



The Republic of Turkey
Ministry of Forestry and Water Affairs
General Directorate of Combating
Desertification and Erosion

LDN TRANSFORMATIVE PROJECT

**(Contributing to LDN Target Setting by Demonstrating the LDN Approach in
Upper Sakarya Basin for Scaling up at National Level)**

Ordos, China

Forest and Water is Life.





Background Information on Turkey

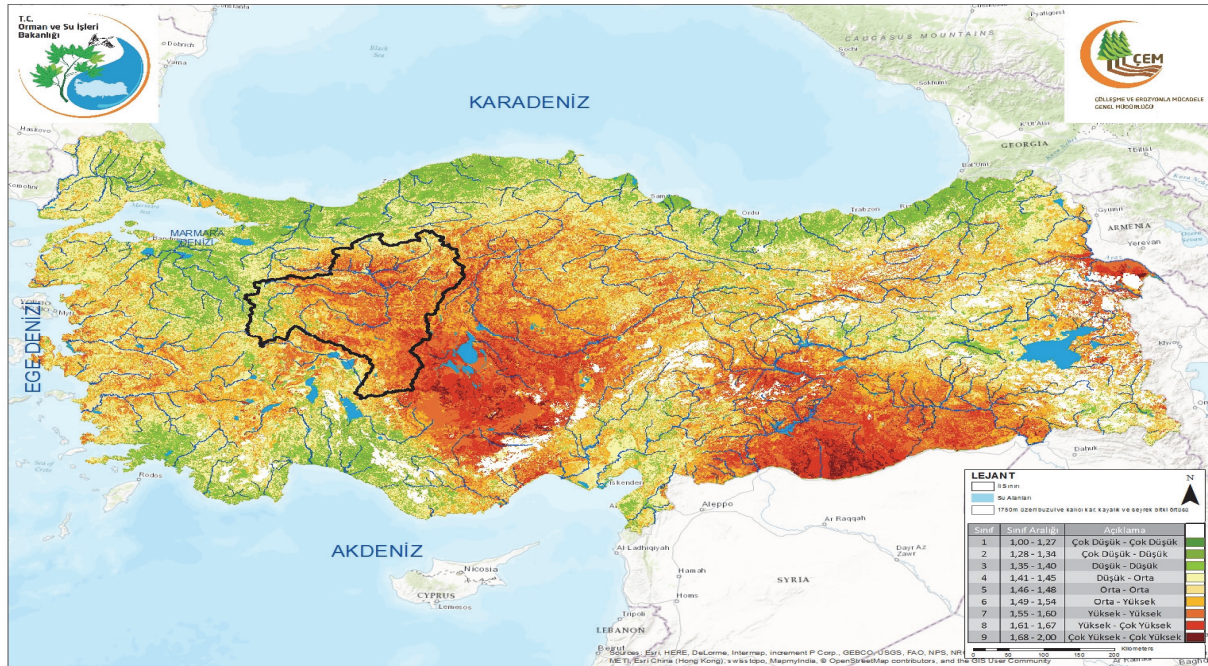


Total surface area	780,043 km ²
Population	80 million
Climate	Semi-arid and sub-humid Mediterranean climate
Av. Precipitation amount	588 mm/year
Average elevation	1132 m
Slope	63% of total area of over 15% steepness
Erodibility	Medium to intense
Forestlands	28.5 %
Agricultural lands	31 %
Rangelands	19 %
Protected sites	7.6 %





Upper Sakarya Basin



Project Cost:

- Co-funding: 13,600,000\$
- GEF Project Funding: 2,388,584 \$



LDN TRANSFORMATIVE PROJECT



- Sakarya Basin is heavily industrialized and the pace of industrialization is increasing, it is still one of the well-established agricultural basins of Turkey.
- Due to the steep topography, semi-arid conditions and inappropriate land management, the Upper Sakarya Basin faces serious degradation.
- Due to the industrial and household waste, there is localised pollution in the basin.
- Animal husbandry is amongst the main income sources of the region.
- There is a continuous pressure on forests and pastures in the region.



LDN TRANSFORMATIVE PROJECT



The Source and Basis of Project Concept:

- **United Nations Sustainable Development Goals; Target 15.3**
 - 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”
- **UNCCD COP 12, Decision COP12/Decision 2 and Decision 3**
 - “Formulation, revision and implementation of action programmes in view of the 2030 Agenda for Sustainable Development ”
 - “Integration of the Sustainable Development Goals and targets into the implementation of the United Nations Convention to Combat Desertification”



LDN TRANSFORMATIVE PROJECT



- It is an interdisciplinary project, working with two main institutions on land use planning and management (MFWA and MFAL),
- It is a participatory and integrated project with the involvement of local authorities, CSOs, farmers' unions, cooperatives and local communities.
- It shall serve as a bridge for transformative projects that will put LDN targets into actions.
- As all the drivers of land degradation are existing in the project basin, it will serve as a laboratory for LDN studies.



LDN TRANSFORMATIVE PROJECT



- Project activities include all necessary suggestions against land degradation drivers.
- The project will include all of the best implementation methods and tools Turkey has ever implemented. This will serve as a significant means in upscaling these methods and tools.
- (Example: forestland rehabilitation, best agricultural practices, fertiliser management, efficient and effective use of water, prevention of water and soil pollution, climate change adaptation and drought management)



LDN TRANSFORMATIVE PROJECT



- It sets out to develop a model for LDN target setting, planning and implementation in the upper Sakarya basin for upscaling at national level in line with SDG target 15.3 and COP 12 decision on the LDN concept,
- It will generate new and innovative approaches to multi-sector land use planning based on testing and implementation in the Sakarya Basin,
- It will focus on building capacity of institutions (central and local government) and communities (stakeholders and beneficiaries),
- It will seek to disseminate and analyse best practices in agriculture, rangelands and forest lands and disseminate the lessons learnt through the Ankara initiative and other established channels.



LDN TRANSFORMATIVE PROJECT



- It aims to improve land cover, enhance soil organic carbon and enhance land productivity thanks to SLM and SFM activities in forests, rangelands and croplands in Sakarya basin,
- It will contribute to establish mechanisms and organisations to facilitate attaining LDN targets,
- It would help to fill the gaps on developing methods and tools for LDN implementation, monitoring and evaluation,
- It will establish tools and mechanism to collect and systematize information on Land Degradation and will develop the LDN monitoring and reporting model.



LDN TRANSFORMATIVE PROJECT



- 25% of greenhouse gas emissions are caused by land degradation.
- The project aims to ensure a decrease in terrestrial greenhouse gas emissions, and an increase in the number of sinks through the below activities:
 - 1-Prevention of land degradation,
 - 2-Reduction of land degradation, and
 - 3-Rehabilitation of degraded lands(e.g. improved agricultural techniques, carbon sequestration and/or absorption in soil (and monitoring), fertiliser management, water harvesting, afforestation and rehabilitation of degraded lands with drought tolerant species and plant varieties)
- It will contribute to the integration of climate change in the LDN decision support system, and to be tested on the project site.



LAND DEGRADATION NEUTRALITY (LDN) PROJECT



Project Components, Results, and Outcomes

Project Components	Funding Type	Project Results	Project Outcomes
1. Strengthening the required environment for the implementation of LDN	TA	1.1. Establishment of a facilitating environment for LDN	<p>1.1.1 Capacity building programmes for the local people of Upper Sakarya Basin; including farmers, forest range officers, and forest villagers.</p> <p>1.1.2 Definition and establishment of the LDN National Data Share Forum</p> <p>1.1.3 Capacity building programmes for farmers, shepards, and forest villagers regarding LDN and its implementation</p> <p>1.1.4 Identification of needed legislative regulations, and the assessment of existing legislation based on project outcomes and the opinions of concerned stakeholders.</p> <p>1.1.5 Integration of LDN approach and priorities to regional and national strategic plans</p>
2. Decision support system for LDN	TA	<p>2.1. Establishment of a Decision Support System to establish and plan LDN targets</p> <p>2.2. Establishment of a monitoring system and related capacity for LDN</p>	<p>2.1.1 Determination, verification, and calibration of LDN parameters</p> <p>2.1.2 Development and verification of Decision Support System</p> <p>2.1.3 Determination of current land degradation levels and land cover classifications in Upper Sakarya Basin in pilot areas.</p> <p>2.2.1 Identification of LDN targets based on existing monitoring infrastructure and agreed parameters</p> <p>2.2.2 Identification of an effective and low cost approach to soil organic carbon monitoring, and the upscaling of its outcomes</p> <p>2.2.3 Calibration of Turkey's current Land Monitoring System to monitor LDN criteria, and to verify the changes in Upper Sakarya Basin</p> <p>2.2.4 Improvement of LDN reporting capacity</p> <p>2.2.5 Integration of climate change in the LDN decision support system, and to verify it in Upper Sakarya Basin</p>



LAND DEGRADATION NEUTRALITY (LDN) PROJECT



Project Components, Results, and Outcomes

Project Components	Funding Type	Project Results	Project Outcomes
3. Demonstration of LDN Approach in Upper Sakarya Basin	INV	<p>3.1. Improvement of land use and management in Upper Sakarya Basin, and enhancement of soil organic carbon</p> <p>3.2. A 10% increase in land productivity, and improvement of the living conditions of the local communities</p>	<p>3.1.1 Drafting participatory, land-based, specific rehabilitation plans on 4,313,827 hectares in line with the priorities identified by the decision support system</p> <p>3.1.2 Implementation of SLM and SFM practices that facilitate carbon reduction on 14,000 hectares of forest, agriculture and pasture lands.</p> <p>3.1.3 Measures and approaches, integrated to SLM and SFM practices, to mitigate / reduce the impacts of climate change</p> <p>3.1.4 Drafting a roadmap to ensure the achievement of LDN targets in the whole of the Upper Sakarya Basin</p> <p>3.2.1 Presentation of gender responsive sustainable livelihood strategies</p> <p>3.2.2 Implementation of climate change resilient, gender responsive activities in order to increase land productivity</p>
4. Upscaling, monitoring and evaluation of LDN experiences	TA	<p>4.1 Nation-wide upscaling of LDN decision support system (78.4 million ha)</p> <p>4.2. Monitoring of project results, and dissemination of lessons learnt</p>	<p>4.1.1 Identification of LDN parameters, LDN decision support system, land cover classification and land degradation levels across Turkey</p> <p>4.1.2 Identification/development of nation-wide LDN targets</p> <p>4.1.3 Development of sound (fundable) (at least 1) projects for LDN fund</p> <p>4.2.1 Identification and analysis of Global Environmental Benefits</p> <p>4.2.2 Drafting of mid-term and final reports</p> <p>4.2.3 Dissemination of project experiences and «lessons learnt» in a national guideline</p>





www.cem.gov.tr

Forest and Water is Life.

