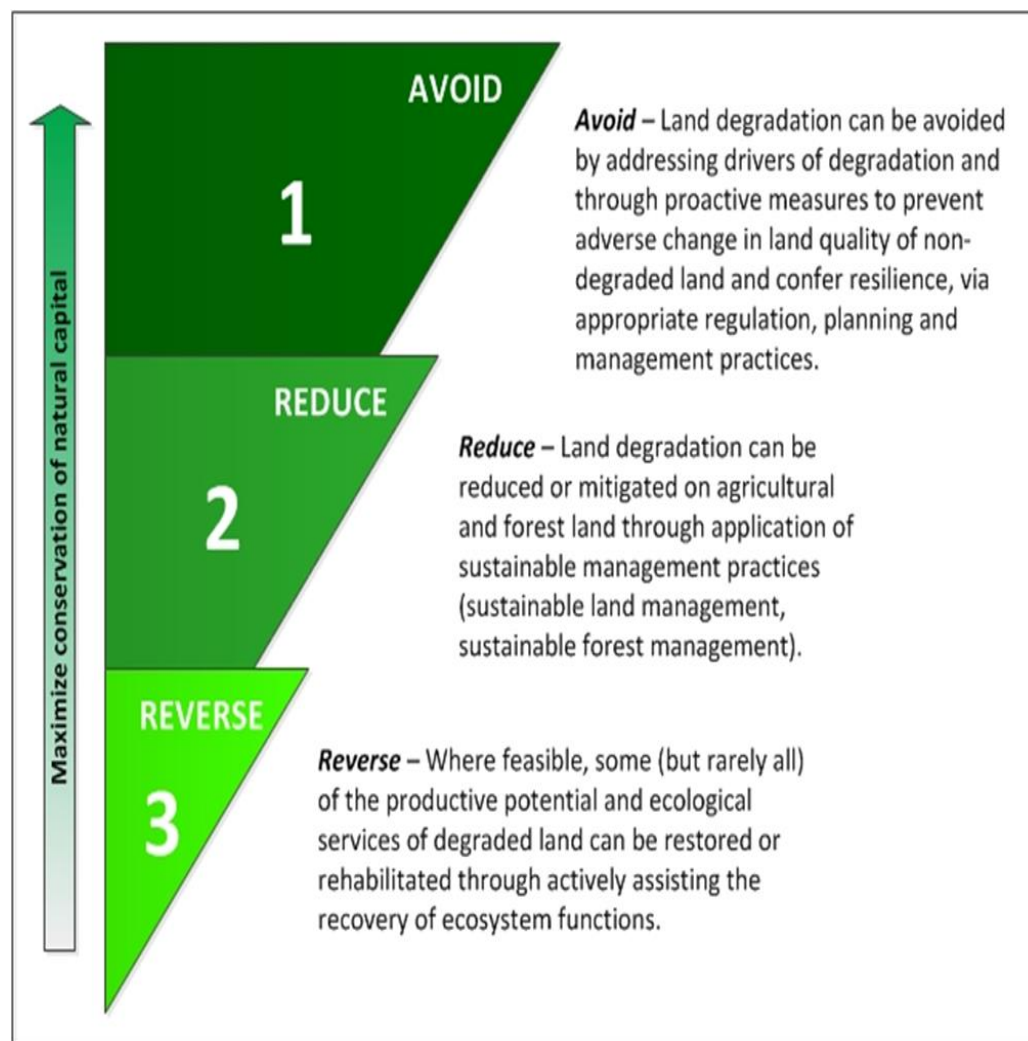
Frame of reference: the baseline equals the target



Baseline against which LDN is to be achieved set as average value across a period immediately prior (e.g., 2000-2015) for each indicator

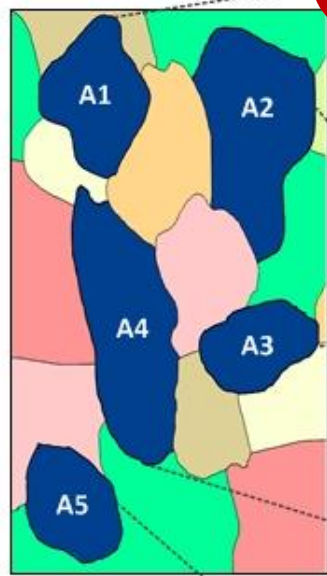
Reporting in the future (e.g., 2030) – target of LDN relative to baseline to be achieved by now ($t1 - t0$)

- **Response Hierarchy**
- **Avoiding degradation is the highest priority, followed by reducing degradation and finally reversing past degradation**



Projecting the impacts of land use decisions

A Map of Land Types
(Land Type "A" = Grassland)



**This hypothetical example is designed to show how land use and management decisions affect metrics of land-based natural capital, and how these changes should be anticipated in planning for Land Degradation Neutrality (LDN). This example illustrates a grassland grazed by livestock.*

Context*

- A1**
Land Area: 15,000 ha
Use: short grazing period
Status: Not Degraded
- A2**
Land Area: 25,000 ha
Use: grazing excluded
Status: Not Degraded
- A3**
Land Area: 10,000 ha
Use: long grazing period
Status: Degraded
- A4**
Land Area: 40,000 ha
Use: med. grazing period
Status: Degraded
- A5**
Land Area: 10,000 ha
Use: short grazing period
Status: Not Degraded

Preparation for Integrated Land Use and Management Planning (t0)

Assessment of land potential, condition, resilience and socio-economic status, including the baseline (t0) measurement of the metrics of land-based natural capital.

Decisions

- Grazing period extended
- Livestock exclusion maintained
- Long grazing period continued
- Sustainable grazing management introduced
- Urban expansion

Anticipated Change in Metrics (t1)

- Negative change anticipated
- No change anticipated
- Negative change anticipated
- Positive change anticipated
- Negative change anticipated

Projected Gains vs. Losses (t1 - t0)

- Loss: 15,000 ha degradation anticipated
- Stable: 25,000 ha no change anticipated
- Loss: 10,000 ha degradation anticipated
- Gain: 40,000 ha improvement anticipated
- Loss: 10,000 ha degradation anticipated

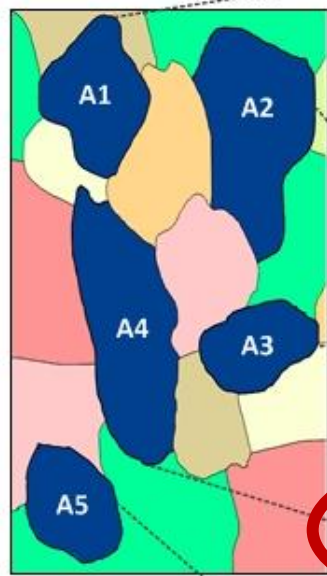
Legend

- All metrics are anticipated to remain stable
- Positive change anticipated (in at least one metric, others stable)
- Negative change anticipated (in at least one metric)
- Stable (no change)
- Degraded land or anticipated negative change
- Not degraded land or anticipated positive change

Land Degradation Neutrality Status
Anticipated
Net Gain: 5,000 ha

Projecting the impacts of land use decisions

A Map of Land Types
(Land Type "A" = Grassland)



Context*

A1 Land Area: 15,000 ha Use: short grazing period Status: Not Degraded
A2 Land Area: 25,000 ha Use: grazing excluded Status: Not Degraded
A3 Land Area: 10,000 ha Use: long grazing period Status: Degraded
A4 Land Area: 40,000 ha Use: med. grazing period Status: Degraded
A5 Land Area: 10,000 ha Use: short grazing period Status: Not Degraded

Preparation for Integrated Land Use and Management Planning (t0)

Assessment of land potential, condition, resilience and socio-economic status, including the baseline (t0) measurement of the metrics of land-based natural capital.

Decisions

- Grazing period extended
- Livestock exclusion maintained
- Long grazing period continued
- Sustainable grazing management introduced
- Urban expansion

Anticipated Change in Metrics (t1)

- Negative change anticipated
- No change anticipated
- Negative change anticipated
- Positive change anticipated
- Negative change anticipated

Projected Gains vs. Losses (t1 - t0)

- Loss: 15,000 ha degradation anticipated
- Stable: 25,000 ha no change anticipated
- Loss: 10,000 ha degradation anticipated
- Gain: 40,000 ha improvement anticipated
- Loss: 10,000 ha degradation anticipated

Legend

- ⊘ All metrics are anticipated to remain stable
- ⬆ Positive change anticipated (in at least one metric, others stable)
- ⬇ Negative change anticipated (in at least one metric)
- ⬆ Stable (no change)
- ⬇ Degraded land or anticipated negative change
- ⬆ Not degraded land or anticipated positive change

Land Degradation Neutrality Status Anticipated
Net Gain: 5,000 ha

*This hypothetical example is designed to show how land use and management decisions affect metrics of land-based natural capital, and how these changes should be anticipated in planning for Land Degradation Neutrality (LDN). This example illustrates a grassland grazed by livestock.

- **Planning for LDN**
- **LDN introduces a new approach in which land degradation management is coupled with land use planning:**
- **integrated land use planning**
- **Keep track of cumulative impacts, and plan measures to counteract losses**

SDG Indicator 15.3.1

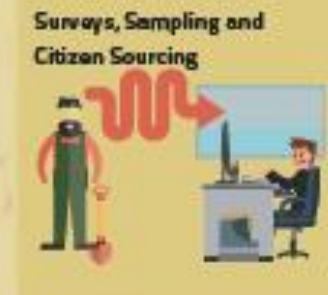
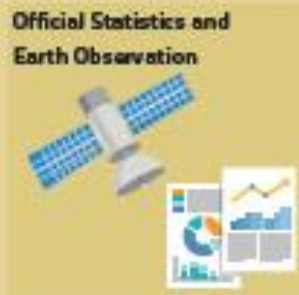
Proportion of land that is degraded over total land area



Sub-Indicators UNCCD (CBD, UNFCCC) Reporting Mechanisms



Data from multiple sources



WHAT is the baseline?

WHAT are the drivers?

WHICH indicators to use?

WHICH data sources to use?

Supporting countries to set Land Degradation Neutrality targets

