



Future Earth and the Challenges of Climate Change in the MENA Region

Manfred A. Lange

Future Earth MENA Regional Center, The Cyprus Institute, Nicosia, Cyprus (m.a.lange@cyi.ac.cy)

Anticipated climate changes in the Eastern Mediterranean, the Middle East and North Africa (MENA Region) have been projected to exceed the global means. The MENA Region has therefore been designated as one of the global “climate change hot spots” (Giorgi, F., 2006). This implies impacts on environment and societies of enhanced magnitude and calls for stringent and effective adaptation strategies and measures.

However, the MENA Region also faces a number of additional challenges that have to be seen as exacerbating climate change impacts (and vice-versa). This includes a rate of population growth that has been identified as one of the highest rates globally, with a 3.7-fold increase in population from 1950 to 2000. The region is expected to continue to see a roughly doubling of its population until 2050 (Population Reference Bureau, 2001). Significant gender inequalities and an extremely high rate of youth unemployment are repercussions of such developments that exacerbate the societal pressures and tensions in the region. Furthermore, the continued growth of large urban centers and the known enhancements of climate change impacts in urban settings add to the risks to urban communities posed by anticipated warming.

In addition, the events of the “Arab Spring”, have resulted in major political, economic and societal transitions and have frequently been (and are still) accompanied by significant armed struggles within and between countries of the MENA Region. These developments render the MENA Region to one of the global “political, societal and humanitarian hot-spots” with extremely high risks regarding political and societal stability and limit the prospects of sustainable development in the countries of the region.

Responding to these challenges requires integrated science and a close relationship between policymakers and stakeholders, a need that Future Earth (www.futureearth.org) has been designed to respond to. In order to address the requirements of nation states and local communities, Future Earth has adopted a regional governance structure. This has resulted in the establishment of the Future Earth MENA Regional Center at the Cyprus Institute (FEMRC; <http://www.futureearth.org/mena-centre>) in Nicosia, Cyprus.

In order to address the described risks and challenges, a solid knowledge base and suggestions for effective mitigation and adaptation strategies are urgently needed. This requires comprehensive assessments of the combined risks posed on the MENA Region in light of the climatic and societal challenges as described above. In addition, these risks will have to be effectively communicated to stakeholders and the research community in order to outline, specify and implement research towards efficacious mitigation and adaption strategies aimed to minimize adverse effects of challenges posed by climate and societal changes in the MENA region.

To this end, the first draft of a “Future Earth Research Strategy for the MENA Region” has been formulated by the FEMRC and its Regional Advisory Committee, which will be introduced in this paper.