



# GCF REGIONAL DIALOGUE

## with Middle East and North Africa

**Rabat, Kingdom of Morocco**  
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# CEDARE Projects on Climate Change



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# Content

1. CEDARE's Mission and Vision
2. CEDARE's Key Initiatives
3. CEDARE' s outlook





## Section 1

# CEDARE's Mission and Vision



# Introduction to CEDARE

## Establishment and Objectives

CEDARE, founded in 1992, is an international inter-governmental organization committed to promoting sustainable development in the Arab region and Europe. Its core objectives revolve around fostering environmental preservation, sustainable resource management, and regional cooperation.

## Partnerships and Collaborations

CEDARE's mission is underpinned by strategic partnerships with governments, NGOs, and international organizations, aligning its efforts with global sustainability agendas and regional development frameworks.

## Capacity Building and Knowledge Transfer

A cornerstone of CEDARE's vision is the empowerment of local communities and stakeholders through capacity-building programs and the transfer of knowledge and best practices in sustainable development.



# CEDARE: Focus areas



Water



Renewable  
Energy



Sustainable  
Growth



Land



Environmental  
Governance



Climate Change



Knowledge



International Young  
Internships





## Section 2

# CEDARE's Key Initiatives



# Climate Change Assessment

01

## Observed Trends

- Temperature increase
- Precipitation Changes
- Sea Level Rise
- Extreme Weather Events

02

## Projected Future Changes

- Further Temperature Rise
- Precipitation Decrease.
- Increased Frequency of Extreme Events
- Biodiversity Loss

03

## Impacts

- Water Scarcity
- Agriculture
- Health Risks
- Coastal Zones
- Tourism

04

## Adaptation and Mitigation

Including improving water management, enhancing resilience in agriculture, developing early warning systems for extreme weather events, protecting coastal zones, and promoting sustainable tourism and energy practices.





# Climate Change and Impact Research: the Mediterranean Environment

## Circe Project

CEDARE involved in Circe project: Climate Change and Impact Research: the Mediterranean Environment.

## Objectives of Circe Project

- to predict and quantify the physical impacts of climate change in the Mediterranean area;
- to evaluate the consequences of climate change for the society and the economy of the populations located in the Mediterranean area;
- to develop an integrated approach to understanding the combined effects of climate change;
- to identify adaptation and mitigation strategies in collaboration with regional stakeholders.



## INCREASING ADAPTIVE CAPACITIES TO CLIMATE CHANGE IN THE ARAB REGION

The regional assessment of climate change in the Arab region involves examining the observed trends, projected future changes, and the potential impacts on the environment, society, and economy.





# Marine Consortium Partners in North and West Africa GMES & Africa

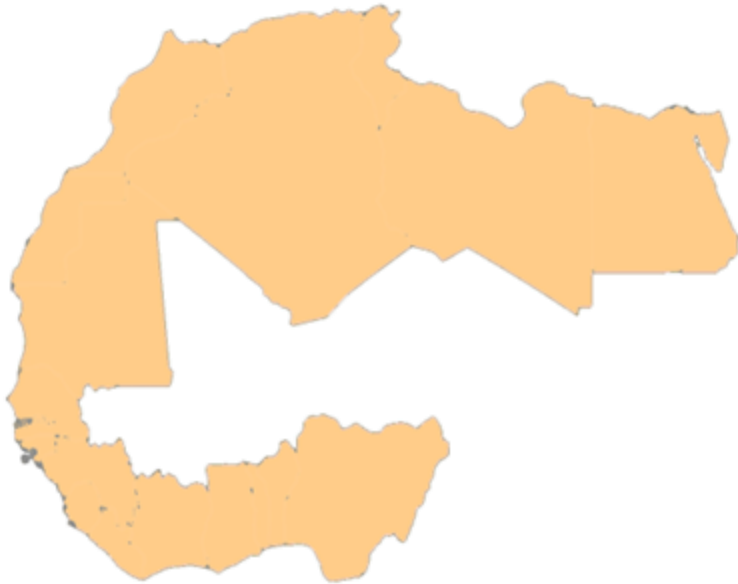


## 12 West African countries

- Benign
- Cape Verde
- Ivory Coast
- Gambia
- Ghana
- Guinea
- Guinea-Bissau
- Liberia
- Nigeria
- Senegal
- Sierra Leone
- Togo

## 6 North African countries

- Algeria
- Egypt
- Libya
- Morocco
- Tunisia
- Mauritania







**GMES**  
AND AFRICA



**Earth  
observation  
applications  
and services**

- 1 Monitoring and forecasting of ocean variables, and weather
- 2 Management and protection of fisheries resources
- 3 Regional marine weather forecast
- 4 Coastal vulnerability monitoring
- 5 Mapping of coastal ecosystems/habitat
- 6 Oil spill monitoring and alert services



# Renewable Energy Transition

01

## Promoting Clean Energy

CEDARE's efforts in promoting clean energy technologies and renewable energy sources are geared towards reducing carbon emissions, fostering energy independence, and advancing the transition towards sustainable energy systems.

02

## Energy Efficiency and Innovation

CEDARE's focus on energy efficiency and innovation encompasses capacity building, technological innovation, and the promotion of energy-efficient practices across various sectors to drive sustainable energy transitions.

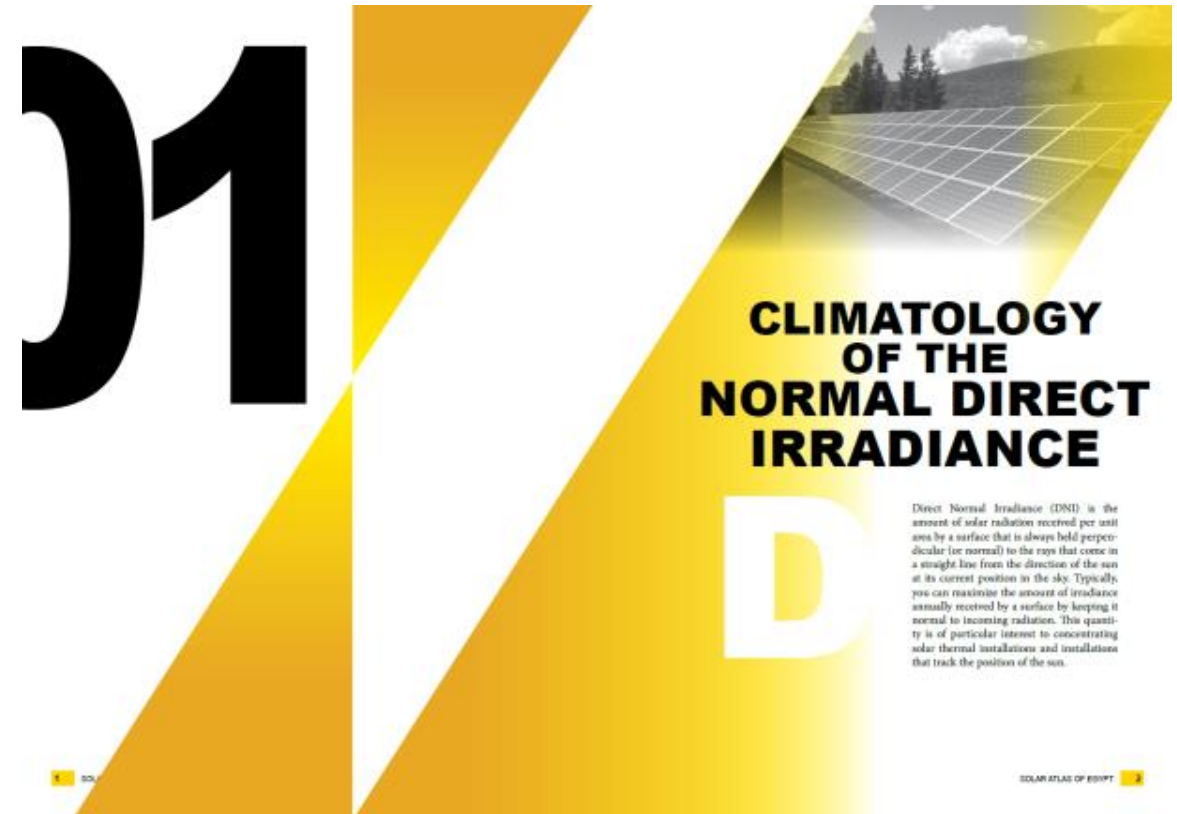
03

## Policy Support and Market Integration

CEDARE provides policy support and facilitates market integration for renewable energy, working towards creating an enabling environment for the widespread adoption of sustainable energy solutions.

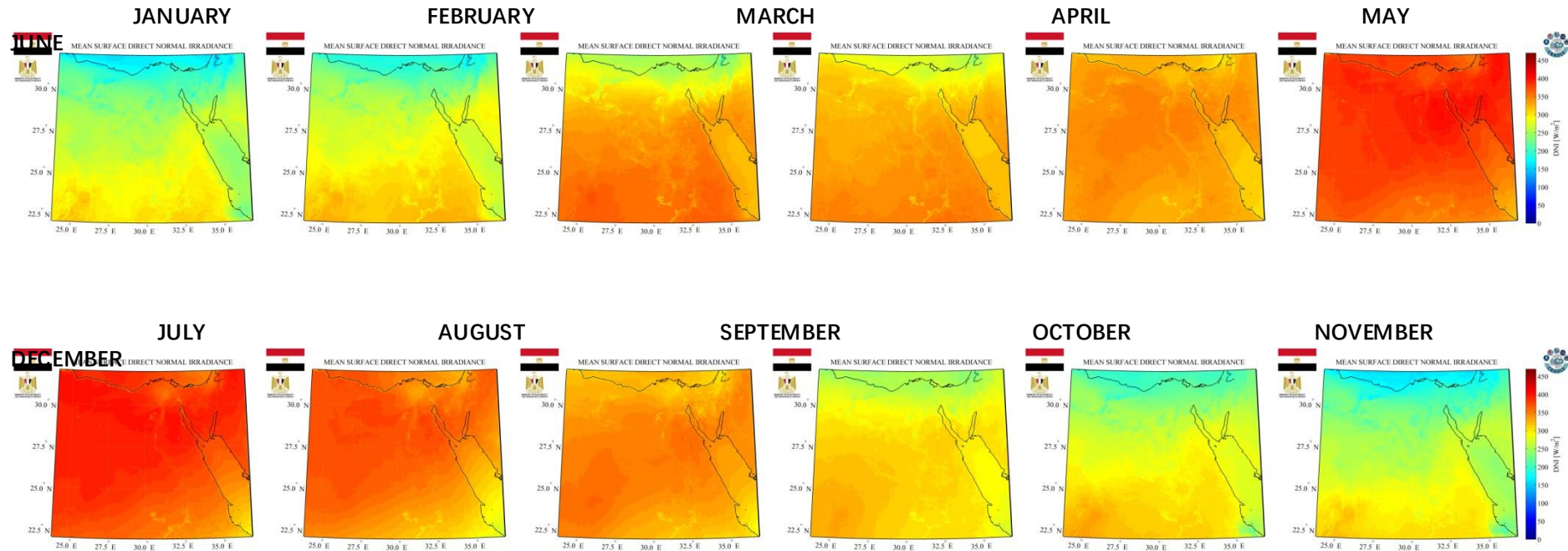


# The Solar Atlas of Egypt

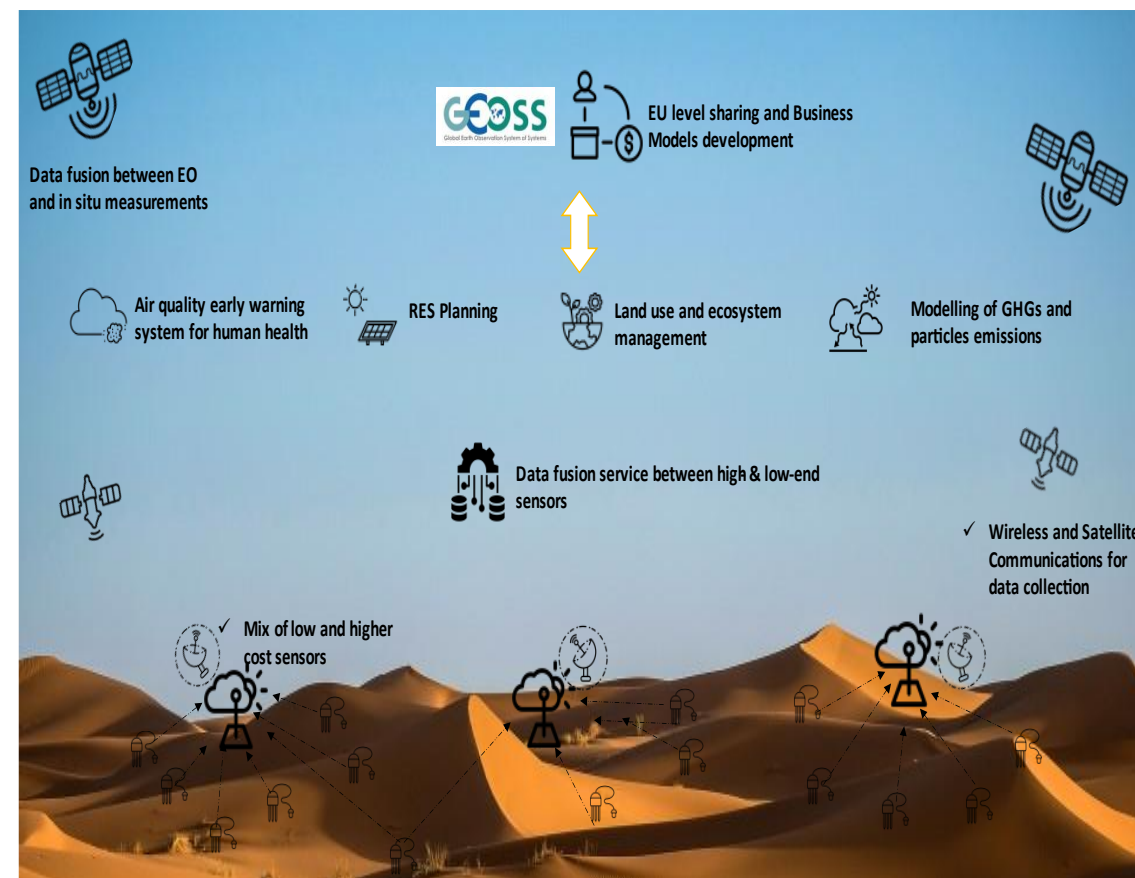
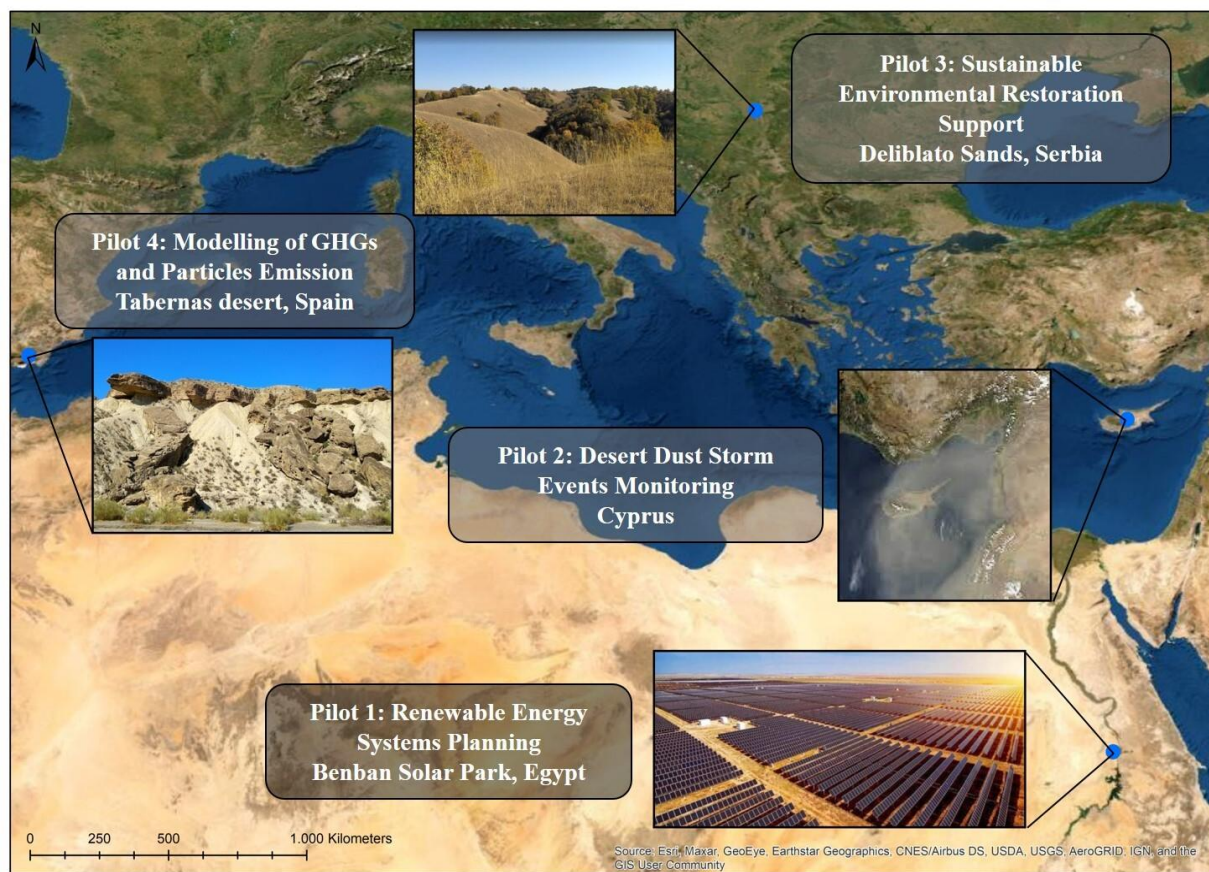




# Mean monthly climatological maps of DNI







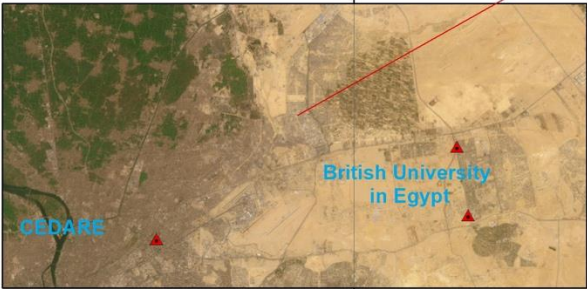
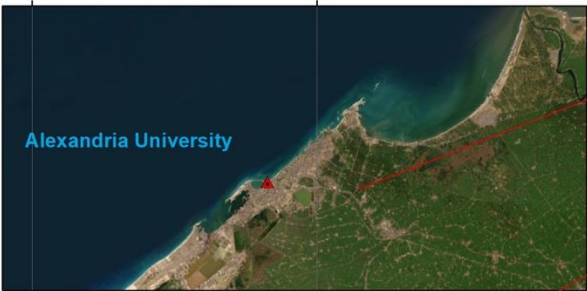


# Pilot 1: Renewable Energy Systems Planning

## Installation locations

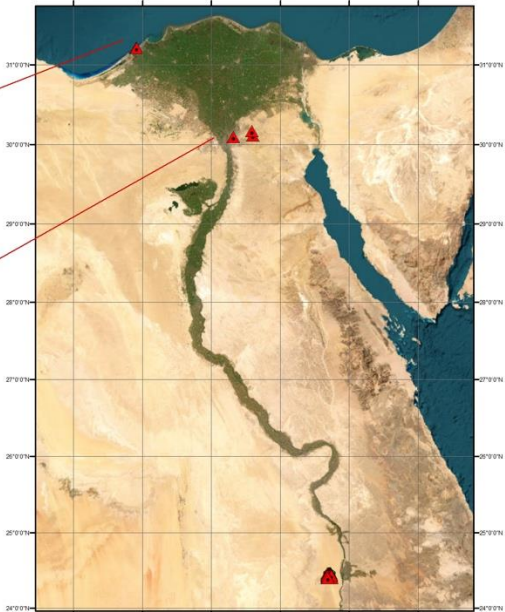


PILOT I  
Renewable Energy Systems Planning  
Other Extended Location

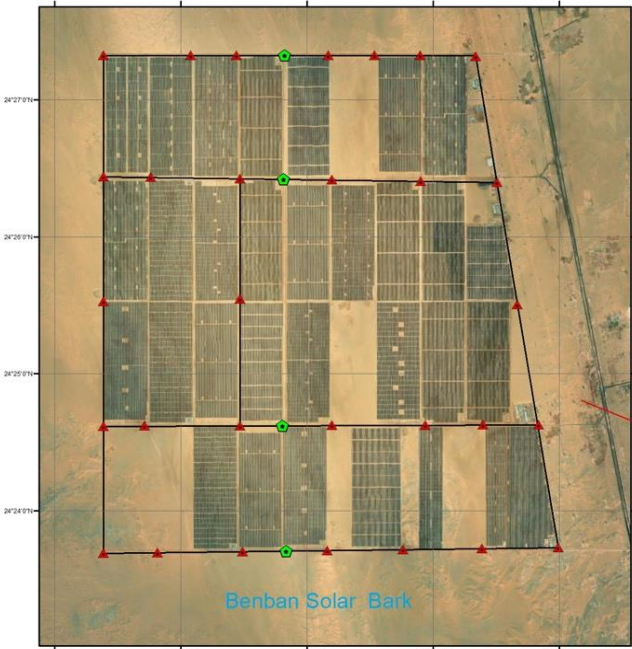


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Under the coordination of ICCS

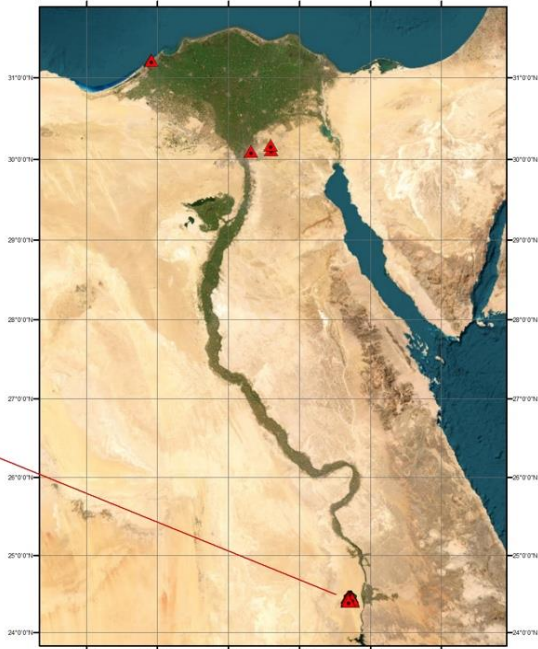


PILOT I  
Renewable Energy Systems Planning  
Benban Solar Bark



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Under the coordination of ICCS





# Sustainable Agriculture & Water Management

01

## Climate-Resilient Farming

Exploring opportunities in climate-resilient farming practices, precision agriculture, and sustainable crop management, with a focus on scalable and innovative technologies.

02

## Water-Energy-Food Nexus

Highlighting investments that address the interconnections between water, energy, and food security, fostering integrated solutions for sustainable water resource management..

03

## Water-Efficient Solutions

investing in water-efficient irrigation systems, drought-resistant crop varieties, and sustainable water resource management to enhance agricultural productivity and resilience.



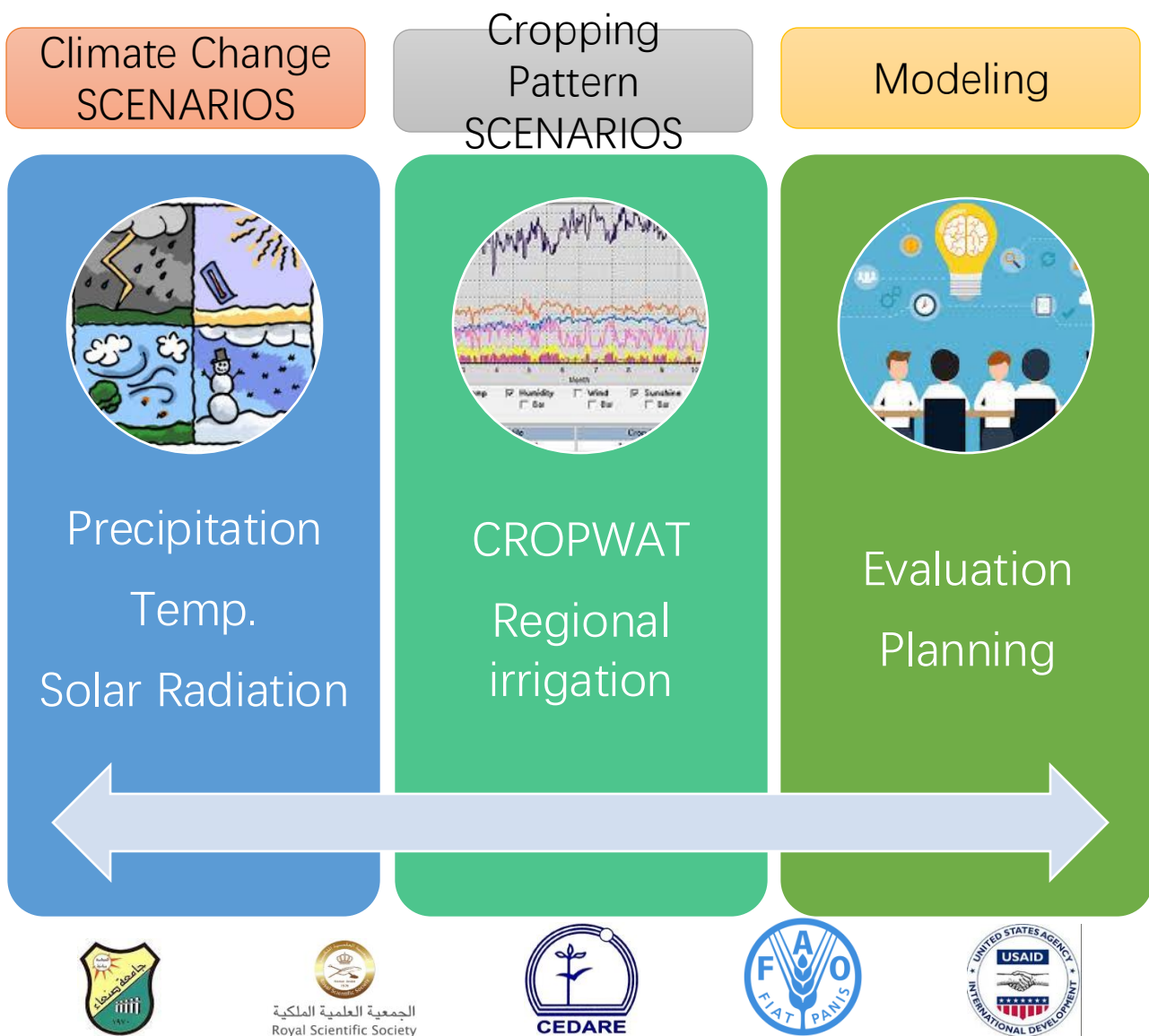
# Impact of Climate Change on Agricultural Cropping Pattern in the MENA Region (ICCAC)



November 2015



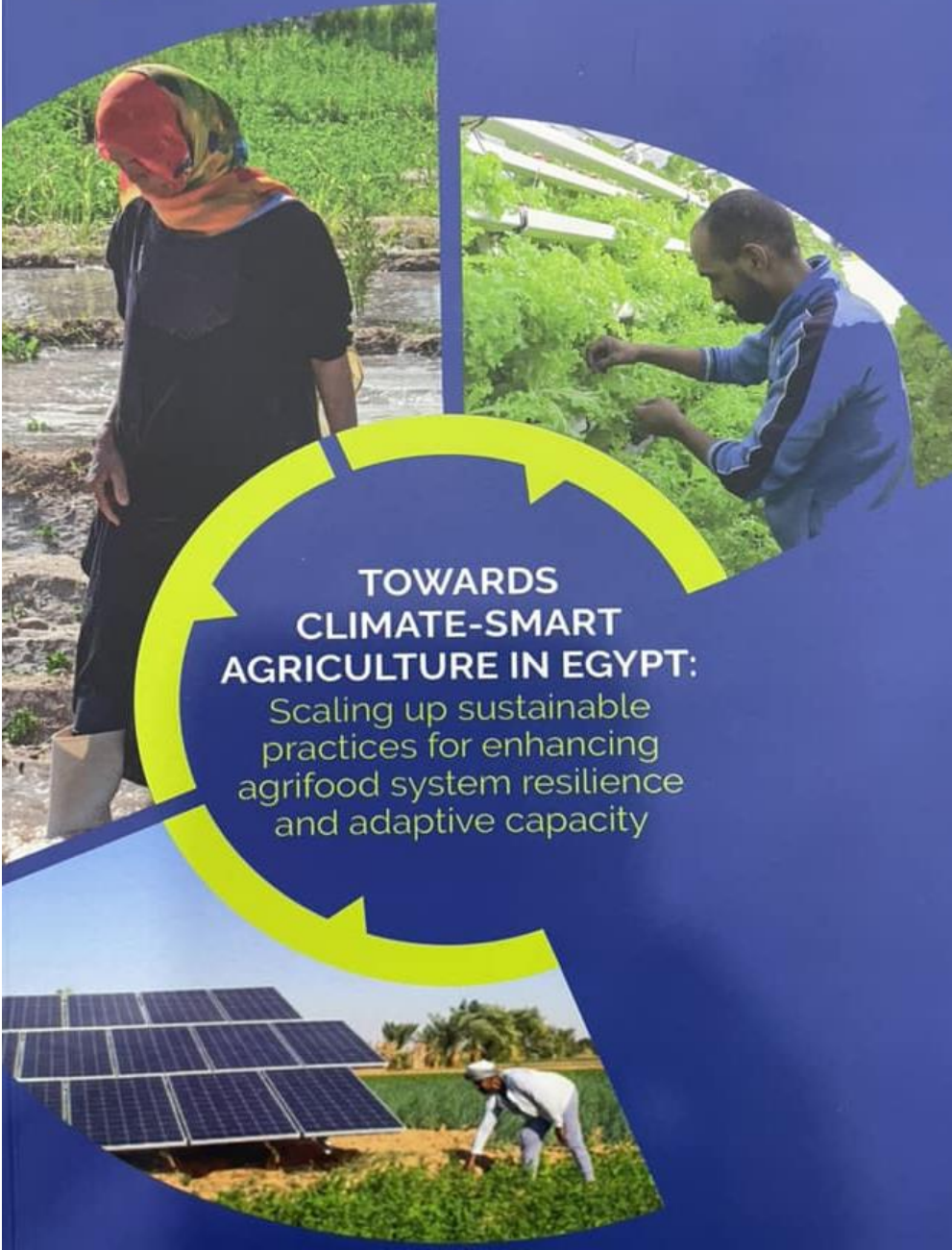
## Impact of CC on Agricultural Cropping Pattern







Food and Agriculture  
Organization of the  
United Nations



**TOWARDS  
CLIMATE-SMART  
AGRICULTURE IN EGYPT:**

Scaling up sustainable  
practices for enhancing  
agrifood system resilience  
and adaptive capacity

## Impact of climate change on the agriculture and water sectors in Egypt

- Challenges and opportunities
- Vulnerability of the agrifood system in Egypt to climate change
- Transformative changes towards climatesmart agriculture and food systems

## Selected climate-smart agriculture practices in Egypt

Agronomic practices

Sustainable water management techniques

Sustainable water management techniques

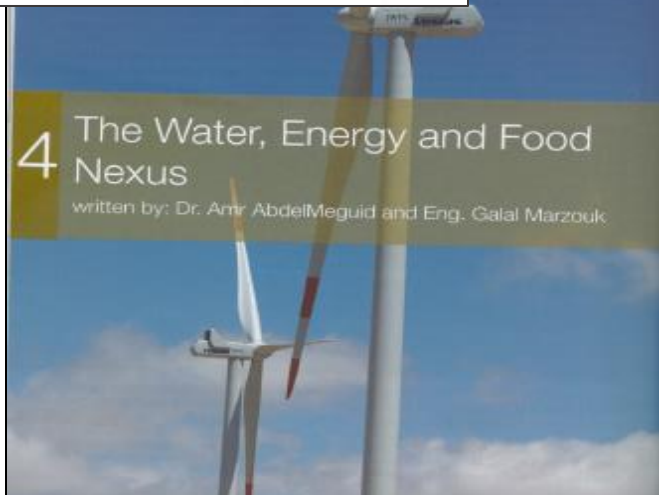
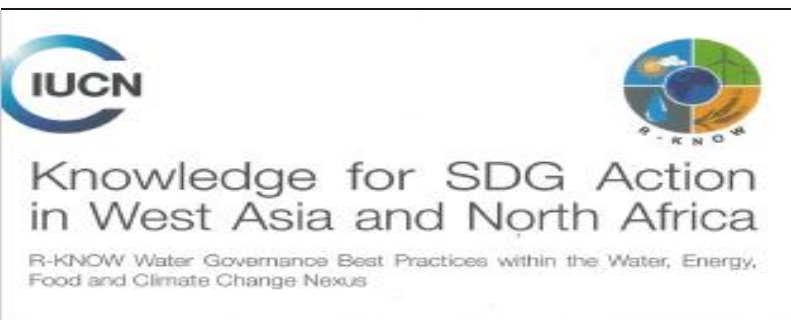
## Scaling up climate-smart agriculture in Egypt: involving all stakeholders

Role of public sector

Private sector engagement

Role of the civil society organizations





# Regional Knowledge Network on Water, Energy, Food and Climate Nexus

- Share and disseminate Knowledge
- Develop conceptual framework
- Document best practices and case studies
- Provide technical support to regional initiatives
- Develop knowledge book





# Adaptation to Climate Change



Sustainable water use for securing food production in dry areas

*Introduce and test new climate-proof crops with improved stress tolerance*

New  
crops  
(Quinoa)



Crop Management  
Considerations under  
Wastewater reuse

optimizing  
crop yields  
and quality

maintaining  
soil  
productivity

protecting  
environment

Denmark, Italy, Portugal, Turkey, Egypt, Syria, Morocco





A Guiding Toolkit for Increasing  
Climate Change Resilience



# Social, Ecological and Agricultural Resilience to Climate Change in the Mediterranean (SEARCH)

- Resilience assessment
- Valuation of ecosystems
- Resilience strategies and adaptation plans
- Pilot projects
- A guiding **toolkit** for increasing Climate Change Resilience
- Policy briefs and green papers





## Section 3

# CEDARE's Future Outlook





# Membership and Accreditation

## Observer IGO

UNFCCC, UNEA,  
UNCCD, IFAD  
Mediterranean  
Commission on  
Sustainable  
Development (MCSD),  
IPCC

African Ministerial  
Conference on the  
Environment (AMCEN),  
CAMRE

## Membership

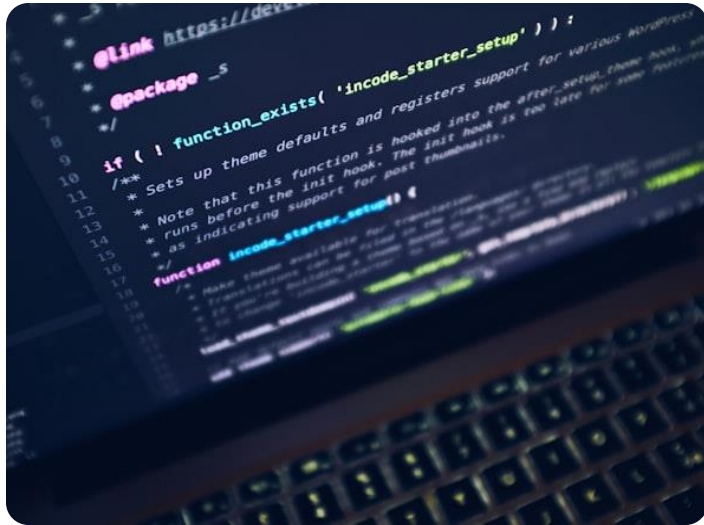
IUCN;  
GWP  
AWC  
UNEP-FI

## Collaborating Center

UNEP initiatives,  
Paris Climate Capacity  
Building (PCCB),  
The Adaptation  
Research Alliance (ARA),  
World Adaptation  
Science Programme  
(WASP)



# Future Outlook and Goals



## Innovation and Adaptation

Looking ahead, CEDARE is committed to fostering innovation and adaptation in response to emerging environmental and developmental challenges, leveraging technological advancements and adaptive strategies.



## Global Partnerships

CEDARE envisions expanding its global partnerships and collaborations to amplify its impact, contributing to transnational efforts towards sustainable development and environmental conservation.



## Legacy and Continuity

As CEDARE charts its course for the future, it remains dedicated to leaving a lasting legacy of sustainable development and ensuring the continuity of its mission for the benefit of present and future generations.



# Thank You

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