

## Adapting Cities for Climate Resilience

— LUXOR, EGYPT —

# Climate Change in the Arab Region – Challenges and Opportunities

## Background

The population of the Arab region has expanded more than three-fold over the past forty years and is expected to jump to 646 million inhabitants by 2050, with more than three quarters of the population living in cities . Cities are the hotspots of global warming . In the Arab region, the concentration of urban populations and socio-economic activities in areas prone to climatic shocks and stresses are increasing the vulnerability of millions and putting their livelihoods at risk. With increased urbanization, the urban heat island effect is projected to increase night time temperatures by 3oC. This is further intensified due to the encroachment of human settlements on agricultural land, which ultimately leads to land degradation and soil erosion.

Over the past decade, the region has witnessed a serious escalation of drought cycles, the frequency and severity of which are beyond anything seen for hundreds of years in the region. According to the IPCC more than 40 per cent of the people in the Arab region have already been exposed to droughts and other climatic disasters leading to food insecurity, loss of livelihoods, and the displacement of millions.

The Arab region is considered the world's most water-scarce and food-import-dependent region as it contains 14 of the world's 20 most water-stressed countries with annual internal water resources amounting to only 6 per cent of average annual precipitation compared to a world average of 38 per cent. Overexploitation of natural resources in the region has led to severe ecosystem degradation. Furthermore, poor land and water management are reducing the potential provision of already limited natural resource services.

In the past few years, the Arab region has suffered from an increased intensity and frequency of extreme weather events including wildfires in Lebanon and Syria; flash floods in Egypt, Jordan, Oman, and Saudi Arabia; and sand and dust storms in Syria and Iraq which spread to Egypt, Jordan, Lebanon, and Kuwait. By 2030 the predominant effects of climate change will include a decrease in precipitation, a drastic rise in average temperatures and an increase in seawater intrusion into coastal aquifers as sea levels rise and groundwater overexploitation continues. Climate change will also have disproportionate consequences for women, poor and marginalized communities, who are especially at risk due to their dependence on natural resources. Moreover, many cities and urban areas across the region, including 43 port cities, are located in flood-prone areas and coastal zones, making them vulnerable to sea level rise, storm surges, and coastal erosion.

Climate change, coupled with the ever-increasing expansion of human settlements and the poor resource management practices, is negatively impacting the region's key economic sectors, especially agriculture. In the Arab region, more than 50 million people are considered undernourished, and 21.2 million people are food insecure, especially in Palestine, Somalia, the Sudan, the Syrian Arab Republic, and Yemen.

Climate change adaptation initiatives in the region include increasing the resilience and adaptive capacities of displaced persons to climate-related water challenges in Jordan and Lebanon; utilising green reconstruction methods and passive building strategies in Iraq; increasing communities' resilience through integrated natural resource management in Syria; creating more green open spaces to protect cities from dust storms, desertification and sand encroachment in Kuwait and strengthening Government and communities' resilience and capacities to better manage flash floods through the implementation of flood resilient infrastructure in Jordan.

Arab cities need to explore innovative means to integrate climate change adaptation aspects into human settlements planning and upgrading to achieve more resilient cities and reduce vulnerabilities of people and infrastructure in line with the SDGs, the Paris Agreement, and the New Urban Agenda. Climate change adaptation solutions in the Arab region can capitalise on the different climate finance opportunities, prioritizing investment in people-centred mobility and resilient infrastructure; safeguarding coastal urban areas and creating sustainable and climate resilient livelihoods. Recovery efforts from COVID-19 could be the first steps towards investing into a green and resilient future.

## The Roundtable

This Roundtable offers a timely opportunity to shed light on the impacts of climate change as a transboundary challenge affecting Arab cities and increasing the exposure of urban populations to climate-related risks and vulnerabilities, and to showcase how cities across the region are responding and adapting to climate change. The overall goal of this Roundtable session is to enable a platform for exchange of knowledge and experiences on how cities and urban areas in the Arab region are creating resilient and adaptive solutions to the climate crisis, and to stimulate a dialogue on transformative climate finance to maximize climate action in the region.

### Objectives:

1. Provide a platform for knowledge sharing across the region on climate change issues and response methodologies.
2. Exchange ideas on intervention approaches to climate change adaptation issues in the region.
3. Raise awareness about financing for climate change projects in the Arab region.

### Expected Outcomes:

1. Better understanding of the climate change issues that face cities and urban areas in the region.
2. Introduction to alternative solutions and private sector interventions that can support climate change adaptation in cities.

### Key Outputs:

A final report of the event will be produced and disseminated amongst the participants.