## OVERVIEW OF LAND DEGRADATION NEUTRALITY (LDN) IN EUROPE AND CENTRAL ASIA

# LDN IN UZBEKISTAN

- Population: 34 232 050 people (2020)
- Total area: 44 892 400 ha
- Gross domestic product: 57.71 billion USD (2020)
- Agriculture, Forestry and Other Land Use: 26.07% of GDP (2020)
- Poverty (% of population below national poverty line): 14.1% (2013)
- Key biodiversity area: 7.33%

Uzbekistan is one of the only two double landlocked countries in the world (completely surrounded by other landlocked countries). It is mostly covered by arid and semiarid plains and deserts with strong continental climate (hot summer and cold winters), with mountain landscapes and more humid climate to the east. The main rivers in Central Asia cross its territory, which has the second lowest Net Primary Productivity of the region (0.71 tC per ha). However, Uzbekistan still holds the second highest Agriculture, Forestry and Other Land Use GDP of the region, showing the relevance of irrigation for the country's economy. Soils are prone to salinization which is exacerbated by dust storms and salt from exposed Aral seabed and unsustainable irrigation and cropland management.

### LAND PRODUCTIVITY DYNAMICS (LPD) (2001-2020)

The stable category is the dominant (57 percent), but an important share of the country presents declining or stressed productivity (37 percent). Almost half of these areas are grasslands (7.3 million ha) and 1.2 million ha are croplands. To the west of the country, the spatial pattern is coincident with the negative trends in precipitation and fire frequency for the same period. Declining Early signs of decline Stable but stressed Stable Increasing No data Water Source: UN. 2020. Map of the World [online] https://www.un.org/geospatial/, modified with Google Earth Engine Application developed for gine.app/view/reu-ldn-assessment LPD COMPARED TO REGION 10.31 11.36 Percentage of area Stable but Stable Uzbekistan Uzbekistan **Declining** Early signs Increasing of decline stressed

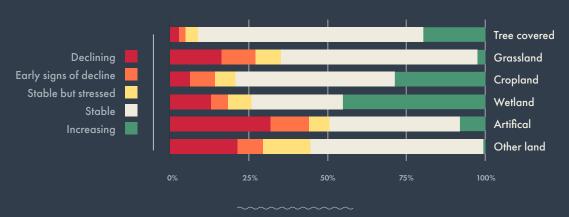
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DOCUMENTED SUSTAINABLE LAND
MANAGEMENT (SLM) TECHNOLOGIES
AND APPROACHES IN WOCAT DATA BASE



622 500 466 TONNES OF SOIL ORGANIC CARBON

#### DISTRIBUTION OF LPD CLASSES FOR LAND COVER



## MONEY ALLOCATED BY THE GLOBAL ENVIRONMENT FACILITY (GEF) THROUGH THE SYSTEM FOR TRANSPARENT ALLOCATION OF RESOURCES (STAR)

Total STAR allocation for GEF 6 and GEF 7 cycles in millions of dollars



#### SOME STEPS FORWARD TO ACHIEVE LDN IN UZBEKISTAN

Uzbekistan reported 28.6 percent of degraded land to the United Nations Convention to Combat Desertification in the PRAIS3 report and later updated this number during the LDN –TSP to between 26-28 percent. During the TSP the national assessment was carried out to build the baseline on LD using national data and an "Integrated indicator" was developed and tested to assess the degree of desertification. The indicator was computed using: soil erosion, bonitet score, NDSI - soil salinity, AI - aridity index, SPI - standardized precipitation index and the Normalized Difference Vegetation Index. It was also found an increase in forest areas (mostly desert forests) and a reduction in areas under hayfields and pastures, that do not show in global data due to differences in land use classification. Two main hotspots were identified: salinization in irrigated areas and overgrazing of rangelands. With the support of the Food and Agriculture Organization of the United Nations (FAO) and GEF, Uzbekistan is working in both these hotspots:

- Under the "Food Systems, Land Use and Restoration Impact Program in Uzbekistan" (<u>FOLUR</u>), the agricultural sector is being targeted to increase efficiency and resilience of wheat value chain by transforming critical degraded landscapes.
- The "Sustainable Forest and Rangelands Management in the Dryland Ecosystems of Uzbekistan" project will promote LDN in rangelands with enabling environment, land-use planning and SLM implementation activities, including the development of a DSS for LDN.
- <u>CACILM2</u> project, which is working in drought prone area with multi-stakeholder land use plans and identifying priority technologies for soil reclamation salt affected croplands areas and pasture rehabilitation.