# Land Degradation Neutrality: a commitment in motion to induce transformational change in the Mediterranean

by Sven WALTER & Habiba KHIARI

Today, the fight against desertification and the restoration of degraded land and soils has become a priority throughout the world. What can be done so that by the year 2030 "the degradation of soils ceases to be a problem worldwide"? Taking this objective as its goal, the United Nations Convention to Combat Desertification has developed the concept of land degradation neutrality (LDN). By 31 May 2019, 122 countries, of which 11 are Mediterranean, have voluntarily committed to ambitious LDN targets.

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#### Introduction

In 2015, the world community adopted the 2030 Agenda for Sustainable Development, including 17 sustainable development goals (SDGs) with 169 targets and some 230 indicators. SDG target 15.3 aims to "combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world" by 2030 (UN, 2019a). Based on this target, the United Nations Convention to Combat Desertification (UNCCD) developed the Scientific Conceptual Framework for Land Degradation Neutrality (LDN) (ORR et al., 2017) and identified LDN as a strong vehicle for driving the implementation of the Convention (UNCCD, 2015). According to the UNCCD, LDN is defined as "a state whereby the amount and quality of land resources, necessary to support ecosystem functions and services and enhance food security, remains stable or increases within specified temporal and spatial scales and ecosystems" (ORR et al., 2017).

In order to translate the global SDG target 15.3 into county-specific targets, 122 countries committed as of 31 May 2019 to set voluntary LDN targets, defining the country's ambition to achieve LDN and to define national LDN baselines, targets and associated measures. In the Mediterranean, 11 countries committed to set voluntary LDN targets: Algeria, Bosnia Herzegovina, Egypt, Italy, Jordan, Lebanon, Montenegro, Morocco, Serbia, Syria and Turkey.

Globally, 12 million hectares are lost each year due to land degradation (UN, 2019b); in the Mediterranean, human pressure and climate change are primary drivers of degradation. Although forest cover in the Mediterranean is increasing by 0,85% per year, Mediterranean forests remain vulnerable and are affected by a combination of climate change, anthropogenic disturbances and other aspects of global change such as land-use and pollution (FAO, 2018a).

Several global and regional initiatives have been established to promote the sustainable use of natural resources, including forests, and to upscale sound policies to achieve the SDGs. These initiatives include the Aichi targets under the Convention on Biological Diversity, the Nationally Determined Contributions (NDCs) under the United Nations Framework Convention on Climate Change, the restoration targets under the Bonn Challenge as well as the LDN targets under the UNCCD. This article provides an update on the LDN target setting process at the global and Mediterranean levels.

#### LDN: Opportunities for Mediterranean Forests

LDN provides a useful framework to promote the sustainable management of (Mediterranean) forests, as it:

provides a balanced approach to compensate degradation with restoration efforts;

Investment opportunities

LDN

Monitoring framework

Monitoring framework

Fig 1:

LDN: Opportunities

for Mediterranean forests.

- generates multiple benefits accelerating the achievement of the SDGs;
- facilitates the establishment of voluntary national LDN targets;
- establishes an effective monitoring framework recognized under the SDG and UNCCD frameworks;
- identifies investment opportunities for action to achieve LDN (fig. 1).

#### LDN - a balanced approach

LDN aims at achieving a balance between new degradation and reversed past degradation — so called losses and gains — by applying the LDN response hierarchy to avoid, reduce and reverse land degradation (fig. 2). It provides a framework to maintain or enhance the land-based natural capital and associated ecosystem functions by:

- maintaining or improving the sustainable delivery of ecosystem services;
- maintaining or improving productivity,
   in order to enhance food security;
- increasing resilience of the land and populations dependent on the land;
- seeking synergies with other social, economic and environmental objectives; and
- contributing to reinforce responsible and inclusive governance of land tenure (ORR *et al.*, 2017).

# LDN – a generator of multiple benefits

LDN is considered as an accelerator providing a way to achieve the SDGs in the most efficient and environmentally-sustainable way (fig. 3). This includes, among others:

- SDG 6 on clean water and sanitation by promoting SLM for effective water use and reducing land degradation in catchment areas:
- SDG 5 on gender equality and SDG 8 on decent work and economic growth by promoting green investment, green jobs and employment opportunities for women;
- SDG 7 on affordable and clean energy by safeguarding fuelwood use and promoting sustainable hydropower; and

- SDG 3 on good health and wellbeing and SDG 12 on responsible consumption and production by 'doing more and better with less' and so reducing the global land footprint.

#### LDN – setting national targets

Setting LDN targets consists of four building blocks (fig. 4):

- Leveraging LDN by catalyzing benefits and bringing it to the forefront of national policy agendas;
- Assessing LDN by establishing a baseline and identifying land degradation drivers and trends:
- Setting voluntary LDN targets and associated measures by defining the country's ambitions in terms of combating land degradation; and
- Achieving LDN by identifying opportunities for transformative projects and programmes as well as innovative financing opportunities that can contribute to achieving these targets (Global mechanism, 2016a).

As of 30 May 2019, 84 countries world-wide have set LDN targets and measures; of these countries, 50 have adopted such targets at governmental level. In the Mediterranean region, 6 out of 11 countries that have engaged in the process have already adopted their LDN targets: Algeria, Bosnia Herzegovina, Egypt, Italy, Lebanon and Turkey. Examples of LDN targets set by Mediterranean countries are presented in table 1.



#### Fig 2:

LDN: a balanced approach (Orr et al., 2017)

#### Fig 3:

LDN: an SDG accelerator (Global Mechanism, 2019)

#### Fig. 4:

Building blocks for LDN target-setting (Global Mechanism, 2016b)

Country	Forest-related targets (examples)
Algeria	By 2025, 475 000 ha will be reforested in accordance with the reforestation plan validated in interministerial council.
Bosnia Herzegovina	The area of forests and forests lands of the Republic of Srpska to reach 53% by 2030.  Increase of afforested areas for Brcko District by 2030.
Egypt	Increase by 25% forest cover / tree cover through agroforestry and SLM in existing forests by 2030 as compared to 2015.
Italy	Rehabilitation measures on 200 km² of dryland forests by 2030.
Lebanon	Restore forest landscapes through reforestation and afforestation on at least 10000 hectares.
Turkey	Increase the ratio of country's forest land by 5% by 2030.

#### Table 1:

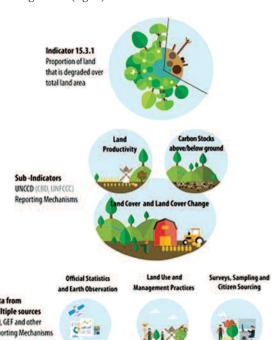
Examples of LDN targets set by Mediterranean countries (UNCCD, 2019b).

# LDN – a recognized monitoring framework

The LDN monitoring framework is recognized by the SDG (UNCCD, 2018) as well as by the UNCCD reporting framework, the Performance Review and Assessment of Implementation System (PRAIS) (UNCCD, 2019a). Monitoring of LDN is based on the SDG indicator 15.3.1 "Proportion of degraded land over total land area". It is calculated using three subindicators, i.e.:

- trends in land cover;
- trends in land productivity; and
- trends in carbon stock above and below ground (fig. 5).

Fig 5: LDN indicator framework (UNCCD, 2019c).



Following the "one out — all out" rule provided by the Scientific Conceptual Framework for LDN, land is considered as degraded if one of the three subindicators identifies a trend that is considered negative under specific national circumstances. Additional indicators can be used by countries, if deemed necessary, based on national circumstances.

# LDN investment opportunities through transformative projects and programmes

Transformational change at scale will be required to achieve LDN at all levels. In accordance with the definition adopted by the IPCC (2014), transformation is perceived as a change in the fundamental attributes of natural and human systems. In the framework of LDN TPP, positive transformation can be pursued through sustainable and inclusive interventions at scale (e.g., in land-scapes) while featuring innovation in terms of locally-adapted technology, practices and financial mechanisms (e.g., blended finance) (UNCCD, 2018b).

Through the LDN target-setting process, some 55 countries have mapped opportunities for TPP. At least three Mediterranean countries, Lebanon, Tunisia and Turkey, are already in the process of developing TPP project proposals with implementing partners targeting investment opportunities such as the Global Environment Facility and the Green Climate Fund.

#### Conclusions

LDN is an effective monitoring and planning framework recognized at scientific (endorsed by the UNCCD Science Policy Interface) and policy (endorsed by the InterAgency and Expert Group on SDG Indicators and the UNCCD Conference of Parties) levels and applicable at global, regional and (sub)national scale. It seeks strong synergies and complementarities with other global commitments, including all Rio Conventions.

Striving to achieve LDN will therefore support countries' efforts for drought preparedness, contribute to the mitigation of drought impact on forests and increase the resilience of both – populations and ecosystems - to climate change by providing cost-effective and long-term solutions.

Defining LDN targets in synergy with other targets defined at country level, under various frameworks such as Aichi Targets, NDCs and the Bonn Challenge, will foster partnerships across sectors, ensure a (more) effective use of resources and increase the impact on the ground. Most Mediterranean countries put in place related policy processes to build the necessary synergies to achieving the objectives defined under the Agadir Commitment, i.e. restore in an effective manner at least 8 million hectares of degraded forest ecosystems by 2030.

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#### **Summary**

### Land Degradation Neutrality: a commitment in motion to induce transformational change in the Mediterranean

In 2015, the world community adopted the 2030 Agenda for Sustainable Development, including the sustainable development goals. SDG target 15.3 aims to "combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world" by 2030. Based on this target, the United Nations Convention to Combat Desertification developed the Land Degradation Neutrality (LDN) concept. By 31 May 2019, 122 countries, including 11 Mediterranean countries, committed to set voluntary LDN targets. Defining these targets in synergy with other relevant processes such as Aichi Targets, the National Determined Contributions and the Bonn Challenge, will foster partnerships across sectors, ensure the effective use of resources and increase the impact on the ground. This will contribute to the Agadir Commitment expressed by Mediterranean countries to restore in an effective manner at least 8 million hectares of degraded forest ecosystems by 2030.

#### Résumé

## Le concept de neutralité en matière de dégradation des terres : un engagement pour induire un changement en Méditerranée

En 2015, la communauté mondiale a adopté le Programme de développement durable à l'horizon 2030, y compris les objectifs de développement durable (ODD). L'objectif 15.3 des ODD vise à « lutter contre la désertification, remettre en état les terres et sols dégradés, notamment les terres touchées par la désertification, la sécheresse et les inondations, et œuvrer à la réalisation d'un monde où la dégradation des sols n'est plus un problème » d'ici 2030. Sur la base de cet objectif, la Convention des Nations Unies sur la lutte contre la désertification (CNULCD) a développé le concept de neutralité en matière de dégradation des terres (LDN). Au 31 mai 2019, 122 pays, dont 11 pays méditerranéens, s'étaient engagés à définir des objectifs volontaires en matière de LDN. Définir ces objectifs en synergie avec d'autres processus pertinents tels que les objectifs d'Aichi, les contributions nationales déterminées et le défi de Bonn, favorisera les partenariats intersectoriels, garantira une utilisation efficace des ressources et augmentera l'impact sur le terrain. Cela contribuera à l'engagement d'Agadir exprimé par les pays méditerranéens de restaurer au moins 8 millions d'hectares d'écosystèmes forestiers dégradés d'ici 2030 de manière efficace.