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# Building Climate Resilient Inclusive Food Systems (CRIFS in Lebanon)

GCF Sub-Regional Dialogue with Fragile and Conflict Affected States in the Middle East

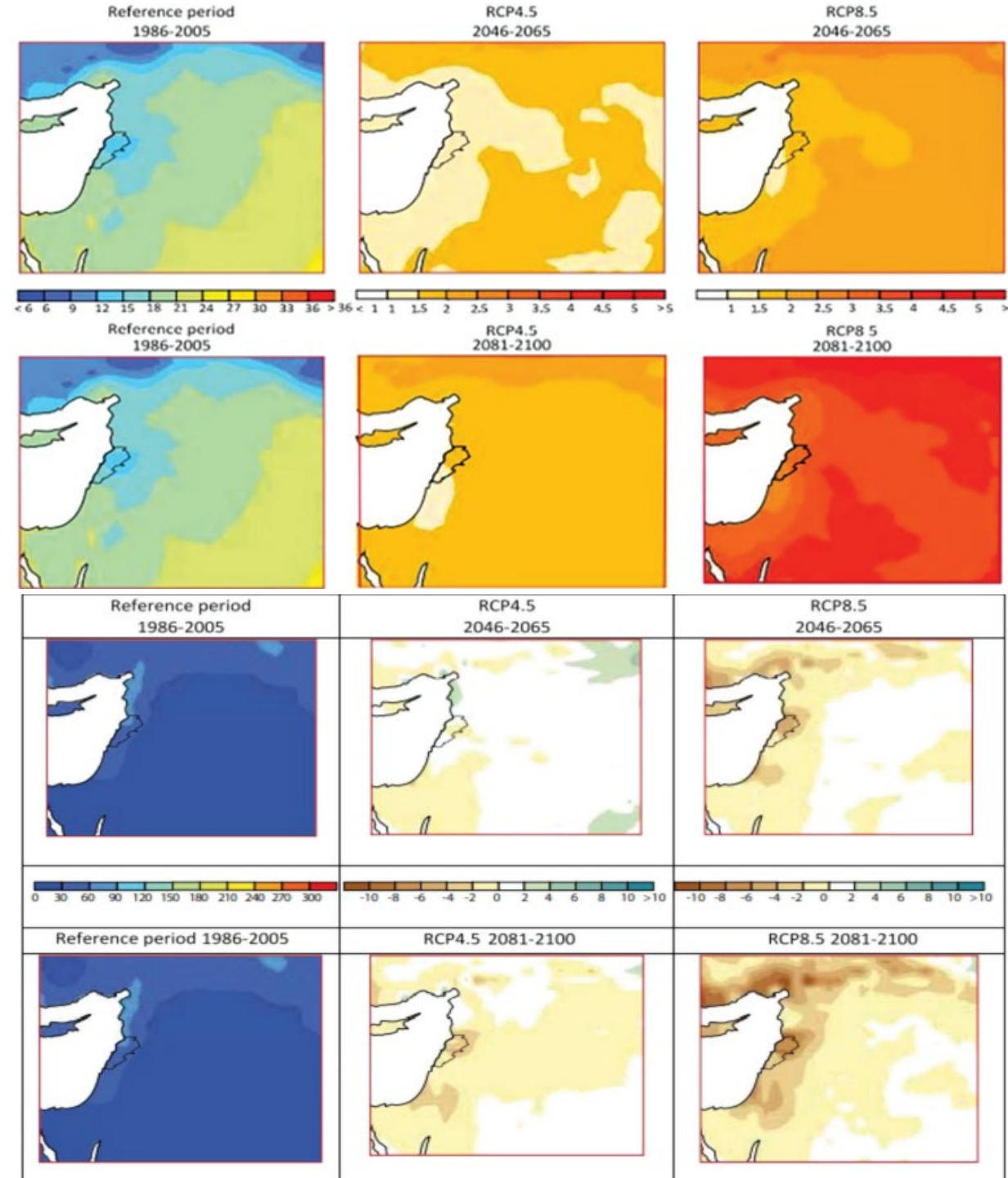
# CLIMATE CHANGE PROFILE

- Lebanon has a Mediterranean climate with hot summers and mild, rainy winters.
- Around 70% of annual rainfall occurs between November and March, often during intense storms.
- Over recent decades, average temperatures have increased by 1.5°C, consistent with global warming trends.
- Summer temperatures now regularly reach 35°C, while winter averages have risen to 15°C.
- Annual rainfall (historically 800–900 mm) has declined, with some years showing up to 20% below long-term averages.

Lebanon ranks **109th globally in climate vulnerability** and **162nd in readiness**, setting the country overall index ranking at **120th out of 188** (ND-Gain Index, 2023), reflecting both its high exposure to climate risks and moderate adaptive capacity.

# CLIMATE PROJECTION

- Average temperatures could rise by 1.2°C and 1.7°C, respectively, by mid-century (2046–2065) compared to the 1986–2005 baseline.
- By 2100, temperatures are expected to increase by up to 3.2°C under moderate scenarios and as much as 6.6°C under worst-case conditions.
- Perception anticipated to decline by 4–11% by the end of the century, leading to increasingly arid conditions.
- Snow cover projected to decline by 40–70%, drastically reducing snowpack duration.
- Sea-level rise is anticipated to continue at a rate of 30–60 cm over the next 30 years



# Lebanon Food System

## Structural challenges

- Limited agricultural land: 25% of national territory is cultivated.
- Small-scale farming dominance- 170,000 farm holdings; 25% produce mainly for subsistence.
- Highly unequal land ownership- 1% of landowners controls 25% of agricultural land.
- 10% control 66% of agricultural land.
- Heavy reliance on imported seeds, inputs, materials, and equipment - high production costs.
- Local production is insufficient to meet national food needs- 80% of consumed calories are imported.
- High dependence on informal labour across food production and processing.

## Emerging risks & systemic inefficiencies

- Weak food safety regulations and enforcement.
- Excessive chemical use ( fertilizers & pesticide).
- Poor distribution channels undermine export potential and consumer safety.
- Poor land water resource management exacerbates climate vulnerability.
- Environmental degradation weakens long-term food system sustainability.
- Governance & Institutional Gaps
- **Climate Change Impact**



# About the Project

<b>Project Title</b>	Building Climate Resilient Inclusive Food System (CRIFS) in Lebanon
<b>Country</b>	Lebanon
<b>Accredited Entity (AE)</b>	World Food Programme (WFP)
<b>Indicative total budget</b>	USD 50 million
<b>Indicative GCF funding</b>	USD 45 million
<b>No# of beneficiaries and % of population</b>	Direct: 250,000 (4.3% of national population) Indirect: 493,000 (8.5% of national population)
<b>Result area of the project</b>	Adaptation @100 % of the targeted population
<b>Sector &amp; Funding modality</b>	Public, PAP
<b>Financial instrument</b>	Grant
<b>Implementation period</b>	5 years

# Building Climate Resilient Inclusive Food Systems in Lebanon (CRIFS)

## Objective

Strengthening Lebanon's food system adaptation capacity, enhancing food security, and fostering sustainable economic opportunities

## Outcomes

1. Enhancing critical agribusiness value-chain infrastructure for climate resilience.
2. Promoting climate-smart agriculture and restoring degraded landscapes to improve food security and ecosystem services.
3. Strengthening the enabling environment for effective climate risk management and adaptation planning.

# Outcomes #1: *Enhancing critical agribusiness value-chain infrastructure for climate resilience*

## **1. Protecting and restoring Land & Water productivity**

- Rehabilitation and lining of irrigation canals to reduce seepage,
- Construction of check dams and terraces to control erosion and enhance water infiltration
- Development of rainwater harvesting ponds for dry-season water storage

## **2. Improving On-Farm Water efficiency**

- Introduction of water-saving technologies like drip irrigation systems,
- Zero / no-tillage practices to conserve soil moisture

## **2. Strengthening Post-Harvest management**

- Investment in climate-resilient, energy-efficient facilities for key value chains (cereals, pulses, greenhouse vegetables)- cleaning, drying, cold storage, and processing units
- Renewable energy integration
- Market Linkages
- Establishment of contractual agreements with buyers/processors to ensure stable market access and steady supply chains

# Outcomes #2: *Promoting climate-smart agriculture and restoring degraded landscapes*

## **1. Enhancing Climate-Resilient production**

- Deployment of climate-resilient crop varieties and livestock breeds
- Partnership with the Lebanese Agricultural Research Institute (LARI) to scale up seed multiplication and establish farmer dissemination networks

## **2. Promoting Climate-Smart Agriculture (CSA)**

- Crop diversification
- Soil management and conservation

## **1. Nature-Based Solutions & landscape restoration**

- Reforestation and afforestation
- Rangeland rehabilitation
- Wetland restoration



# Outcomes #3: *Strengthening the enabling environment for effective climate risk management and adaptation*

## **1. Targeted training in;**

- Climate risk management
- Financial literacy
- Business development
- Value addition

## **2. Enhance national climate information services by;**

- Expanding the weather station network
- Strengthening the technical capacity of hydrometeorological institutions to generate location-specific climate forecasts and risk advisories.
- Develop and operationalize tailored climate information and early warning systems.
- Improve delivery of climate services to farmers and other food system actors via accessible communication channels

## **3. Facilitate structured market linkages by;**

- Establishing contractual agreements between producers and buyers,

# Target

15 of 19 Livelihood Zone across 12 districts across the country

	Individuals	HHs	
Total Beneficiaries	930,855	186,171	Average HH size is 5 members
Total Direct Beneficiaries	250,000	50,000	Determined based on fund and operational costs (Calculation below)
Total Indirect Benef	680,855	136,171	
Direct benef/total pop (4M)	6%		
Indirect Benef/Total Pop	17%		
Total population in targeted areas	2,125,940		Total population in areas excluding green zones
Indirect Benef/Targeted Pop	32%		



# Safeguard profile

- **Category C** – low or no risk. An ESAP will be elaborated at the Full Proposal stage
- **Gender mainstreaming**- Will be at the core of this project. A comprehensive gender analysis will inform a detailed Gender Action Plan during the full proposal stage.
- Low risk of **Sexual Exploitation, Abuse, and Harassment (SEAH)**.
- **No no indigenous peoples**- the project's beneficiaries are members of the general population and smallholder farming communities

# Financial structure

## **100 % Grant-Based financing**

- GCF Grant - USD 45 million
- Co-financing- USD 5 million (WFP, Government of Lebanon, other partners)

## **Financing choice reflects**

- Lebanon's economic constraints
- Public-good nature of interventions
- Vulnerability of beneficiaries

## **WFP (AE) will administer all funds including**

- Financial flows and disbursement
- Procurement and contracting
- Fiduciary reporting and compliance

## **Implementation agreements will be established with**

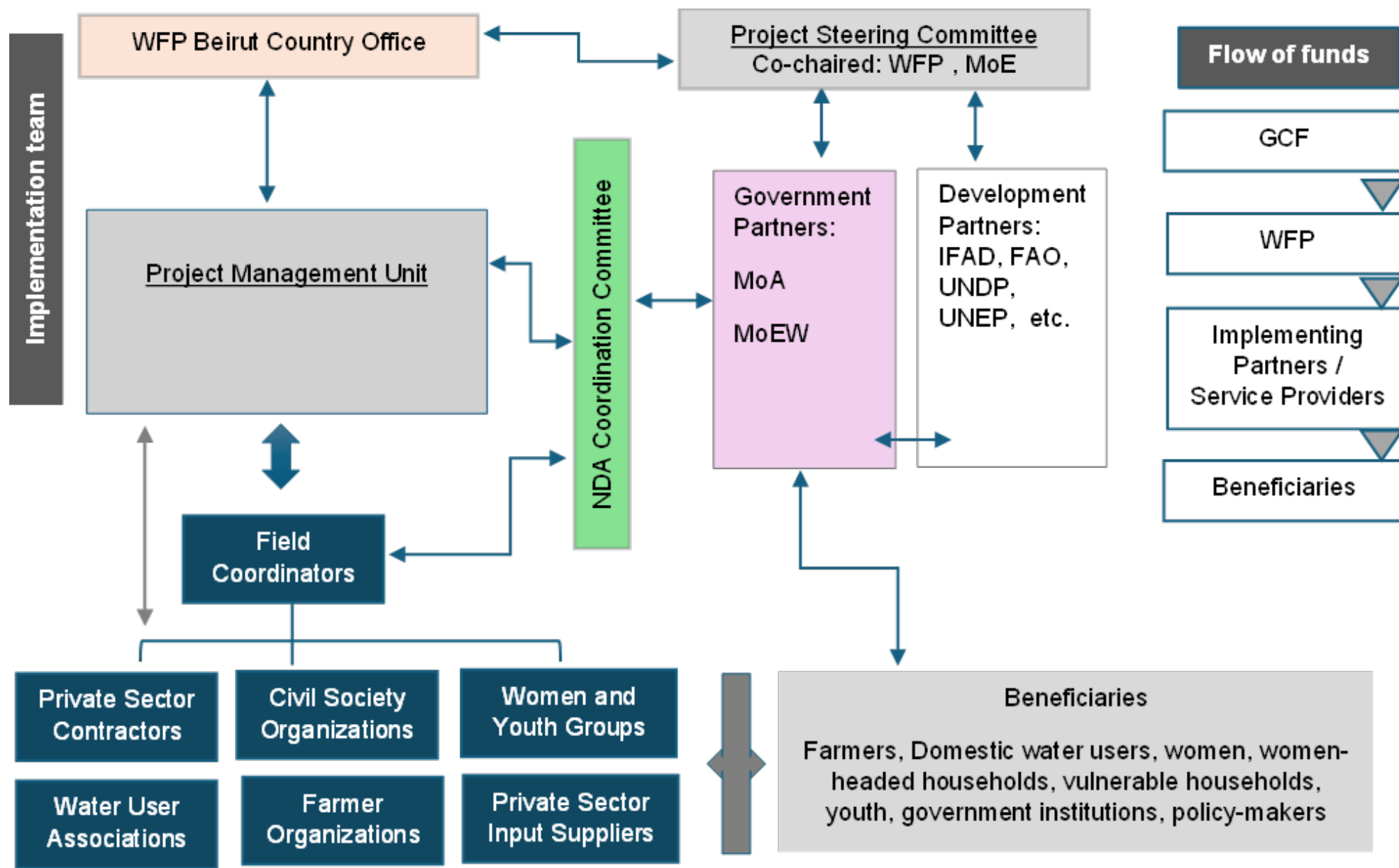
- Ministry of Environment (NDA)
- Ministry of Agriculture
- Local NGOs, cooperatives, and private-sector service providers

# Financial structure

## Use of Fund

Project Component / Outcome	Amount (USD)
Outcome #1- Enhancing critical agribusiness value chain infrastructure for climate resilience	20,500,000
Outcome #2- Promotion of climate-smart agriculture and agribusiness for food & nutrition security	16,500,000
Outcome #3- Strengthening the enabling environment for climate-friendly agribusiness	10,500,000
Project Management	2,500,000
<b>Total</b>	<b>50,000,000</b>

# Project Organization





# Project Development Status & Timeline

Phase	Estimated duration	Key activities	Status
<b>Project ideation and scoping</b>	2 Months	<ul style="list-style-type: none"> <li>Identify national priorities and alignment with GCF results areas</li> <li>Conduct preliminary climate vulnerability/risk assessments.</li> <li>Initial consultation with the NDA and key stakeholders.</li> </ul>	Completed
<b>Concept Note (CN) package submission and screening</b>	9 Months (2 remain)	<ul style="list-style-type: none"> <li>Draft CN based on the scoping study and feedback from stakeholders.</li> <li>Concept note informal review by GCF and the NDA and other key stakeholders.</li> <li>Refining the concept note based on initial feedback.</li> <li>Securing NDA endorsement.</li> <li>Endorsement of the CN by the GCF.</li> </ul>	Submitted (ongoing)
<b>Funding Proposal (FP) package development</b>	6 Months	<ul style="list-style-type: none"> <li>Draft the full GCF funding proposal package, including: <ul style="list-style-type: none"> <li>✓ Detailed budget with human resources plan and necessary annexes (co-financing, risk assessment, ESS, FS etc.).</li> <li>✓ Internal review and quality assurance.</li> <li>✓ Develop a detailed logical framework and results management framework.</li> </ul> </li> <li>Gather extensive data and evidence to support the proposal's claims.</li> <li>Formal submission of the proposal package through the GCF online system.</li> </ul>	Not initiated
<b>FP package review</b>	3 Months	<ul style="list-style-type: none"> <li>Address rounds of queries and feedback from the GCF.</li> <li>Internal revisions and finalization before Board consideration.</li> </ul>	Not initiated
<b>Board approval and Legal arrangements</b>	2 Months	<ul style="list-style-type: none"> <li>Submission of the FP packages to the Board for final decision.</li> <li>Agreement negotiation, coordination with NDA and signing process following FP approval.</li> </ul>	Not initiated

# NDA Processing timeline

- Sharing and registration- **2 days**
- Formation of Review Team - **5 days**
- Administrative Review - **20 days**
- Technical Review - **40 days**

Questions ?

# Workplan and the way forward

[illegible]