



RICCAR



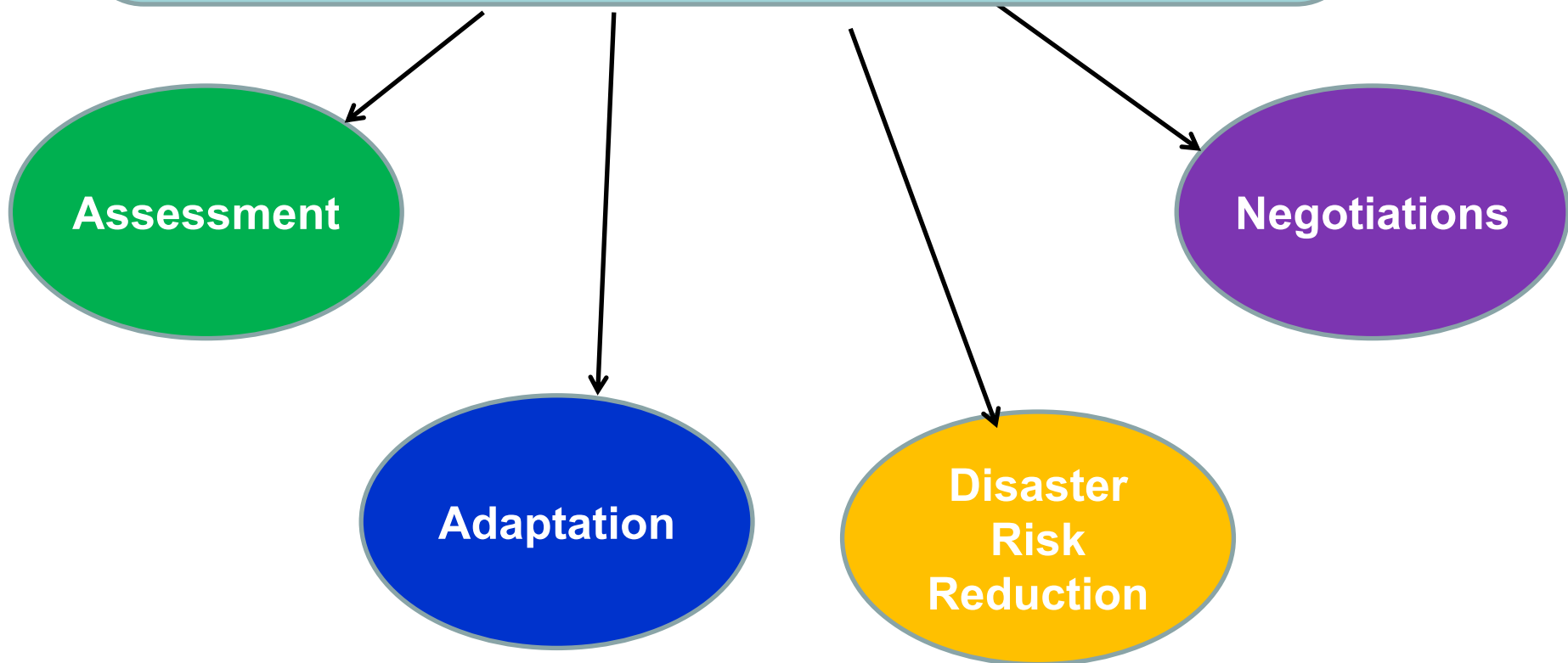
Regional Mechanisms for Supporting Climate Change Negotiations, Assessment, Adaptation and Disaster Risk Reduction

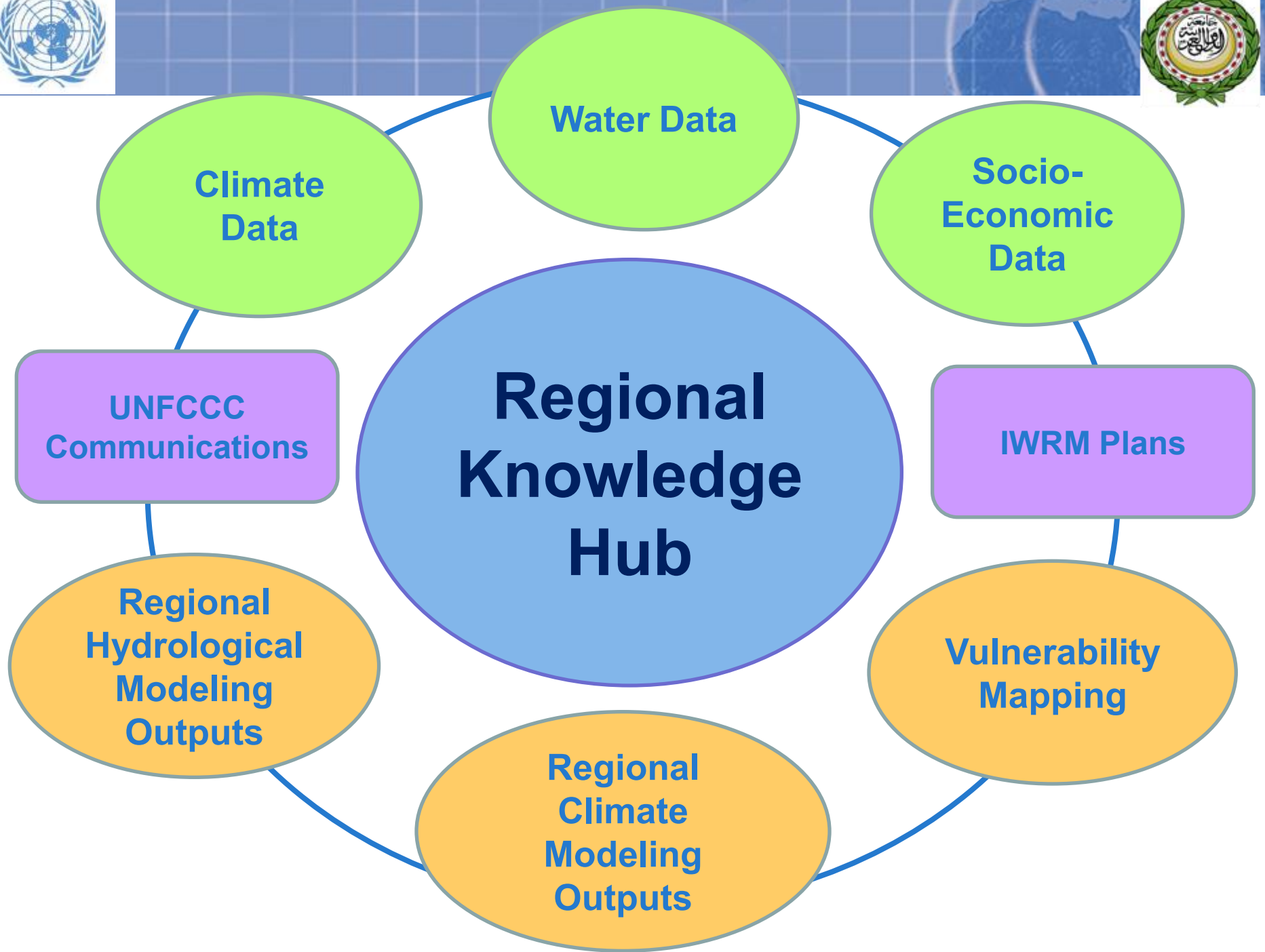
*Tarek Sadek,
Water Resources and Climate Change officer
Sustainable Development Policies Division, ESCWA*



RICCAR: Knowledge & Policy Formulation Tools

Regional Initiative for the Assessment of the Impact of Climate Change on Water Resources and Socio-Economic Vulnerability in the Arab Region (RICCAR)





RICCAR Regional Knowledge Hub



Link to
Proposed
LAS
Knowledge
Networks

Arab Ministerial
Water Council
(AMWC)

Regional
Knowledge Hub

Structure
Approved by
AMWC
(Doha, May 2014)

RKH
Advisors
(GIZ)

ACSAD-ESCWA
Coordinating Secretariat
FAO FENIX Platform

Regional Knowledge Hub Network

- Agricultural Node (FAO)
- Thematic Nodes
- Water & Climate Node

Arab Climate Outlook Forum

Scoping Meeting hosted by Jordan
(Amman, Nov 2014)

Purpose

- Regular **seasonal forecast** products for the Arab region.
- Regional assessments of **climate extremes** based on national inputs.
- Climate/climate change **monitoring and assessment**
- Regional assessment of **climate change scenarios** and their implications.
- Improved and accurate **climate data** and enhanced monitoring capacity.
- Provision of regional climate information to help responding to **user needs** (hydrology, agriculture, health, etc.).
- Regular **capacity development** efforts and promotion of common approaches for climate services by Arab countries
- Better user awareness and sustainable platform for **user interface**.

Governance

- **Approved** by Arab Permanent Committee for Meteorology (Jeddah, 25-30 March 2015)
- **UAE** Met Office offered to host ArabCOF, with budgetary review currently underway with LAS Technical Secretariat and ESCWA.



Regional Knowledge Hub Schematic

Arab Ministerial Water Council (AMWC)

Arab Permanent Committee on Meteorology (APCM)

Regional Knowledge Hub
Arab Regional Knowledge Hub for Climate and Water (mechanism)

Regional Climate Outlook Forum
Arab Climate Outlook Forum (annual meetings)

RKH Advisors

UN-LAS Coordinating Secretariat

UAE Met Service

Knowledge Hub Network

- Agriculture (FAO)**
- Adatpation (tbc)**
- Negotiations (tbc)**

Seasonal Forecasts

Climate Prediction/Projection

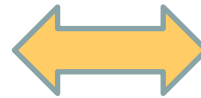
Developing the Capacities of the Arab Countries for Climate Change Adaptation by Applying IWRM Tools

**Impact
Assessment**

Climate Change Adaptation

RICCAR

**UNDA on
CC
Adaptation
(IWRM)**



**Adaptation to Climate
Change in the Water Sector
in the MENA Region
(ACCWaM)**

IWRN-CCA Training Manual (5 Modules):

5 training modules on

- 1) Agriculture (ACSAD/GIZ),
- 2) Economic DV (ESCWA),
- 3) The environment (UNEP/ROWA),
- 4) Health (WHO/CEHA) and
- 5) Human settlements/WSS (ACWUA)

Strategic priority 1: Strengthened commitment for comprehensive disaster risk reduction across sectors

- **Enhance scientific capacities and stakeholder involvement and assess eco-system and water resources risks and forecast.**
- **Develop national and regional adaptation and risk reduction strategies in the eco-system and water sector based on regional impact and vulnerability assessment and support their implementation.**
- **Develop region-specific guidelines and tools and provide technical support to integrate climate change adaptation, DRR and livelihood activities at national and local level**

Strategic priority 2: Better identified, assessed and monitored disaster risks with early warning expanded

- **Develop national and regional adaptation and risk reduction strategies in the ecosystem and water sector based on regional impact and vulnerability assessment and support their implementation.**
- **Assess regional impacts (e.g. floods, droughts, etc.). in terms of water resources and related extreme events**

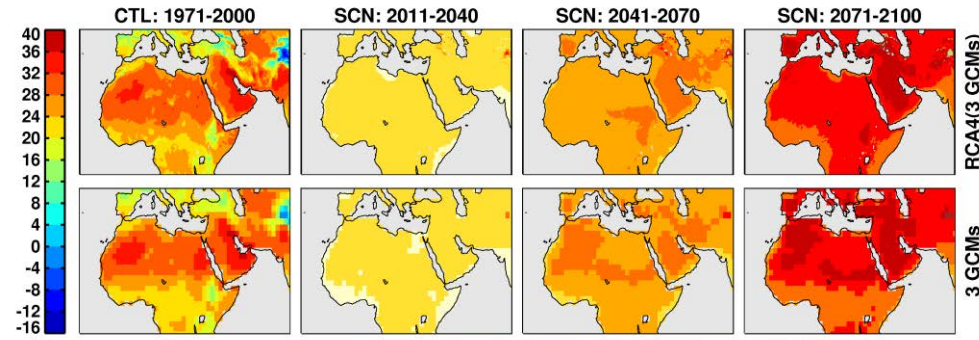
Arab Strategy for Disaster Risk Reduction Action Plan: Linkage to RICCAR

- UNISDR supports selected Arab Countries through RICCAR to build **Disaster Loss Databases (DLDB)**.
- These historical records can be used to validate the projected climate indices on extreme events (e.g. flood, drought, sandstorms, heat waves, etc.) as well as the developed vulnerability maps
- The projected climate variables/extremes can be used in developing short and long term climate change adaptation strategies that will enable managing risks and enhancing resilience.
- RICCAR provided the tools that can be utilized to link the climate risk management to disaster risk reduction (DRR) strategies.

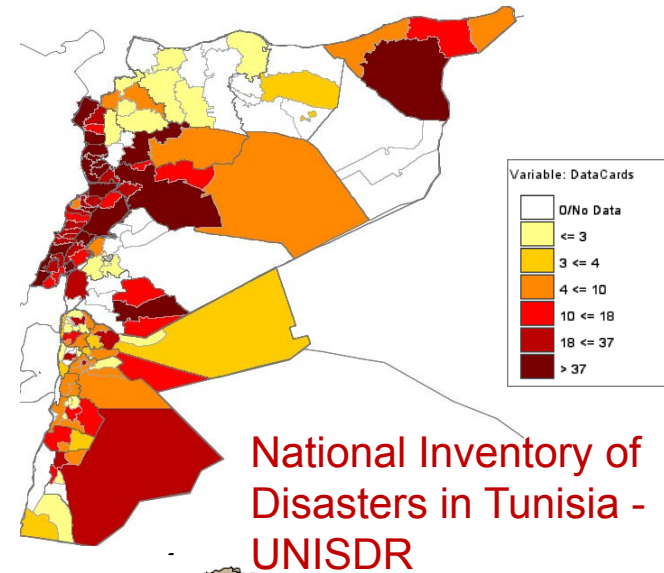
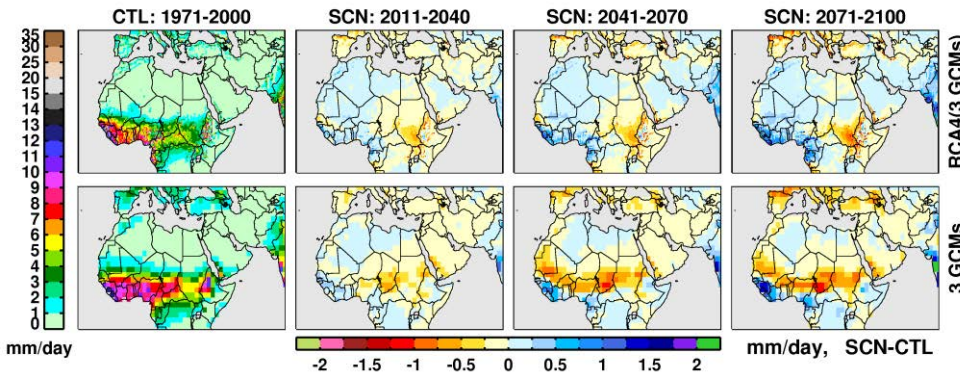
e.g. Use of DLDB to Validate RICCAR Projected Climate for Development of National CCA and DRR Strategies

Frequency of climate related disasters
(Lebanon, Jordan, Syria, 1980-2011) - UNISDR

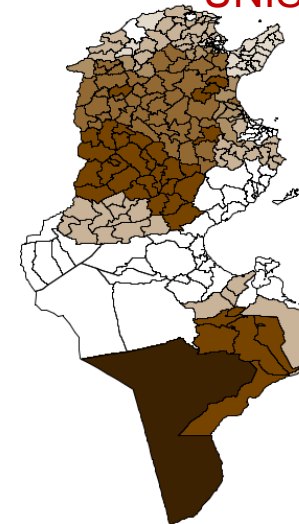
2m Temperature (tas) | JJA | rcp85



Precipitation (pr) | JJA | rcp85



National Inventory of Disasters in Tunisia - UNISDR



Projected climate change impacts on temperature and precipitation till 2100 using RCM in RICCAR

Projected Extreme Climate Indices in RICCAR

Index		Definition	Unit
SU	Summer days	Annual number of days when $T_{max} > 25^{\circ}\text{C}$	days
TR	Tropical nights	Annual number of days when $T_{min} < 20^{\circ}\text{C}$	days
CSDI	Cold spell duration indicator	Annual number of days with at least 6 consecutive days when $T_{min} < 10^{\text{th}}$ percentile	days
WSDI	Warm spell duration indicator	Annual number of days with at least 6 consecutive days when $T_{max} > 90^{\text{th}}$ percentile	days
CWD	Maximum length of wet spell	Maximum annual number of consecutive wet days (i.e. when precipitation ≥ 1.0 mm)	days
CDD	Maximum length of dry spell	Maximum annual number of consecutive dry days (i.e. when precipitation < 1.0 mm)	days
R10mm	Heavy precipitation days	Annual number of days when precipitation ≥ 10 mm)	days

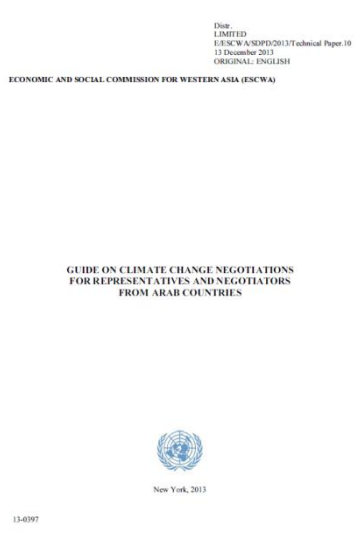
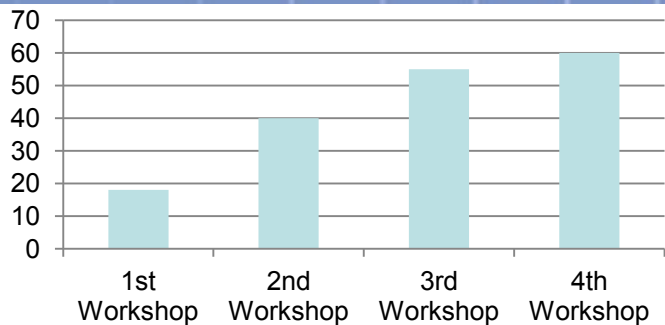
Capacity Development for Climate Change Negotiations

ESCWA organized in coordination with the League of Arab States (LAS) four workshops on capacity development for climate change negotiation, based on resolutions adopted by of the Council of Arab Ministers Responsible for the Environment (CAMRE)

Objectives

- Raising the awareness of new Arab negotiators on climate change negotiations;
- Identifying joint opportunities and challenges in preparing for the drafting of the new climate change agreement at the UNFCCC/COP-21;
- Ensuring an ongoing dialogue on climate change between Arab States;
- Identifying the necessary factors for successful negotiations and building partnerships with non-Arab actors to achieve common goals;

No. of Participants



1- Amman, Jordan 22 - 24 October 2013

- In coordination with LAS
- It aimed to prepare for the UNFCCC/COP-19, held in Warsaw, from 11 - 22 November 2013.

2- Amman, Jordan, 26-28 May 2014

- In coordination with LAS
- To prepare for the 14th session of the subsidiary bodies of UNFCCC, Bonn (4-15 June 2014) and for the Climate Summit, held in New York, on 23 September 2014.

3- Kuwait 11 -3 November 2014)

- In collaboration with the LAS and the Environment Public Authority of Kuwait.
- It aimed to prepare for the UNFCCC/COP-20 held in Lima (1 to 12 December 2014).

4- Doha, Qatar, 19-21 May 2015.

- In cooperation with LAS and the Ministry of Foreign Affairs in Qatar
- to prepare for preparatory meeting in Bonn during June 2015 and the COP-21 in Paris, France end of 2015

RICCAR Partners

Implementing Partners



Cairo Office



United Nations
Educational, Scientific and
Cultural Organization



Donors



SWEDISH INTERNATIONAL DEVELOPMENT
COOPERATION AGENCY



Contributing Research Institutes *supporting Regional Climate Modelling*

- Center of Excellence for Climate Change Research/
King Abdulaziz University (CECCR/KAU) - KSA
- King Abdullah University of Science and Technology
(KAUST) - KSA
- Climate Services Center (CSC) - Germany



Thank you!

www.escwa.un.org/RICCAR