Arab Climate Resilience Initiative

First Regional Consultation Meeting

“Climate Change Impacts in the Arab Region: Water Scarcity, Drought and Population Mobility”

AGENDA

Damascus – Syrian Arab Republic
15-16 September 2010
Climate Change Impacts in The Arab Region: Water Scarcity, Drought, and Population Mobility

Climate change has been called the "defining development challenge of our time" and the Arab region is already the most water-scarce region in the world, and 90% of its surface area lies within arid, semi-arid and dry sub-humid areas. But consensus projections show that the harshest climate conditions still lie ahead.

Climate change scenarios for the Arab region indicate that dry spells will become more pronounced. Projections of the Intergovernmental Panel on Climate Change (IPCC) show a future of reduced rainfall for the region. The Middle East sub-region is very likely to be subject to extreme desiccation in the coming decades, with projected temperature increases in excess of 4°C throughout the far Northern part in summer, and reductions in rainfall exceeding 30% in some areas.

Higher temperatures and less rainfall will reduce the flow of rivers and streams, slows the rate at which aquifers recharge, and render the entire region more arid. These changes will have a series of effects, particularly on agriculture, energy and food security, and malnutrition. Agriculture yields, especially in rain-fed areas, are expected to fluctuate more over time, and to stabilize at lower averages over the long-term. Climate change is also expected to increase the frequency and intensity of extreme climatic conditions and related disasters, leading to more severe events such as droughts, floods, hurricanes and dust storms.

Increasing urbanization and abandonment of rural areas are among the observed impacts of climate change in some Arab countries, and are projected to increase. Shifting rainfall patterns, expanding desertification and falling agricultural productivity are likely to undermine rural livelihoods and accelerate migration to urban areas, where the provision of adequate infrastructure and public services will be a key challenge.

Securing human development in the Arab countries requires that the climate challenge be addressed as an utmost priority. Piece-meal and reactive policy and engineering approaches will not suffice. While the exact impacts to be expected of climate change cannot be fully known, what is certain is that the only responses that will be effective will be those that are coordinated across a range of sectors and institutions, drawing on the energies and responding to the needs of all sectors of society.

2 Data in this section are drawn from: Osman Elasha, Belgie (2010). Mapping of Climate Change Threats and Human Development Impacts in the Arab Region. Regional Bureau for Arab States, United Nations Development Programme.
To support national partners in moving toward integrated responses to key climate challenges, the UNDP Regional Bureau of Arab States (UNDP-RBAS) is preparing an Arab Climate Resilience Initiative to bring a wide range of actors together to develop capacity and build momentum to achieve climate resilience in a rapidly changing environment.

Within this context, the aim of the Climate Change Impacts in the Arab Region: Water Scarcity, Drought, and Population Mobility consultation, organized by UNDP-RBAS in partnership with the Ministry of Environment in Syria, is to bring together policy leaders and experts to examine the dynamics and the policy priorities within a few inter-connected dimensions of the climate change impact that are priorities for many Arab countries. The overall objectives of the meeting are as follows:

- Discuss national and regional priorities as well as opportunities for cooperation among Arab countries in the response to climate change issues.
- Develop recommendations for activities and policies that respond to the priorities.
- Expand the knowledge base and set the pace for policy dialogue on climate change in the region.
- Mobilize key actors to address the related policies and strategic actions.

In this regard, the Arab Climate Resilience Initiative aims to bring together a wide range of actors to develop capacity and build momentum to achieve climate resilience in a rapidly changing environment.

The overall objectives of the meeting are as follows:

- Discuss national and regional priorities as well as opportunities for cooperation among Arab countries in the response to climate change issues.
- Develop recommendations for activities and policies that respond to the priorities.
- Expand the knowledge base and set the pace for policy dialogue on climate change in the region.
- Mobilize key actors to address the related policies and strategic actions.

The meeting is organized by UNDP-RBAS in partnership with the Ministry of Environment in Syria, with the aim of bringing together policy leaders and experts to examine the dynamics and the policy priorities within a few inter-connected dimensions of the climate change impact that are priorities for many Arab countries. The overall objectives of the meeting are as follows:

- Discuss national and regional priorities as well as opportunities for cooperation among Arab countries in the response to climate change issues.
- Develop recommendations for activities and policies that respond to the priorities.
- Expand the knowledge base and set the pace for policy dialogue on climate change in the region.
- Mobilize key actors to address the related policies and strategic actions.

The meeting is organized by UNDP-RBAS in partnership with the Ministry of Environment in Syria, with the aim of bringing together policy leaders and experts to examine the dynamics and the policy priorities within a few inter-connected dimensions of the climate change impact that are priorities for many Arab countries. The overall objectives of the meeting are as follows:

- Discuss national and regional priorities as well as opportunities for cooperation among Arab countries in the response to climate change issues.
- Develop recommendations for activities and policies that respond to the priorities.
- Expand the knowledge base and set the pace for policy dialogue on climate change in the region.
- Mobilize key actors to address the related policies and strategic actions.

The meeting is organized by UNDP-RBAS in partnership with the Ministry of Environment in Syria, with the aim of bringing together policy leaders and experts to examine the dynamics and the policy priorities within a few inter-connected dimensions of the climate change impact that are priorities for many Arab countries. The overall objectives of the meeting are as follows:

- Discuss national and regional priorities as well as opportunities for cooperation among Arab countries in the response to climate change issues.
- Develop recommendations for activities and policies that respond to the priorities.
- Expand the knowledge base and set the pace for policy dialogue on climate change in the region.
- Mobilize key actors to address the related policies and strategic actions.

The meeting is organized by UNDP-RBAS in partnership with the Ministry of Environment in Syria, with the aim of bringing together policy leaders and experts to examine the dynamics and the policy priorities within a few inter-connected dimensions of the climate change impact that are priorities for many Arab countries. The overall objectives of the meeting are as follows:

- Discuss national and regional priorities as well as opportunities for cooperation among Arab countries in the response to climate change issues.
- Develop recommendations for activities and policies that respond to the priorities.
- Expand the knowledge base and set the pace for policy dialogue on climate change in the region.
- Mobilize key actors to address the related policies and strategic actions.
8:30 – 9:00  
**REGISTRATION**

9:00 – 9:30  
**OPENING**

Challenges of Climate Change in the Arab Region

- **Ismail Ould-Cheikh Ahmed**
  UN Resident Coordinator and UNDP Resident Representative for Syria

- **Fatma El-Mallah**
  Advisor to the Director-General on Climate Change, League of Arab States

- **Adel Abdellatif**
  Chief, Regional Programme Division, Regional Bureau for Arab States, United Nations Development Programme

- **H.E. Dr. Kaoukab Al-Sabah Daya**
  Minister of State for Environmental Affairs

9:30 – 9:45  
**BREAK**

9:45 – 12:00  
**PANEL 1**

Water: The Impacts of Climate Change on a Scarce Resource

- **Session Chair:**
  H.E. Dr. Hassan Janabi
  Official Representative of Iraq to the FAO in Rome

- **Monitoring Climate Change Impacts in the Region:**
  Eman Ghoneim
  University of North Carolina

- **Water Scarcity in the Region:**
  Hamed Assaf
  Economic and Social Commission for Western Asia (ESCWA)

- **Climate Change Impacts on Water Resources - National Perspectives:**
  - **Yemen:**
    Naif Abou Lohom
    Sana’a University
  - **Tunisia:**
    Fethi Lebdi
    Director, Institut National Agronomique de Tunis (INAT)
  - **Qatar:**
    Hassan Mohannadi

12:00 – 9:45  
**SESSION 1**

The Impacts of Climate Change in the Region: National Perspectives

- **Yemen:**
  Tawfik Abouhومة
  University of Sana’a

- **Tunisia:**
  Fethi Lebdi
  Director, Institut National Agronomique de Tunis (INAT)

- **Qatar:**
  Hassan Mohannadi
Panel 3: The Impacts of Climate Change on Land Use: Threats to Arable Lands and Food Security

Session Chair:
Ali Ghazi
Expert Consultant, Ministry of Town and Country Planning, Environment and Tourism, Algeria

Projections for the region:
Ali Ghazi

National Perspectives:
- Sudan:
  Ismail Elgizouli
  Environment Advisor, Higher Council for Environment and Natural Resources, Sudan

- Saudi Arabia:
  Mansour Almazroui
  Director, Center of Excellence for Climate Change Research, King Abdulaziz University

- Syria:
  Zuhair Masri
  Syrian Association for Development of the Environment (NADE)

- Egypt:
  Boshra Salem
  University of Alexandria

Discussion

12:00 – 12:15 BREAK

12:15 – 2:15 PANEL 3
The Impacts of Climate Change on Land Use: Threats to Arable Lands and Food Security

2:15 – 12:15 LUNCH

12:15 – 2:15 Projections for the region:
Ali Ghazi

National Perspectives:

Sudan:
- Ismail Elgizouli
  Environment Advisor, Higher Council for Environment and Natural Resources, Sudan

Saudi Arabia:
- Mansour Almazroui
  Director, Center of Excellence for Climate Change Research, King Abdulaziz University

Syria:
- Zuhair Masri
  Syrian Association for Development of the Environment (NADE)

Egypt:
- Boshra Salem
  University of Alexandria

Discussion

2:15 – 3:45 LUNCH

3:45 – 2:15
Session Chair:
Mahmoud El-Solh
Director-General, International Center for Agricultural Research in the Dry Areas (ICARDA)

Regional Perspective:
Mahmoud El-Solh

Monitoring Drought with Satellite Imagery:
Essam Heggy
NASA Jet Propulsion Laboratory, California Institute of Technology

National Perspectives:
- Jordan: Zeyad Makhamreh
  University of Jordan
- Bahrain: Asma Ali Abahussein
  Arabian Gulf University
- Palestine: Ziad Mimi
  Birzeit University

Discussant:
Dia El Din El Quosy
National Water Research Center (NWRC), Egypt
Day 2: September 16, 2010

**Panel 4: Social Impacts of Climate Change**

**Session Chair:** Philippe Boncour

Managing Climate-Induced Migration - Regional Perspective:

**Sudan:** Paul Rushton
Darfur Programme, International Organization for Migration (IOM)

**Morocco:** Mohammed Houymid
Director, National Coordinator of the program for sustainable territorial development of the southern provinces (the South Agency and UNDP)

**National Perspectives:**

- Sudan:
  - National Dialogue on Migration Division, International Organization for Migration (IOM)

- Morocco:
  - Mohammed Houymid
  - Director, National Coordinator of the program for sustainable territorial development of the southern provinces (the South Agency and UNDP)

**Impact on Vulnerable Groups - Regional Perspective:**

**Hamed Bakir**
Regional Advisor Health and the Environment, World Health Organization (WHO)

**Discussant:**
Sari Hanafi
American University of Beirut (AUB)

11:00 – 11:15 BREAK

**Panel 5: Climate Change Adaptation Measures**

**Session Chair:** Ibrahim Abdel Gelil
Arabian Gulf University

**Regional Synopsis of Adaptation to Climate Change:**

**Balgis Elasha**
Climate Change Adaptation Expert, African Development Bank

**A Regional Approach to Adaptation - Africa Adaptation Programme:**

**Case Studies – Morocco and Tunisia:**
Water Resource Alternatives for the Region:

- **Desalination: Case Study-Kuwait:**
  Amr Fadlelmawla
  Kuwait Institute for Scientific Research (KISR)

- **Water Reuse: Case Study-Jordan:**
  Muhammad Shatanawi
  University of Jordan

- **Water Harvesting: Case Study-Tunisia:**
  Mohammed Ouessar
  Institut des Régions Arides

- **Adaptation in Agriculture: Case Study-Morocco:**
  Riad Balaghi
  Institut National de la Recherche Agronomique, Morocco

Financial mechanisms (existing and potential):

- Elie Kodsi
  Drylands Development Centre, UNDP

Discussion