

# Land Degradation Neutrality and adaptation to climate change



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NAP Expo, Bonn – July 13, 2016

# The facts

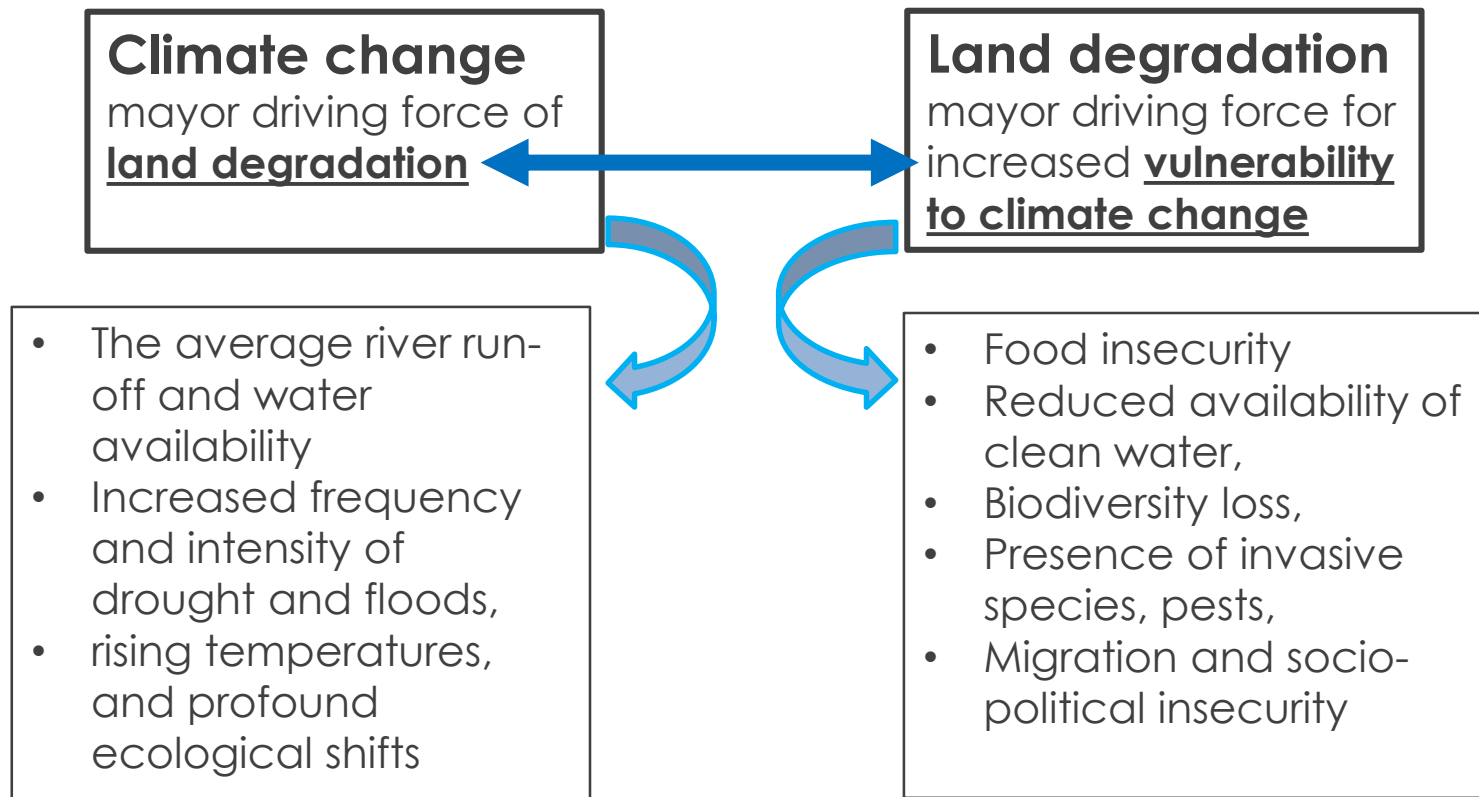
- Between **10–20 % of drylands** are degraded; **24 % of globally usable land is degraded**, with an estimated economic annual loss of USD 40 billion
- The adoption of sustainable land management (SLM) practices could deliver up to **US\$ 1.4 trillion in increased crop production**
- Land use change and degradation is responsible for about **20%** of carbon emissions globally.
- The average river run-off and water availability is projected to decrease by **10-30% over some dry regions**, including the dry tropics.

# Why land-based adaptation?

- 1.** Strong causality relationship between land degradation and vulnerability to climate change
- 2.** Cost-effectiveness of land-based adaptation measures compared to other sectors
- 3.** Multiple-benefits of land-based actions, mainly poverty reduction and therefore resilient development

# 1. Strong causality relationship between land degradation and vulnerability to climate change

# Land-climate adaptation nexus



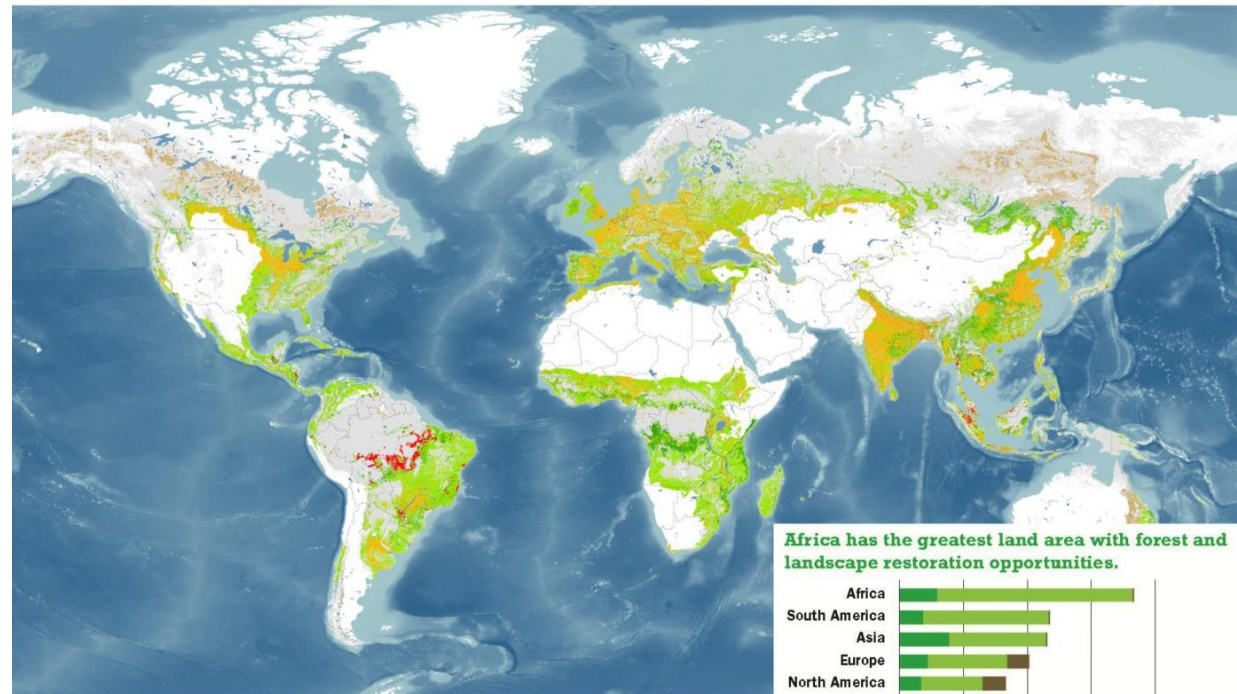
## 2. Cost-effectiveness of land-based adaptation measures compared to other sectors

# LDN Opportunities

- 2 billion hectares of land can be restored
- 500 million hectares of degraded land are abandoned agriculture land
- LDN has the potential to cut up to 35% of global GHG emissions by sustainably storing carbon in soils and to enhance resilience to climate change
- LDN is an efficient way to halt on-going biodiversity collapse through re-building sustainable landscapes



## A World of Opportunity for Forest and Landscape Restoration



### FOREST AND LANDSCAPE RESTORATION OPPORTUNITIES

- Wide-scale restoration
- Mosaic restoration
- Remote restoration

### OTHER AREAS

- Agricultural lands
- Recent tropical deforestation
- Urban areas
- Forest without restoration needs



- Wide-scale restoration
- Mosaic-type restoration
- Remote, unpopulated areas



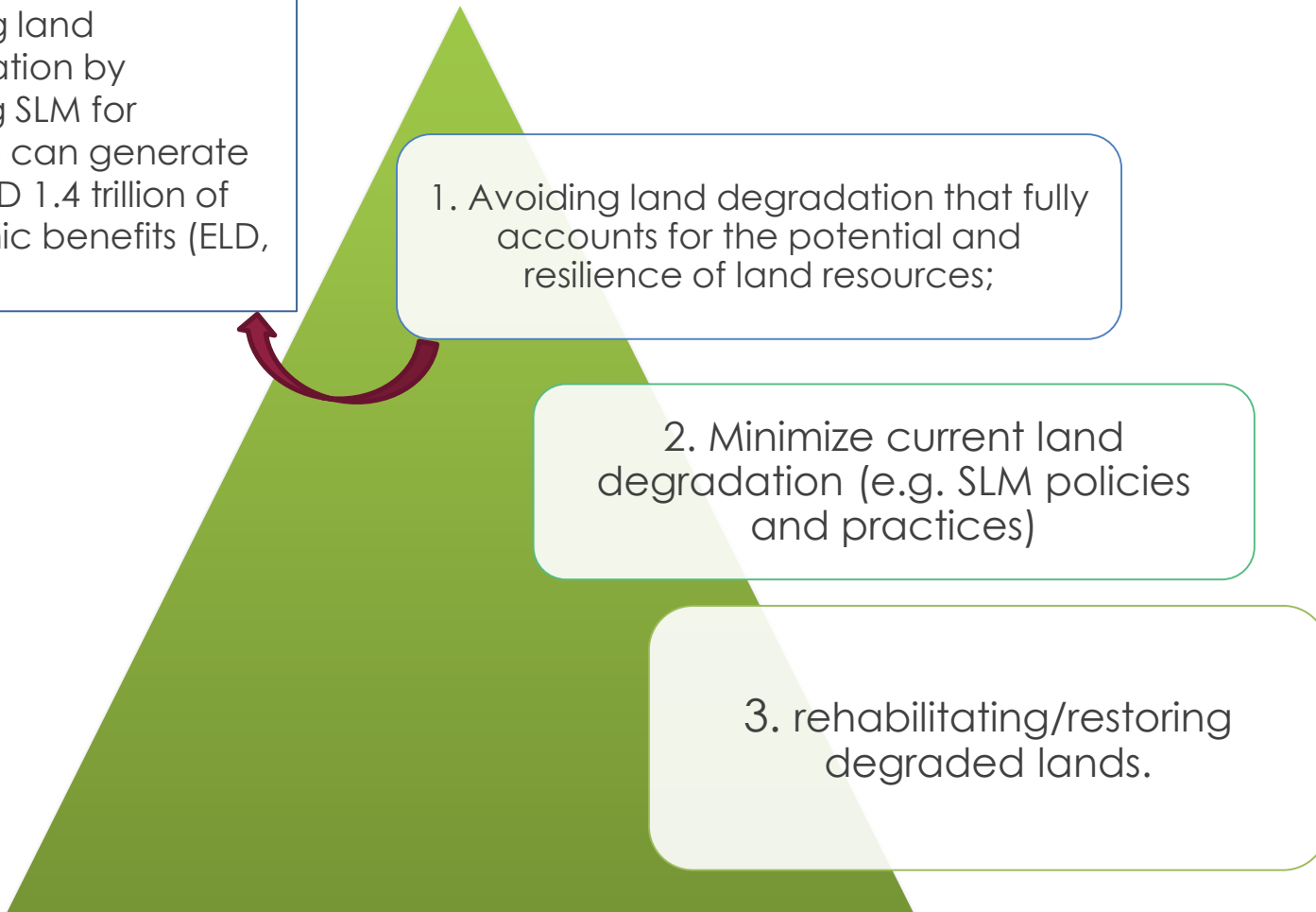
# Cost-effectiveness of land-based measures

Avoiding land degradation by applying SLM for instance can generate up to USD 1.4 trillion of economic benefits (ELD, 2015a).

1. Avoiding land degradation that fully accounts for the potential and resilience of land resources;

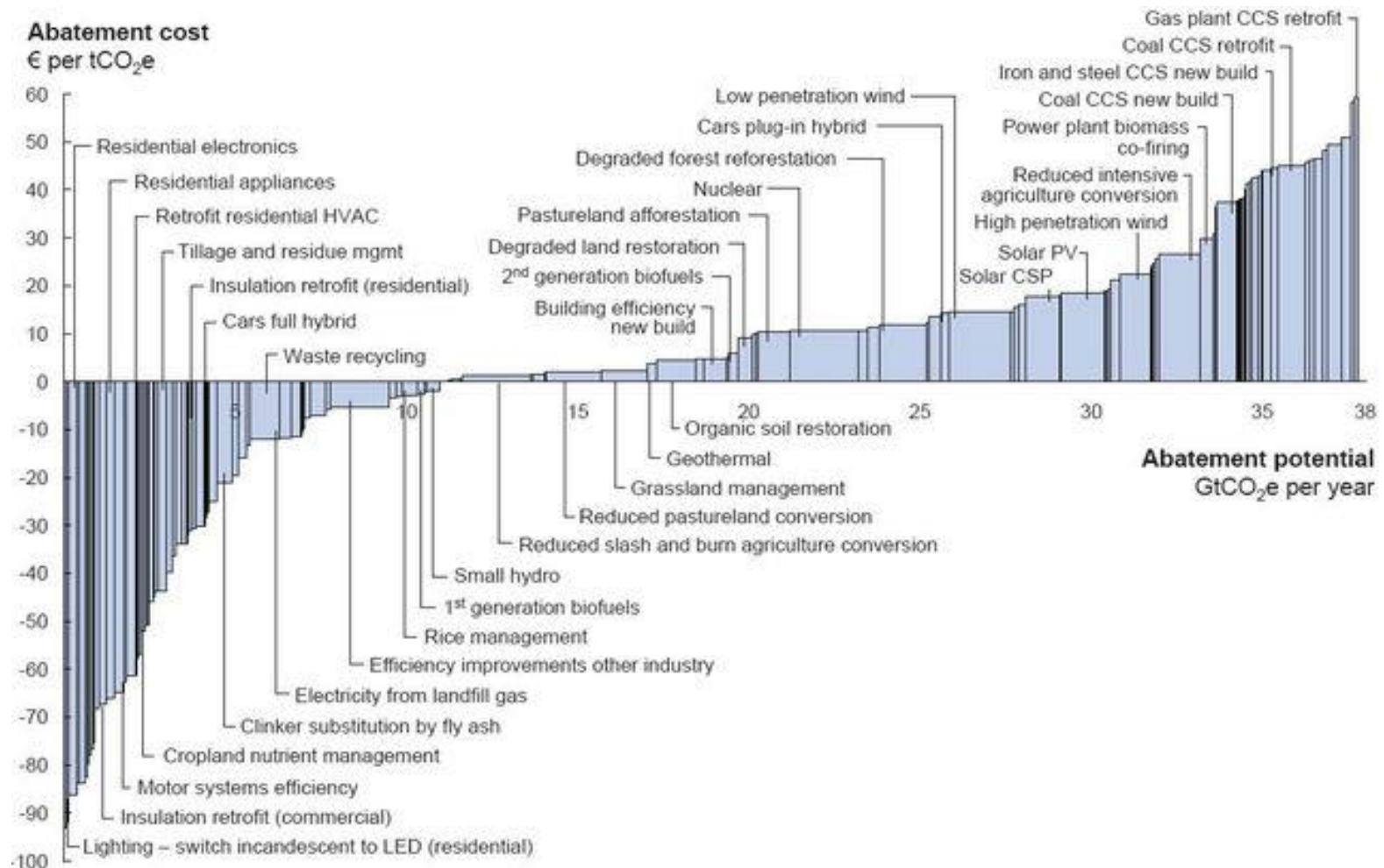
2. Minimize current land degradation (e.g. SLM policies and practices)

3. rehabilitating/restoring degraded lands.





# Cost-effectiveness of land-based measures

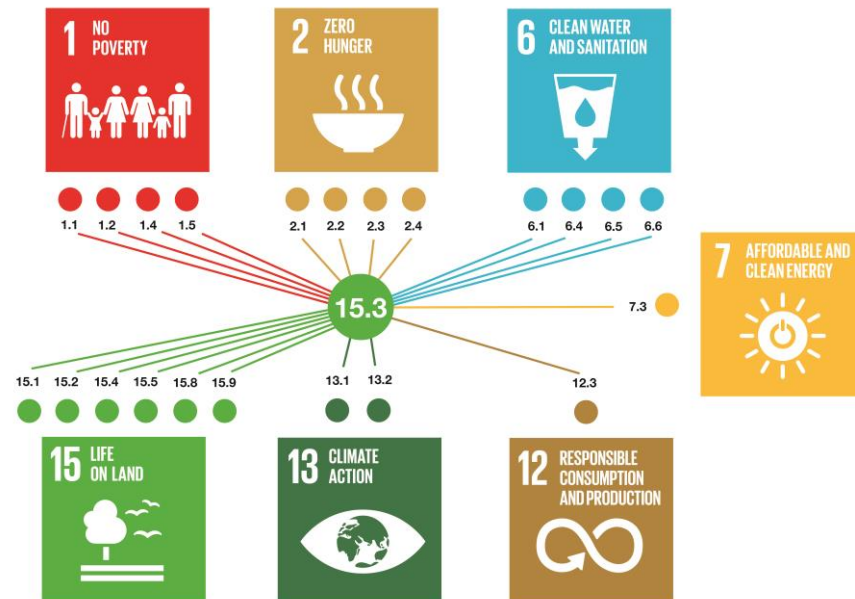


Note: The curve presents an estimate of the maximum potential of all technical GHG abatement measures below €60 per tCO<sub>2</sub>e if each lever was pursued aggressively. It is not a forecast of what role different abatement measures and technologies will play.  
Source: Global GHG Abatement Cost Curve v2.0

### 3. Multiple-benefits of land-based actions, mainly poverty reduction and therefore resilient development

# Multiple benefits of LDN

- Direct **linkages** between LDN and SDGs in the area of poverty, food security, environmental protection and sustainable use of natural resources.
- Implementing LDN creates **multiple benefits** and will make a direct contribution to achieving these and other SDGs



# Land-based adaptation projects



## Niger

PPCR - Mainstreaming climate resilience into development strategies; **expanding sustainable land management initiatives** and integrating them into planning and budgeting processes



## Senegal

**Increasing the Resilience of Ecosystems and Communities** through the Restoration of the Productive **Bases of Salinized Lands**, in Senegal, with CSE (GCF funding: USD 7.6 million)



## ADAPTATION FUND

## Argentina

Increasing Climate Resilience & Enhancing **Sustainable Land Management** in the Southwest of the Buenos Aires Province  
USD 4 million

## LDN target setting process

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

# THANK YOU!

