Economic and Social Commission for Western Asia

Land Degradation in Arid Ecosystems

Multi-stakeholder Platform for Protecting Biodiversity: Inception Meeting

UN House – Beirut, Lebanon
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Pathways for Biodiversity Conservation in Degraded Lands and Arid Ecosystems

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Current Status

The Arab Region

- Covers 10% of the world land surface (13.5 million km²)
- Rich array of ecosystems including deserts, mountains, coastal areas, wetlands, drylands and forests.
- One of the most environmentally vulnerable regions worldwide due to water scarcity (19 of the 22 countries), land degradation, desertification, and climate change
- Land use changes, overexploitation of resources, pollution, and conflicts

Biodiversity in the Arab region is declining, and its natural habitats and ecosystems are threatened

- Arab region receives a disproportionately low share of global public international climate finance flows and only small percentage (4%) of that is allocated to environmental and disaster risk reduction initiatives.

SDG Status in the Arab Region

The SDG index for the Arab countries ranges from 67.4 to 42.3

- Jordan, Tunisia UAE Algeria, Morocco and Oman (scoring the highest above 65)
- Comoros, Djibouti, Mauritania, Somalia, Sudan and Yemen (scoring the lowest with values below 50)

SDG 15 (Life on land) shows that most of the Arab countries are moderately improving except for Comoros, Djibouti, Yemen, Iraq, Bahrain, Oman, Qatar, and the UAE

Land Degradation & Biodiversity Loss Nexus

Land Degradation & Biodiversity Loss are both the cause and consequence of the environmental crises confronting our world and the Arab region

- These two challenges are interlinked on different levels and share common drivers, including natural, anthropogenic, socioeconomic, and political factors
- The link between land degradation and biodiversity loss is evident and intricately linked to the 2030 Agenda for Sustainable Development and various multilateral environmental agreements

Link to 2030 Agenda & MEA

Arab countries have recognized the urgent need to address these interconnected challenges and effectively address the nexus of land degradation, biodiversity loss, and climate resilience

- Aligning their existing strategies and policies in line with 2030 Agenda and have made commitments under key international frameworks (UNCCD, CBD, UNFCCC)

Arab countries need to continue to strengthen and enhance national and regional efforts to address the interconnected challenges of land degradation and biodiversity loss primarily by:

- Leveraging the provisions of multilateral environmental agreements
- Integrating climate change considerations into land management practices and biodiversity conservation strategies
- Enhancing collaboration, policy coherence, and resource mobilization among Arab countries and international partners.

Land Degradation in the Arab Region

Aridity

- 90% of the region is considered very arid and the remaining 10% is covered by semi-arid and dry sub-humid areas
- 73% of the already limited arable land is affected by land degradation
- Economic cost of land degradation $9 billion per year

Land degradation

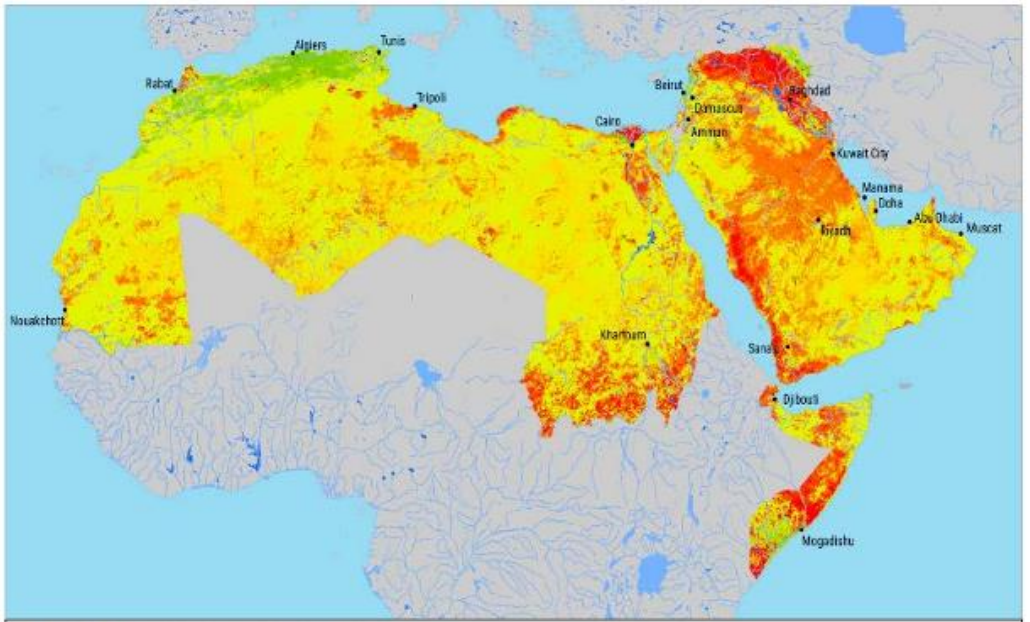
- 82% of the regions' land is affected by some form of land degradation, with deforestation, overgrazing, desertification and soil erosion being major contributors
- Increased from 40 to 70 % in the MENA region over the past two decades with Iraq, Jordan, Lebanon, Syria & Palestine showing the greatest decline

Forest Cover

Change is heterogenous across the region since the 1990's

- Increasing (Bahrain, Lebanon, Morocco, Palestine, Syria, and Tunisia, UAE)
- Stable (Algeria, Djibouti, Libya, Mauritania, Oman, Qatar and Saudi Arabia)
- Decreasing (Comoros, Somalia, and Sudan)

Land degradation disproportionally affects women in the region as it exacerbates the existing gender inequalities



Biodiversity in the Arab Region

- Biodiversity Hotspot (3 of the 34 internationally recognized biodiversity hotspots IUCN):
  - Irano-Anatolian (includes part of Iraq and Syria)
  - Mediterranean Basin (includes Mashreq and Maghreb countries)
  - Horn of Africa (includes Djibouti, Somalia, Yemen, Oman and Saudia Arabia)
- High endemism level
  - 3,397 endemic flora species
- High number of threatened species
  - 1,746 species including 245 critically endangered and 327 endangered species

Habitat fragmentation, destruction and conversion is the primary causes of biodiversity loss mainly attributed to land degradation as well as urbanization and agriculture expansion to accommodate growing population with increased demands

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Major challenges

Major Challenges

Arab region are facing significant challenges in both biodiversity loss and land degradation

- Deterioration of biodiversity and ecosystems
- Shrinking of arable lands
- Reduced productivity of land resources
- Exacerbation of water scarcity
- Hydro-climate issues (increased occurrence of droughts, floods)
- Environmental hazards (dust storms, deterioration of water quality and unsustainable use of water resources)

These challenges are exacerbated by a regional context of conflict and political unrest.

The combination of socioeconomic, anthropogenic, natural, and political, institutional and regulatory drivers in the Arab region are driving land degradation and biodiversity loss to alarming levels

- Anthropogenic drivers in the Arab region are relatively faster but have lower impact as compared to natural drivers

Socioeconomic Drivers & Pressures

Population Growth

- Population doubled between 1990 and 2021 (444.81 million in 2021)
- Highest population (Egypt, Algeria, Sudan, Iraq, Morocco, Saudi Arabia, Yemen, and Syria)

Poverty

- Damaging environmental practices, unsustainable land and resource utilization

Migration (rural into urban areas and foreign workers) and ***displacement*** (refugees)

- 40% increase in migration and displacement (38 million migrants and refugees as of 2017)
- GCC countries are receiving the most migrants in the region,
- Jordan, Lebanon, Libya, Syria & Sudan are among the top countries for refugees

These drivers place significant constrains on the region's resources including soil, biological, food and water

Limited Awareness among decision makers and the general population

Drivers & Pressures

Climate Change

- Important accelerator of land degradation and biodiversity loss by contributing to other environmental challenges in the region (extreme weather events, desertification, wildfires, invasive species).
  - Average temperatures projected to rise by 5°C by the end of the century
  - Average yearly rainfall projected to decrease by 10% in the next 50 years (highest decline in North Africa)

Increased demand on natural resources

- Over and unsustainable exploitation biological, geological and hydrological resources (overgrazing, deforestation, intensive cultivation and monoculture, loss in genetic resources, overuse of surface and over abstraction of groundwater)
- Habitat conversion, fragmentation, and loss to accommodate rapid urbanization and increased demand for agriculture
- Pressures and pollution on coastal and marine ecosystems affect 11 Arab countries.
- Poor rangeland management and overgrazing is a serious issue in Arab countries (Saudia Arabia, Jordan, Lebanon, Kuwait, Qatar, Syria, Algeria, Morocco, Djibouti, Mauritania and Somalia).
- Significant land use change mainly affects Egypt, Saudi Arabia, Iraq, Jordan and Lebanon

Drivers & Pressures Cont'd

Limited solid waste and wastewater management coupled with poor management of the industrial and agriculture sectors

- Led to significant land, water, air pollution threating marine and land ecosystems and their biodiversity as well the polluting the already scare water resources and arable land at an alarming rate.
- Pollution is a significant issue facing the region particularly in Algeria, Djibouti, Egypt, Iraq, Kuwait, Lebanon, Libya, Morocco, Palestine, and Tunisia.

Land dynamics

- Magnifying the impacts of weathering agents and have resulted in large cross-border sand and dust storms across the Arab Region.
  - 60% of soil resources in the MENA region is eroded by wind (Sudan, Saudi Arabia, Libya, Iran, Algeria, Yemen, Tunisia, Syria, Iraq, Jordan, and Egypt .
  - Water erosion (Iran, Sudan, Yemen, Algeria, Tunisia, Morocco, Oman, Libya, Syria and Iraq)

Fauna and flora migrations

- Decline and change in biodiversity, increased soil erosion & altered soil composition and structure
- 554 invasive species have been reported in the Arab region, of which 15% marine species

Political, Institutional and Regulatory Drivers & Pressures

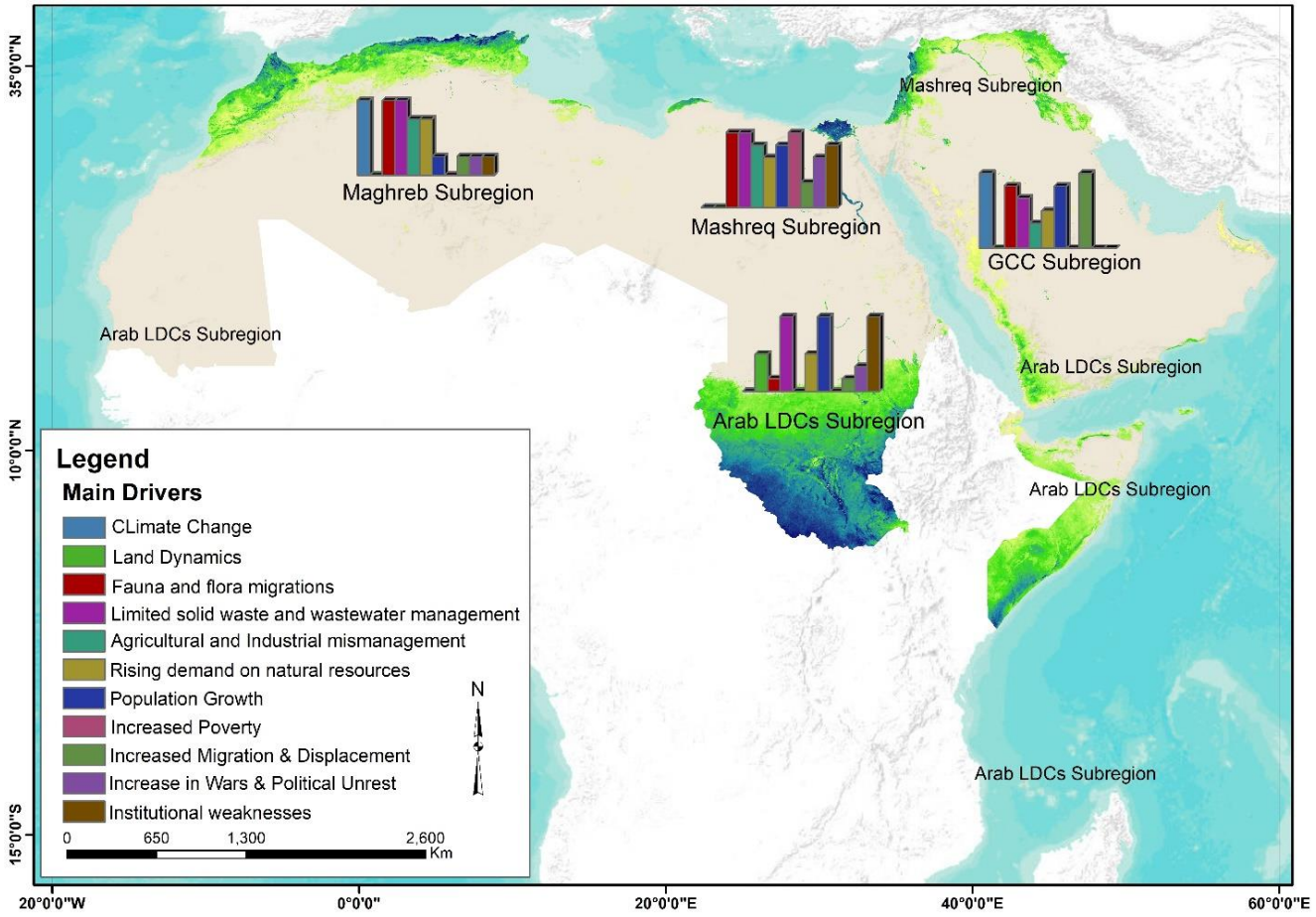
Wars and Political Unrest

- Weakened state of governance, shift in priorities, weakened enforcement, increase in illegal activities (wood cutting for heating and cooking, overhunting, overfishing, habitat conversion…)
- Migration and displacement of people typically resort to unsustainable land use and resource utilization and cause significant pressure on land and natural resources

Institutional fragmentation and weak institutional mandates and capacities

- Insufficient legal and regulatory framework
- Lack of coordination between institutional bodies
- Limited human and financial resources
- Weak enforcement of existing laws and regulation
- Lack of adequate regional clear frame for coordination

Drivers overview



- Two drivers (increased demand on natural resources and limited awareness on importance of biodiversity and land management) significantly affect every country in the Arab region.
- Mashreq countries (limited solid waste and wastewater management, poor management of agriculture and industrial sectors, increased poverty, increase in wars & political unrest and institutional fragmentation/weak institutional mandates and capacities, population growth and invasive species).
- The Maghreb countries (climate change, invasive species, limited solid waste and wastewater management, poor management of agriculture and industrial sectors).
- Arab LDC's Countries (population growth, increased poverty, limited solid waste and wastewater management, and institutional fragmentation/weak institutional mandates and capacities)
- GCC countries (climate change, invasive species, population growth, migration and displacement)

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- Opportunities for action

What has been achieved

To combat land degradation and protect its biodiversity, Arab countries have:

- Conducted considerable planning, strategies, policies
- Implemented numerous programs and initiatives on local, national, and regional fronts
- Developed and implemented a myriad of science, innovation and technology, governance, institutional and financial solutions

Science, Innovation and Technology Actions

Protected areas

- Every country in the Arab region has established a protected areas covering different ecosystem, biological diversity, and landscapes)

Transboundary protected areas

- Limited number but large impact

Land rehabilitation and restoration of degraded land

- Reforestation, rangeland management, land reclamation, sustainable land and soil management, eradication of invasive species)

Land Degradation Neutrality (LDN)

- Nine Arab countries (Algeria, Comoros, Egypt, Iraq, Jordan, Lebanon, Somalia, Sudan, and Syria) submitted their national reports on LDN targets to the UNCCD Secretariat with voluntary targets to neutralize land degradation by 2030

Knowledge co-generation, knowledge sharing and advocacy

- Bilateral and regional forums and mechanisms, international and regional NGOs and CSOs)

Governance & Institutional Actions

Institutional Framework

- All 22 Arab Countries have a Ministry or National Authority mandated for environmental issues
- Some countries have dedicated institutions for biodiversity & land degradation

International Conventions

- All Arab countries are parties to the CBD and have recently adopted The Kunming-Montreal Global Biodiversity Framework (GBF) during the 2022 COP 15; UNFCCC and the UNCCD
- All countries apart from Libya and Yemen have ratified the Paris Agreement

National Laws, policies and ***strategies***

- All countries have either or both general and specific instruments focused on combating land degradation & biodiversity loss
- National land use planning frameworks and regulations covers interlinkages between land degradation and biodiversity & integrates environmental considerations into development projects (UAE, Jordan, KSA, Morocco, Egypt, and Lebanon)

Financial Actions

Funding mechanisms

- Regional funds such as Arab Fund for Sustainable Development, The Arab Development Fund (ADF) and The Arab Gulf Program for Development (AGFUND) and country-based grants and loans financial mechanism that encourage biodiversity protection and better land management

Incentive programs

- Sustainable natural resource utilization and environmental management

Partnerships with the private sector

- Social Corporate Responsibility (SCR) and Environmental, Social, and Corporate governance (ESG), Green financing)

Pathways to reverse Biodiversity loss and Land Degradation

- Mainstreaming biodiversity conservation and sustainable land management; integrating into national development plans, sectoral policies, and investment strategies
- Strengthening protected area networks and expanding coverage
- Fostering transboundary collaboration in establishing more transboundary protected areas
- Scaling up land rehabilitation and restoration efforts
- Increasing investment in programs focusing on reforestation, sustainable land and soil management, and eradication of invasive species
- Promoting sustainable land management practices, engaging local communities in restoration initiatives
- Diversifying financial mechanism (national, regional and international, private sector)
- Evidence based decision-making and implementation of effective policies
- Comprehensive country-based (i.e., at local scale) and regionally harmonized initiatives
- Field based and ground verified baseline information to guide the development of strategies and policies
- Collaborative efforts involving stakeholders from various sectors including decision makers, scientific community, and organizations (local, regional, international)

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Thank you