

Land Degradation Neutrality Target Setting Programme

Experience of the UN Convention to
Combat Desertification

PannEx/Land Degradation
Neutrality

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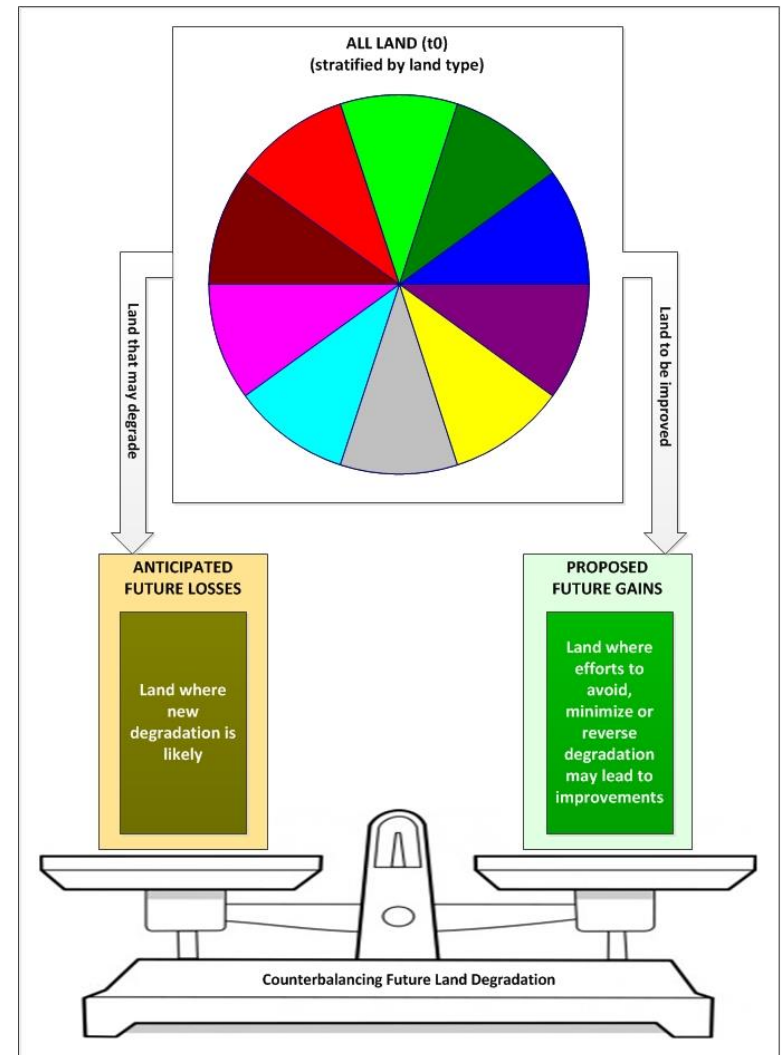
United Nations Convention
to Combat Desertification



LDN definition

“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”

By Intergovernmental Working Group , COP12



LDN principles

- Respect national sovereignty
- Neutrality is the minimum objective: countries may elect to set up a more ambitious target
- Counterbalance “like for like”
- Apply the response hierarchy: avoid → reduce → reverse
- Manage counterbalancing at the scale of land use planning
- Monitor using UNCCD land-based indicators
- Use additional national indicators



- Protect the rights of land users
- Apply the participatory approach: include stakeholders in design, implementing and monitoring actions towards LDN

LAND DEGRADATION NEUTRALITY TARGET SETTING PROGRAMME (LDN-TSP)



- Administrated by the Global Mechanism of UNCCD
- 100+ countries
- Support to a country-driven process!

4 Building Blocks of LDN-TSP

LDN Leverage

- High-level stakeholders engagement
- Leverage opportunities

Assessing LDN

- Land data is verified and validated
- Baseline, LD drivers and trends identified and mapped

LDN target & measures

- LDN target is set up
- Associated measure identified

Achieving LDN

- Establish partnership
- Financial opportunities identified

In Belarus...

- **SDGs nationalization process** → Target 15.3 and its indicators are included in priority list
- **Climate obligations** → A specific LDN target related to the ecological rehabilitation of depleted peatland integrated into the NDC
- **2016-2020 National Action Programme for the Prevention of Land (and Soil) Degradation** →

What to leverage in the EU?



“By 2020, EU policies take into account their direct and indirect impact on land use in the EU and globally, and the rate of land take is on track with an aim to achieve no net land take by 2050; soil erosion is reduced and the soil organic matter increased, with remedial work on contaminated sites well underway”.

The 2011 Roadmap to a resource efficient Europe

“By 2020 land is managed sustainably in the Union, soil is adequately protected and the remediation of contaminated sites is well underway.”

General Union Environment action programme to 2020 'Living well, within the limits of our planet' (7EAP)

“By 2020, ecosystems and their services are maintained and enhanced by establishing green infrastructure and restoring at least 15% of degraded ecosystems.”

EU biodiversity strategy to 2020

General Union Environment action programme to 2020 'Living well, within the limits of our planet' (7EAP)

Para 25 (...)The Union and its Member States shall reflect on how best to make such a commitment on land degradation neutral world operational within their respective competencies. ...The targets should also be set for sustainable land use and soil.

Building block 2: Assessing LDN

SDG Indicator 15.3.1

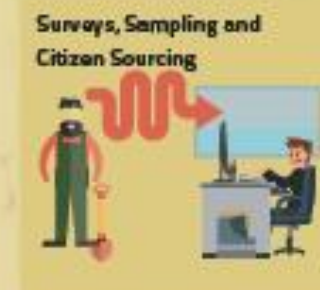
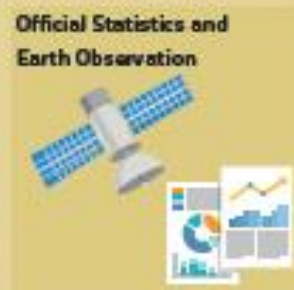
Proportion of land that is degraded over total land area



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?

Which indicators to use?

...in Namibia

- Land cover
- Land productivity
- Soil organic carbon

- Additional Indicator:
Bush Encroachment

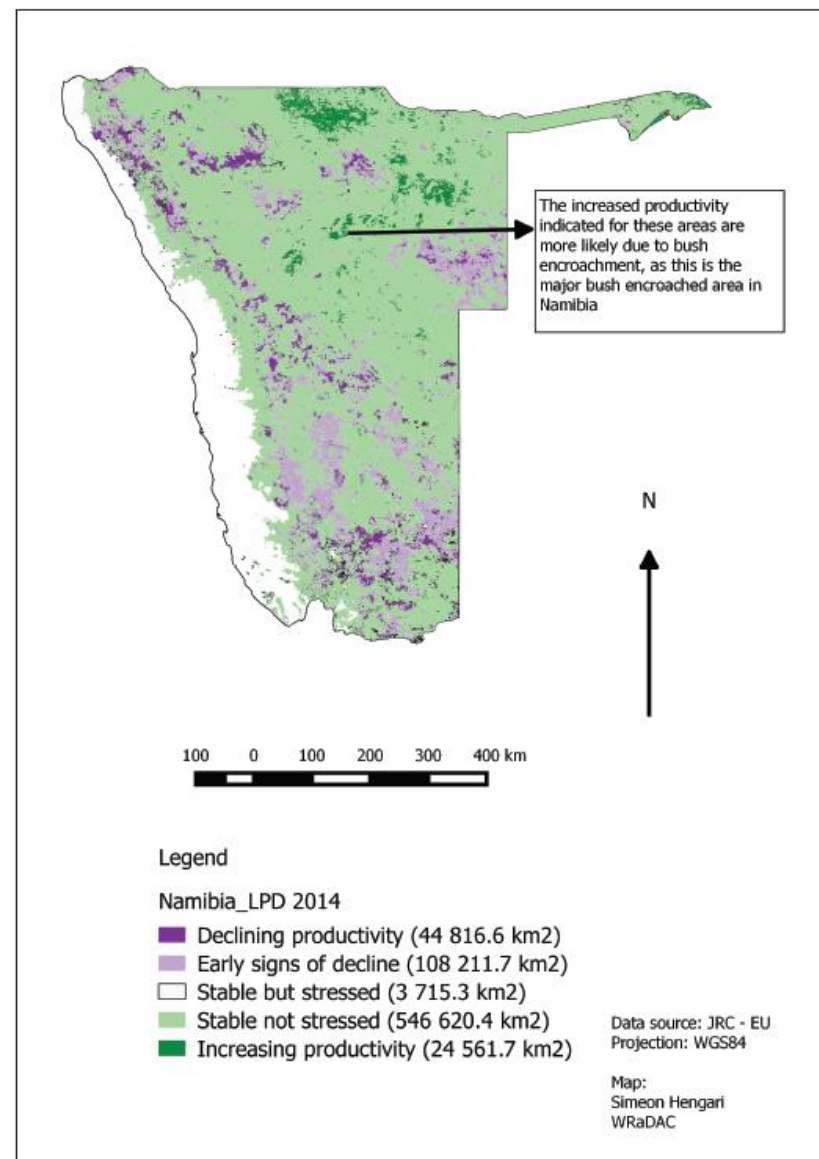


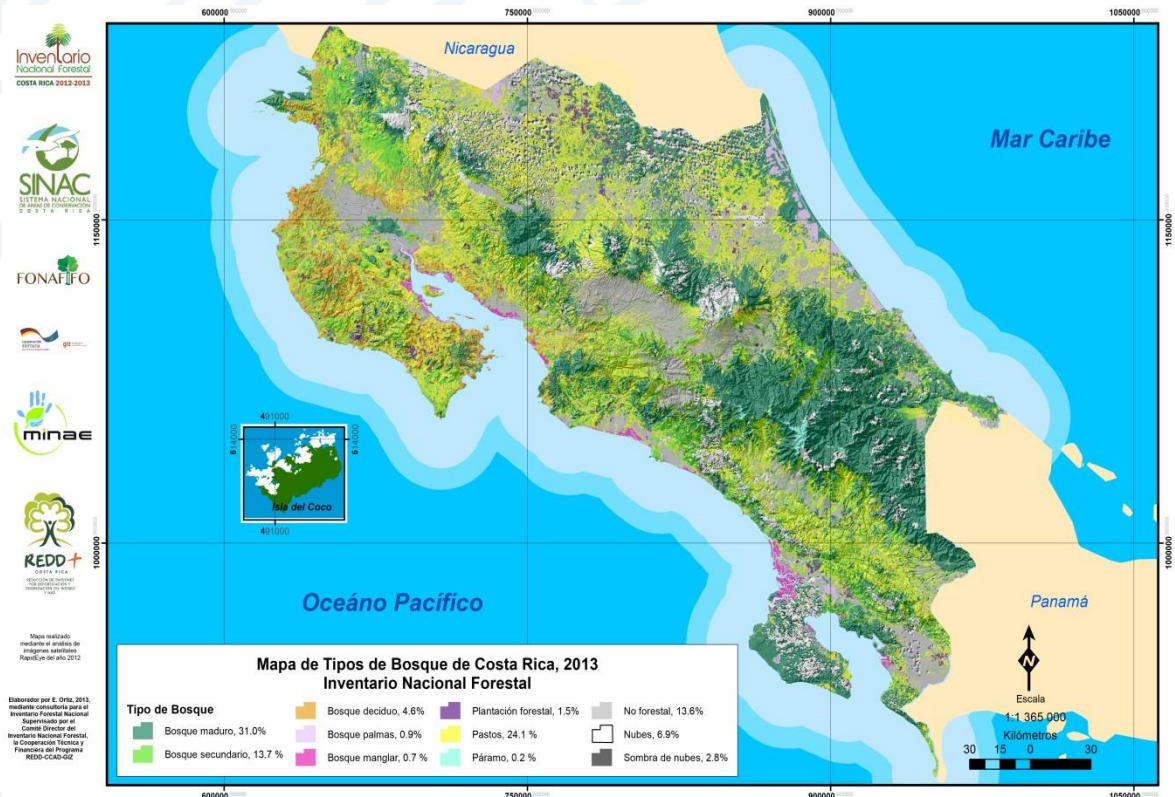
Figure 4. Land productivity dynamics in Namibia, 1998 – 2013 (data from the JRC-EU)

Which data sources to use?

...in Costa Rica

- Global data showed a **0.16%** increase in forest cover between 2000 and 2010, while national data suggested a larger increase of **4.7%**.

- Use of official national data is encouraged to increase country ownership

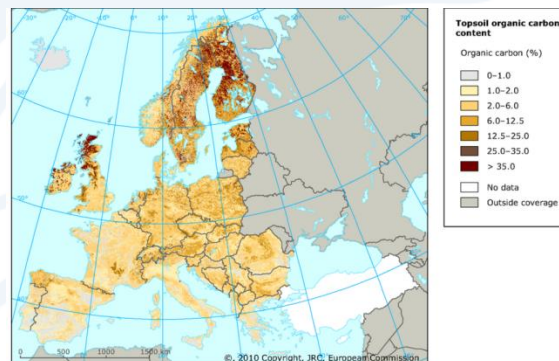


...and in the EU?

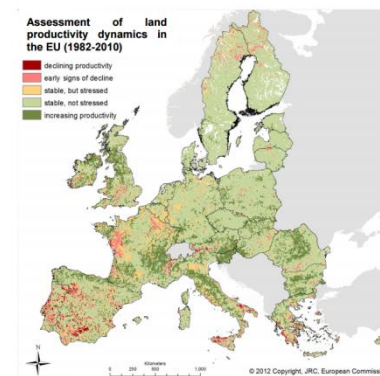
Some example of available indicators/data



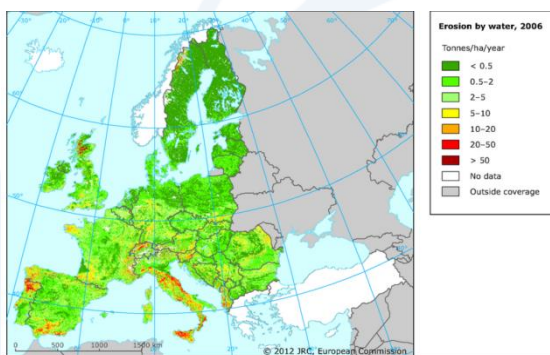
Land take (EEA)



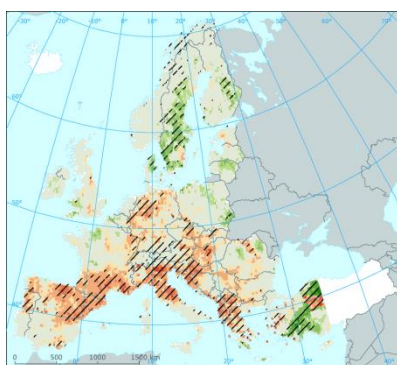
Soil organic carbon (EEA)



Land productivity dynamics (JRC)



Soil erosion (EEA)



Soil moisture (EEA)

+ Copernicus land monitoring service, Eurostat land cover/use Indicators, agri-environmental indicators, socio-economic indicators etc..

LDN at the national level

- **LDN is achieved by 2030, compared to the 2015 baseline (no net loss)**
- **LDN is achieved by 2030, compared to the 2015 baseline and additional 10% of the national territory has improved (net gain)**

LDN at the (sub)-national level

- **LDN is achieved in the Western Province of country X by 2030, compared to the 2015 baseline**
- **LDN is achieved in the watershed area(s) by 2030, compared to the 2015 baseline**

...Belarus

Area of ecologically rehabilitated depleted peat fields and disturbed bogs: at least 55 000 ha by 2020; at least 60 000 ha by 2030

***This is one out of 8 specific targets identified by Belarus**

...in Ethiopia

“By 2036, ensure the rehabilitation and improvement of the productivity of about 21 M ha of forest land...”

***This is one out of 9 specific targets identified by Ethiopia**

...in Namibia

“Reduce bush encroachment on 1,9 M ha by 2040”*

***This is one out of 6 specific targets identified by Namibia**

...and in the EU?

“By 2020 ... the rate of land take is on track with an aim to achieve no net land take by 2050...”

- **Can this be considered as a specific LDN target in the EU?**
- **Which other existing targets and commitments can be leveraged?**

In Senegal...

Two funds were identified as possible sources to finance LDN transformative projects:

- **The National Agricultural and Food Research Fund, an innovative public financing mechanism that funds agricultural research.**
- **The Agro-Silvo-Pastoral National Development Fund which aims to mobilize public and private funds to finance agrosilvopastoral development.**

WHICH transformative LDN projects can be identified?

WHICH innovative sources of finance can be mobilized?

WHICH partnerships can be established?

UNCCD reporting



- **Three LDN indicators are embedded in UNCCD reporting on progress indicators (every 4 years)**
- **Default national data will be provided for each reporting cycles**
- **Next reporting cycles 2018, 2022, 2026, 2030**
- **Build country capacity to validate default data**



Further readings

UNCCD/SPI. In Press. Scientific Conceptual Framework for Land Degradation Neutrality. A Report of the Science-Policy Interface. Barron J. Orr, Annette L. Cowie, Victor M. Castillo Sanchez, Pamela Chasek, Neville D. Crossman, Alexander Erlewein, Geertrui Louwagie, Martine Maron, Graciela I. Metternicht, Sara Minelli, Anna E. Tengberg, Sven Walter, and Shelly Welton. United Nations Convention to Combat Desertification (UNCCD) Science-Policy Interface (SPI), Bonn, Germany. ISBN (paper): 978-92-95110-42-7 ISBN (electronic): 978-92-95110-41-0.

UNCCD/SPI. 2016. Land in Balance: The Scientific Conceptual Framework for Land Degradation Neutrality. Science-Policy Brief 02 – September 2016. United Nations Convention to Combat Desertification (UNCCD) Science-Policy Interface (SPI), Bonn, Germany. ISBN 978-92-95110-36-6 (hard copy), 978-92-95110-35-9 (electronic copy). Online: http://www.unccd.int/Lists/SiteDocumentLibrary/Publications/10_2016_spi_pb_multipage_eng.pdf

UNCCD/The Global Mechanism (2016). Achieving Land Degradation Neutrality at the country level, Building blocks for LDN target setting.

Online: http://www2.unccd.int/sites/default/files/documents/160915_ldn_rgb_small%20%281%29.pdf

UNCCD/The Global Mechanism (2016). Scaling up land degradation neutrality target setting – from lessons to actions: 14 pilot countries' experiences.

Online: http://www2.unccd.int/sites/default/files/documents/160915_ll_rgb_small.pdf

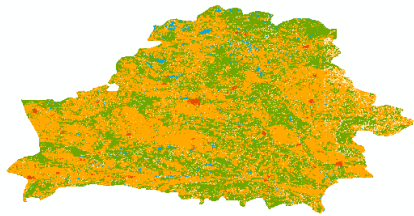
LDN Pilot phase 2014 – 2015

Country identifies nationally available data (RS, maps, etc)

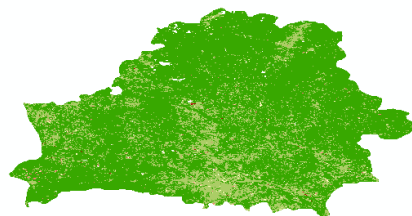


No national data ? → default data provided by project

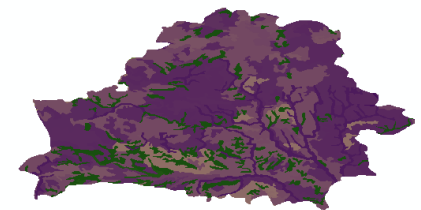
Landcover (2000–2010)



Land Productivity (2000-2010)



Soil organic carbon (SOC)



National basic data using the LDN indicators framework (adjusted from IPCC Good Practice Guidance for LULUCF)

Land-Use Category	Land area (2000)	Land area (2010)	Net change in area (2000-2010)	Net land productivity change (sq km, 2000-2010)					Soil organic carbon (2010)
	sq km	sq km	sq km	Declining	Early stage of declining	Stable but stressed	Stable not stressed	Increasing	ton/ha
Forest land	78175,50	77997,80	-177,70	1,30	48,70	392,90	12111,00	65299,70	122,3974546
Shrubs, grasslands and sparsely vegetated areas	11880,20	11942,20	62,00	0,10	6,70	23,00	1401,20	10433,20	115,8377483
Cropland	111745,90	111861,60	115,70	82,00	408,50	693,00	22254,60	88211,50	113,9166863
Wetlands and water bodies	3002,90	3002,90	0,00	13,80	6,80	31,30	653,80	1659,20	156,9643192
Artificial areas	2070,10	2070,10	0,00	19,40	3,60	3,60	1265,50	761,20	93,13936936
Bare land and other areas	3,70	3,70	0,00	0,10	0,20	0,20	1,90	1,20	61,63217926
Balancing term	681,70	681,70	0,00						

Setting LDN national target

Negative trends	Area	Corrective measures	LDN target	Investments required (M USD)	
			Area	Time (year)	
Insufficient share of environment-stabilizing land (natural meadows, forest land, woodlands and forest plantations, bogs and land of water bodies)	91 344 km ²	<ol style="list-style-type: none"> 1. Rehabilitate land plots subjected to degradation 2. Carry out surveys, develop schedules and phased reclassification of degraded and severely eroded land, as well as land withdrawn from agricultural use as a result of the Chernobyl disaster, that are appropriate for forest cultivation, as forest fund land 3. Inventory forest shelter belt land and carry out measures to rehabilitation and develop it 4. Recultivate quarries of common minerals 5. Forest cultivation on blown sands, slopes and ravines within the forest fund limits 6. Post-fire rehabilitation within the forest fund limits 	118 332 km ²	2020	110, 34
	44% of total country area haven't status environment-stabilizing land		<p>57% of total country area have to be the status of environment-stabilizing land</p> <p>2 076 sq km of land changed its status to environment-stabilizing land</p>	124 560 km ²	
Peats mineralization	2 200 km	Ecological rehabilitation of depleted peat fields and disturbed bogs	550 sq km	2020	5,5
			600 sq km	2030	
			of depleted peat fields rehabilitated ecologically		
Water and wind erosion of land	5 565 km ²	Carry out measures to prevent land (and soil) degradation at reconstruction and rehabilitation of reclamation systems	0% increase of erosion land	2020	252,782
			0% increase of erosion land	2030	
Total	91 344 km ²		9 454 km ²		368,622