

GREEN
CLIMATE
FUND

GCF REGIONAL DIALOGUE
with MIDDLE EAST & NORTH AFRICA

Agriculture and food security

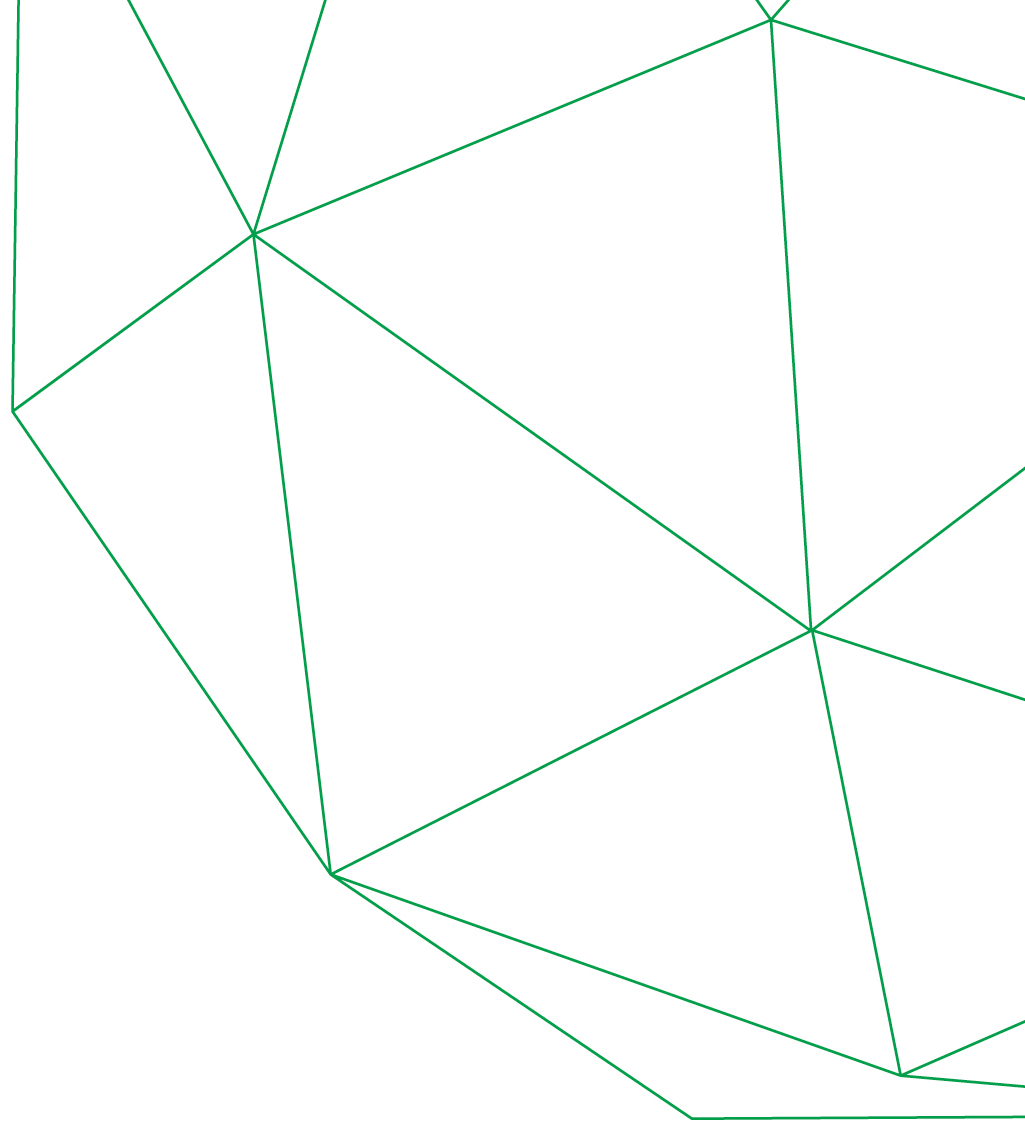
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24–28 June 2024



Agriculture sector in MENA region

- Agriculture contributes approx. 14 percent of the regional GDP and employs 38 % of the population
- Nearly 65% of the cropland is used for cereal production
- Of total land in the region 33% is agriculture land (pastures and cropland) with 5% of that being cropland. Approx. 40% of that land requires full irrigation.
- The region imports more food than any other region

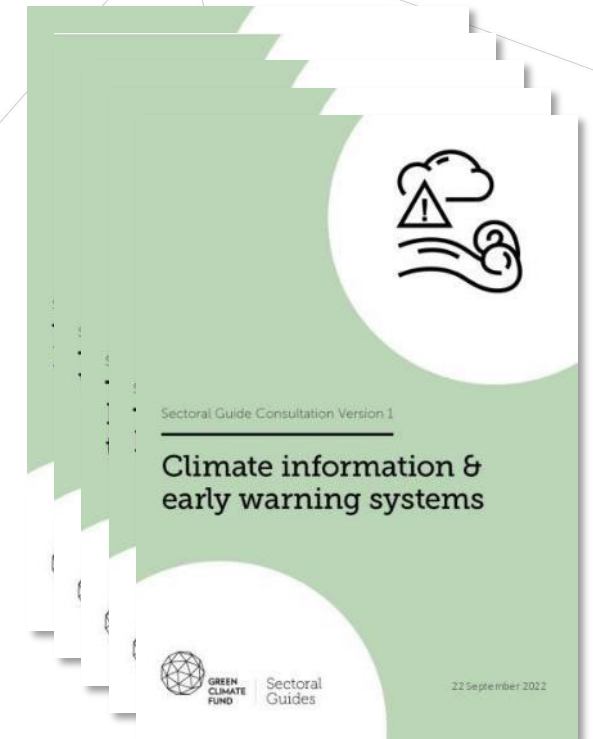
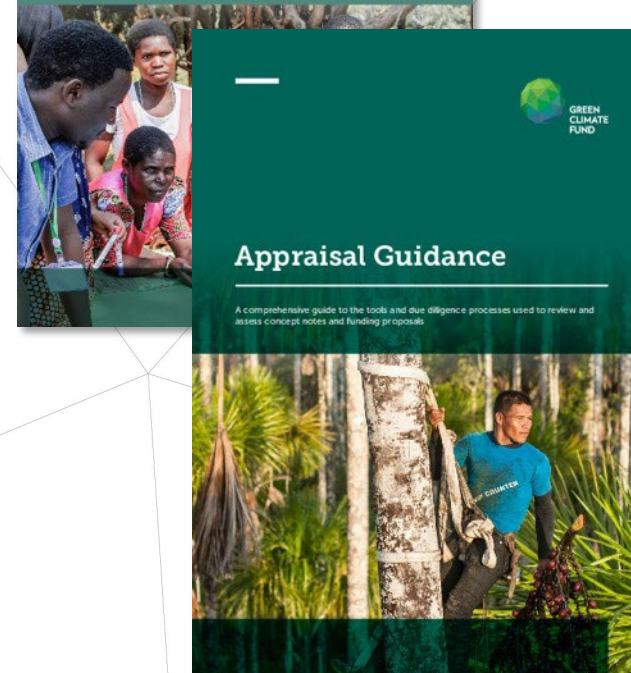
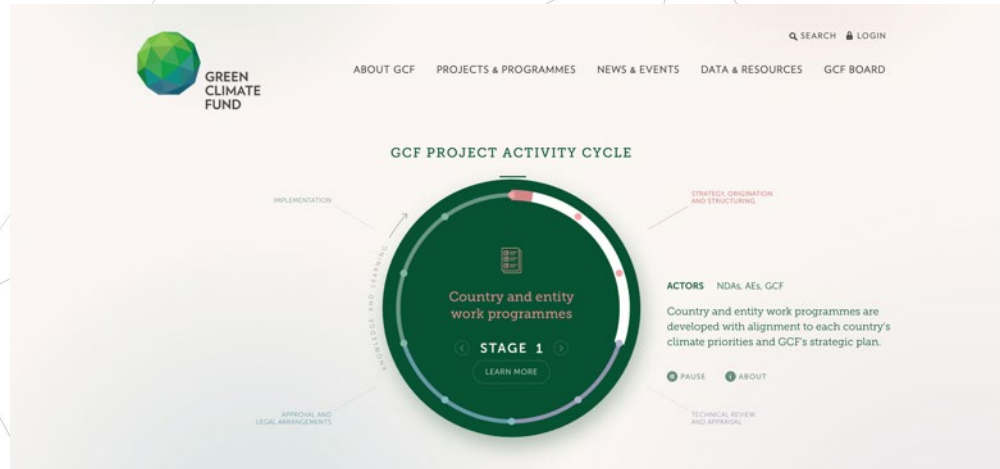
Climate change challenges in the agriculture sector

- MENA is one of the world's most vulnerable regions to the impacts of climate change, higher temperatures, rising seas, droughts, floods, intense water scarcity.
- Countries are among the most water-stressed countries in the world - Approx. 80% of water use in the region is used for agriculture
- Shortage of arable land suitable for rainfed agriculture and increasing soil degradation
- Reduced water and fodder for livestock systems and reduced carrying capacity of rangelands
- Reduced crop and livestock production – projections indicate high rise in food insecurity for small scale farmers and pastoralist communities
- Increase in food loss and waste

GCF Targeted results 2024-2027

- Advance the implementation of their NDCs, NAPs and LTS.
- Double the number of Direct Access Entities with approved GCF funding.
- Establish new or improved early warning systems.
- **Enable smallholder farmers to adopt low-emission climate-resilient agricultural and fisheries practices and secure livelihoods while reconfiguring food systems.**
- **Conserve, restore or bring under sustainable management terrestrial and marine areas.**
- Develop or secure low-emission climate resilient infrastructure.
- Expand access to sustainable, affordable, resilient, reliable renewable energy, particularly for hardest to reach, and to increase renewable energy sources in the energy mix.
- Shift toward clean and efficient energy end-use for transport, building and industry sectors.
- Access adaptation funding, including for locally-led action.
- Provide seed and early-stage capital for innovative climate solutions, business models and technologies to local private sector early-stage ventures and MSMEs.
- Enable national and regional financial institutions to access GCF resources, and other green finance, particularly for MSMEs.

Access and Simplification measures



Transitioning Food Systems



Changing how food is produced, stored, transported, sold and consumed

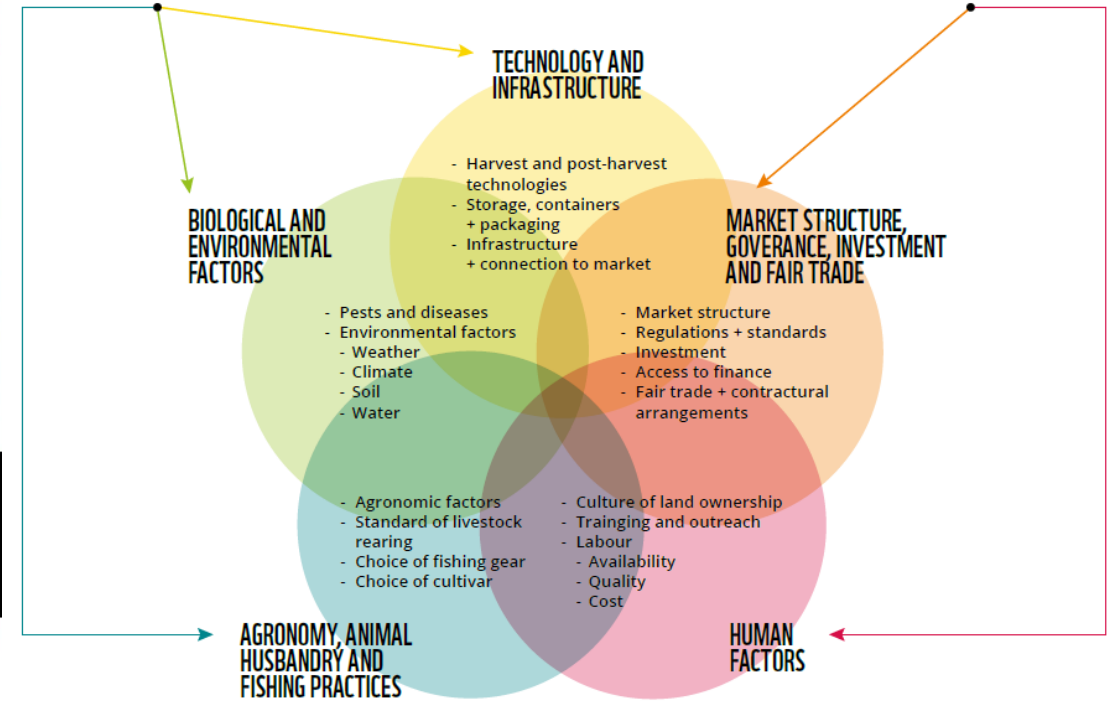
- reshaping supply chains, food processing, storage, marketing, and procurement;
- reducing food loss and waste;
- shifting consumers to demand safer, healthier and more environmentally sustainable diets;

Must be environmentally sustainable, deforestation-free, inclusive, and enhancing rural employment opportunities

Low-emissions goals for food systems include reducing food loss and waste, improving energy efficiency, finding alternative energy sources



DIRECT DRIVERS



Promoting resilient agroecology



- Resilient agroecology supports adaptation and mitigation efforts while seeking to promote the agroecological conditions that reduce climate shocks on agricultural productivity
- **Improved seeds, crop and livestock varieties, and breeds** (e.g. drought-tolerant maize, etc.)
- **Diversifying crops, aquaculture and livestock** (e.g. crop rotation, intercropping, etc.)
- **Sustainable practices and technologies** (e.g. landscape approaches, water and soil management, IPM, soil carbon sequestration, agroforestry, solar irrigation, micro-pumps, minimum tillage, residue management, etc.)

Facilitating Climate Informed Advisory and Risk Management Services



- **Climate information and early warning systems**
- **Digital agricultural advisory and extension**
 - **Overcoming existing gaps**
 - **Effective delivery mechanisms** that facilitate personal relationships and multi-way communication at low or no cost
- **Financial literacy training, access to finance** (e.g. mobile money) helps ensure financial services reach women, youth, impoverished
- **Index Insurance** increase resilience by linking insurance payouts to predetermined index e.g., rainfall, temperature, yield



Concept note ideas: Food system transitioning in MENA



- Transition the food systems to more diversified systems with more drought tolerant species and variety mixes
- Land and soil conservation interventions
- Improved livestock feeding, grazing management and breeding practices
- Food loss and waste reduction – circular economy solutions - upcycling
- The Water, Energy and Food (WEF) Nexus
- Climate smart agriculture solutions preserving biodiversity

Concept note storytelling



1. What is the **problem** you want to tackle?

2. What are the **causes & impacts** of the **problem**?

3. What is the **current situation** and **gaps & challenges** to address the **problem**?

4. What is your **solution** to the **problem**?

5. What is the **impact** of your **solution**?

1. **Maize productivity** is **declining** and **will decline** further in the future,

2. because of climate-induced **temperature** increase & decrease in **rainfall**. These are leading to rise in **evapotranspiration** and **subsequent yield decline**

3. Currently maize **monocropping, rainfed, pests**
Gaps & challenges: Limited access to **water** & **drought-resistant varieties, storage and processing**

4. **Irrigation** and provision of **resilient varieties, species diversification and access to storage**

5. **Increased yields, resilient food systems**



Thank you