

MENA Water World Café 2015 Issue Paper

Water and Climate Change (Group 2)

Brief problem description:

Article 2 of the UNFCCC refers to the dangerous human influences on climate, in terms of whether they would allow ecosystems to adapt, ensure that food production is not threatened and chart a path of sustainable economic development. Global, national and local level measures are needed to combat the adverse impacts of climate change induced damages.

In Arab region as well as MENA region, climate change is expected to affect the quantity and quality of the region's water resources. International studies, including reviews by the Intergovernmental Panel on Climate Change (IPCC), have reported that regions with already scarce water resources, such as the Middle East and North Africa, will suffer even more from water scarcity. Previous regional and local studies of past weather records already show an increase in mean temperatures, and in the magnitude and frequency of extreme temperatures.

Increasing temperatures, coupled with changing precipitation patterns, are expected to decrease surface water availability, and, acting on top of other stresses, increase water scarcity in the Arab region. Many countries in the Arab region are ranked among the poorest countries in the world in water availability, with a current per capita availability of 75 l/day - approximately 1/10th that of, for example, any Western European country. In addition, the region population continues to grow and there are greater than ever demands on its water supply. Current water usage exceeds available water rights and groundwater wells are being exploited at unsustainable rates.

Adverse impacts of climate change will negatively affect progress toward development in a number of key areas including agriculture and food security, water resources, public health, climate-related disaster risk management and natural resources management. The Government of the region should take these impacts into account in all its national planning efforts. In addition, it is anticipated that climate change will constrain the ability of developing countries to reach their poverty reduction and sustainable development objectives under the United Nations' Millennium Development Goals (MDGs). The achievement of the MDG targets will depend on effective planning for managing climate risks.

A number of constraints exist with regards to ensuring resiliency of the MDGs in the context of emerging climate change pressures. Within this context Arab Region needs to face various important issues, such as: weak capacities of national agencies, local authorities and vulnerable communities to develop coping mechanisms and strategies on adaptation and risk management; lack of tools and systems to enable appropriate planning and implementation of climate change adaptation; and a general lack of information on technological adaptation and sustainable development. These issues will be discussed in the MENA Water World Café 2015 roundtable discussion "Water and climate change (Group 2).

Objective:

Discuss water and climate change in MENA region

Expected outcomes:

1. How to increase knowledge and understanding about risks from water-related climate change impacts?
2. Pro and contra for adoption of integrated flood / drought risk management, including an appropriate mix of structural and non-structural approaches?
3. Needs for implementation of monitoring and early warning systems for risks from water-related extreme events?
4. Needs for an improved preparedness approach to manage water-related extreme events?

Key messages - Resilience to water-related extreme events:

1. Suggested capacity building programs at national and regional level, encompassing participation, needs and rights of vulnerable individuals and groups.
2. Droughts and floods occur everywhere, but where water is managed properly, their impacts are greatly reduced and only catastrophic in rare and extreme cases.
3. The long-term monitoring and reporting systems are be an integral part of any risk assessment and of extreme events and should be used to set up plans and strategies for integrated disaster risk management.
4. Investment in preparedness is highly cost-effective.