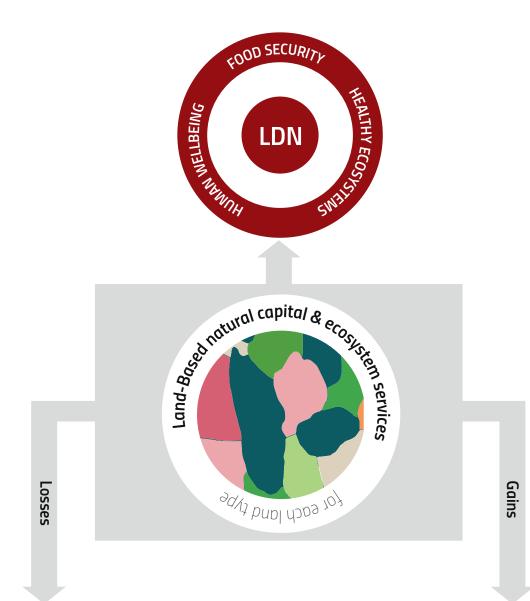
LAND DEGRADATION NEUTRALITY (LDN): **A FRAMEWORK FOR MAINTAINING ECOSYSTEMS AND HUMAN WELL-BEING UNDER A CHANGING CLIMATE**



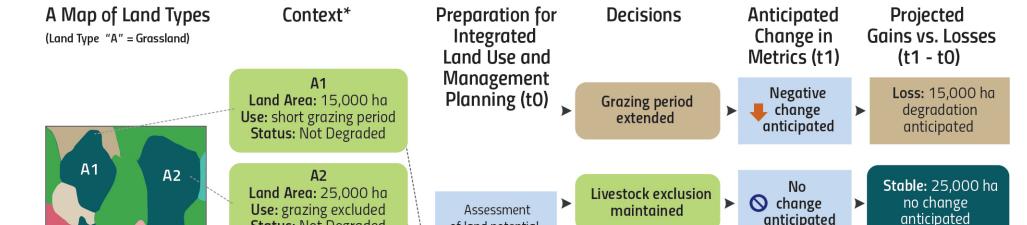
Convention to Combat Desertification

Land Degradation Neutrality

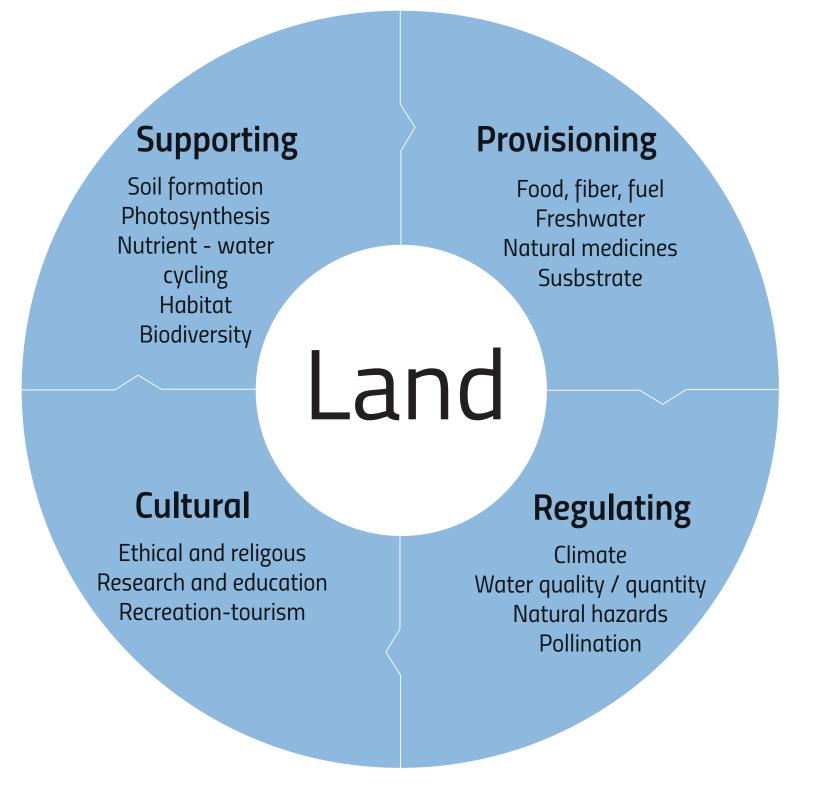
"A state whereby the amount and quality of land resources necessary to support ecosystem functions and services and enhance food security remain stable or increase within specified temporal and spatial scales and ecosystems"



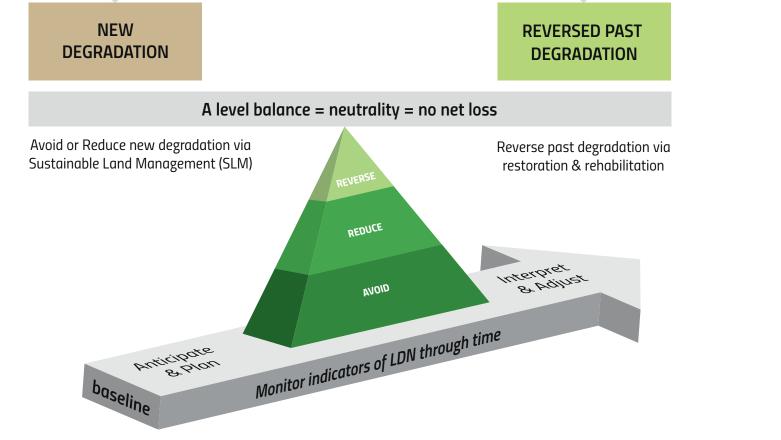
The LDN Conceptual Framework focuses on the goal of LDN and its supporting processes through the optimization of land interventions during land use planning



– UNCCD COP12



Soils of the world's agroecosystems have lost 25 to 75% of their original soil organic carbon pool, amounting to 42 to 78 Gt of carbon, of which 18 to 28 billion tonnes were lost through desertification



LDN is designed to maintain (or improve) land-based natural capital and the ecosystem services that flow from it

Land-based interventions can have positive environmental, economic and soil impacts

Forest/woodlan	d

Grazing land

A4 A3 La Usa A5 La	Use: grazing excluded Status: Not Degraded	Assessment of land potential, condition, resilience and socio-economic status, including the baseline (tO) measurement of the metrics of land-based natural capital.		maintained		anticipated		anticipated		
	A3 Land Area: 10,000 ha Use: long grazing period Status: Degraded		socio-economic status, including the baseline (t0)	socio-economic status, including the baseline (tO)	•	Long grazing period continued	•	Negative change anticipated	•	Loss: 10,000 ha degradation anticipated
	A4 Land Area: 40,000 ha Use: med. grazing period Status: Degraded		>	Sustainable grazing management introduced	•	Positive change anticipated	►	Gain: 40,000 ha improvement anticipated		
	A5 Land Area: 10,000 ha Use: short grazing period Status: Not Degraded		•	Urban expansion	•	Negative change anticipated	►	Loss: 10,000 ha degradation anticipated		
Legend	(in at least one metric, others stable)	•	d lan	ange) d or anticipated negative land or anticipated postiv		-		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

LDN is designed to achieve multiple benefits



Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss Target 15.3: combat desertification, restore degraded land and soil, including land effected by desertification, droughts and floods, and strive to achieve a land degradation-neutral world

Convention on

Conservation of biological

diversity, the sustainable

the fair and equitable

arising out of the

resources (Art. 1)

utilization of genetic

sharing of the benefits

use of its components and

Conservation

of biological

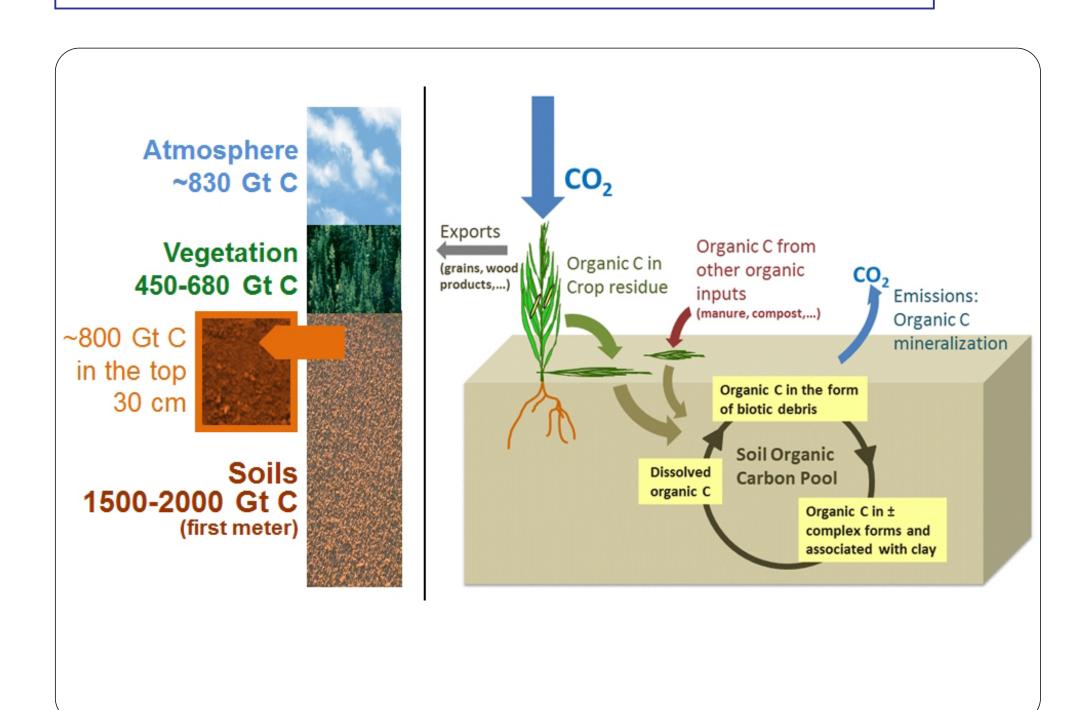
diversity

EbA

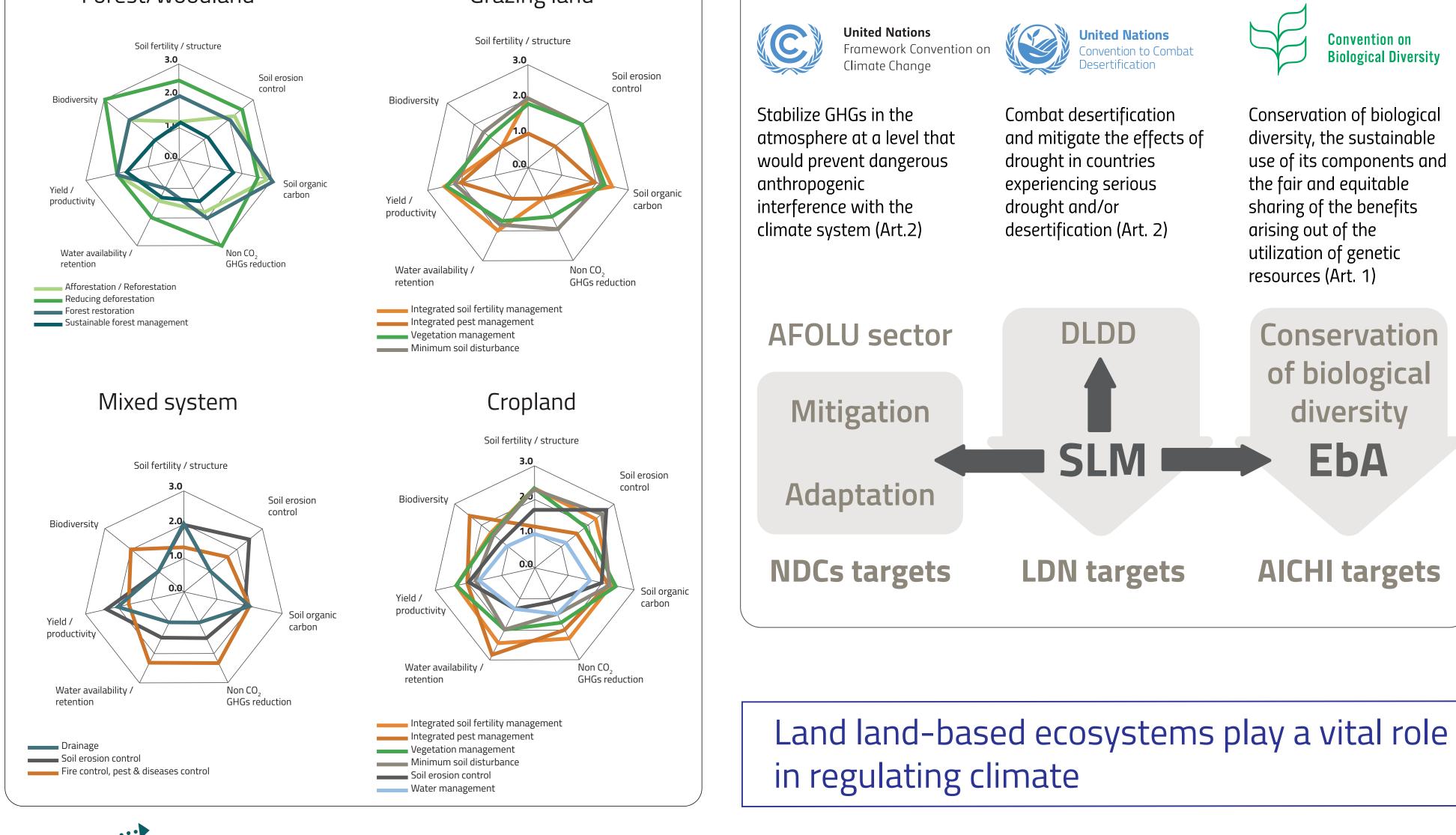
AICHI targets

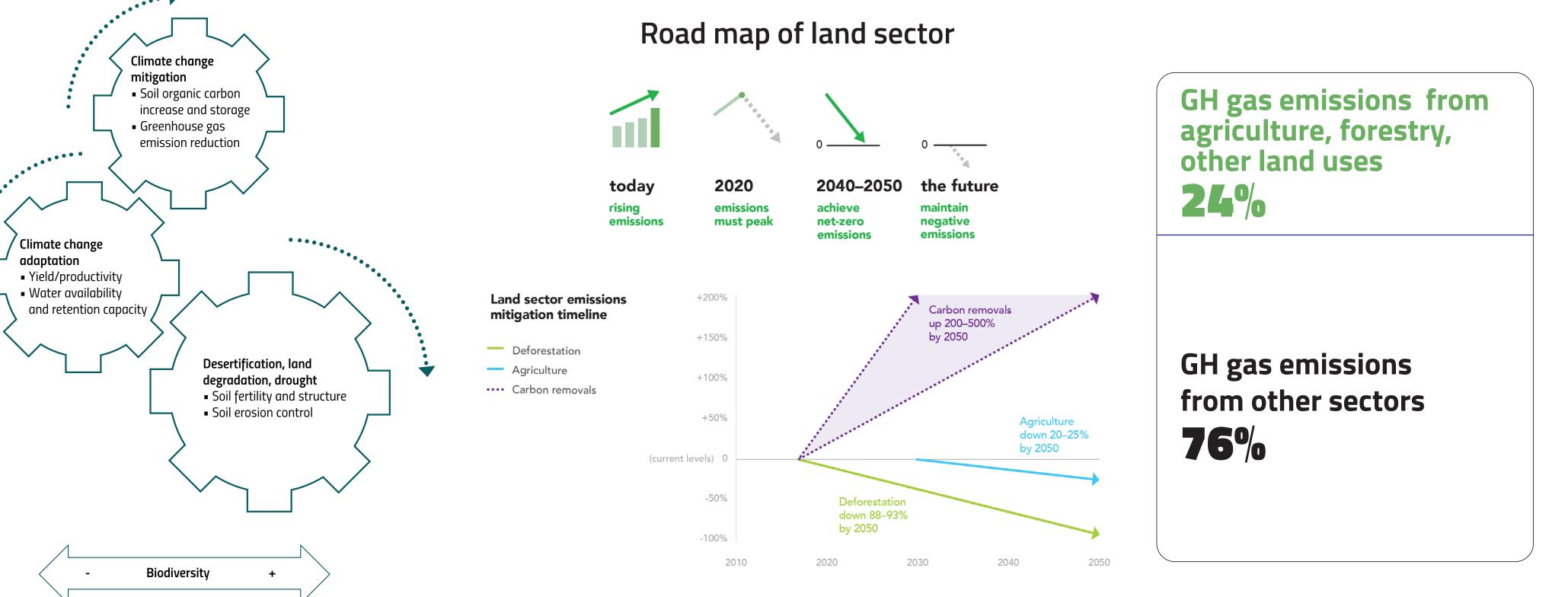
Biological Diversity

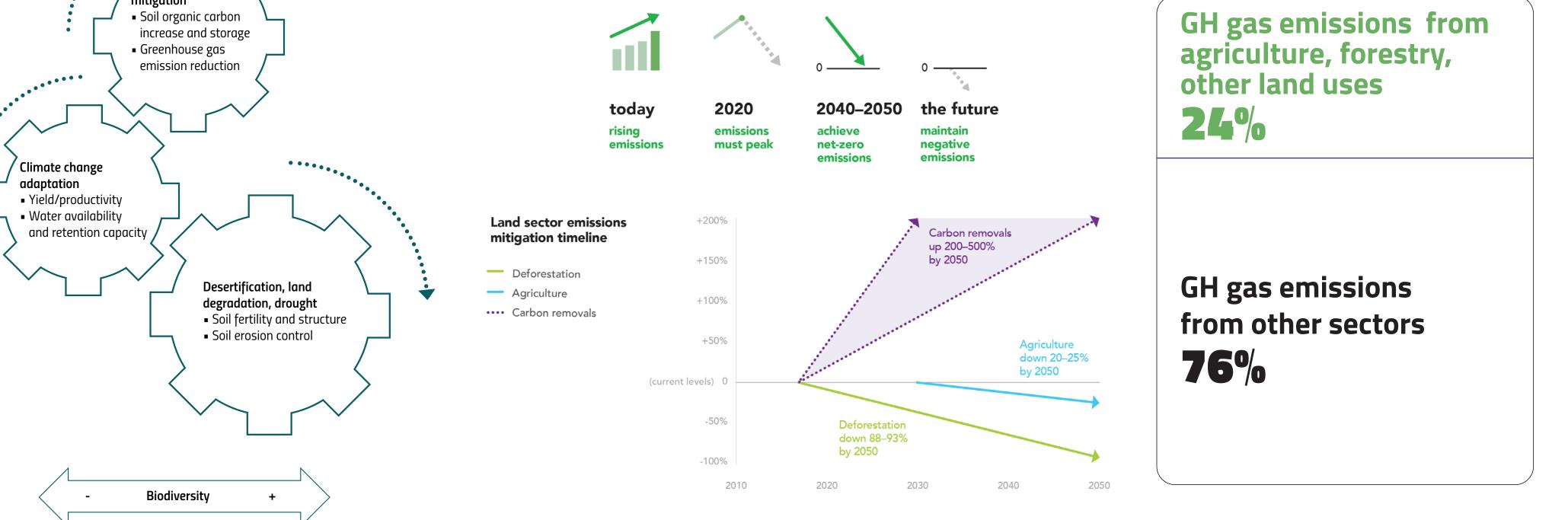


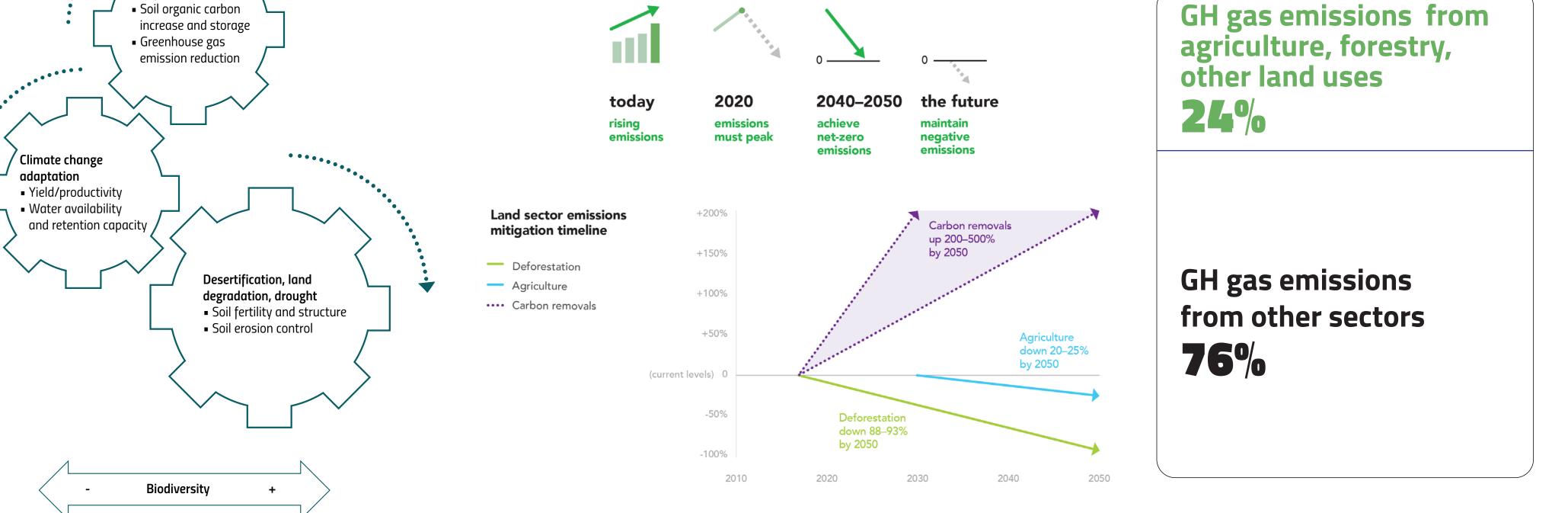


Land-based adaptation measures can build resilience and reduce vulnerability









- Building soil carbon: agricultural soils could sequester 0.6 to 1.2 Gt C/yr
- Ecosystem resilience: water availability and retention capacity
- Human well-being: yield productivity through SLM, reaching 95% of potential, could add 2.3 billion tonnes of crop production valued at USD 1.4 million

Sources: 1. Orr et al. 2017. Scientific Conceptual Framework for LDN, SPI report UNCCD; 2.Sanz et.al.2017. SLM contribution to successful land based climate Change adaptation and mitigation, SPI Report, UNCCD; 3. UNCCD SPI, 2015-2017 Science and Policy Brief on SLM, SOC and LDN; 4. Busch et al., 2017, How Improved Land Use Can Contribute to the 1.5°C Goal of the Paris Agreement, Working Paper, Climate Focus; 5.Millennium Ecosystem Assessment 2005.