



Climate Justice in the Middle East – ME

Climate change is one of the most important issues facing human civilization, yet a status quo of inaction and delay has rung true for many governments worldwide in recent decades. Ample literature and discussion addressing the physical impacts of climate change has failed to be matched by a parallel engagement from the social sciences to evaluate impending societal impacts. This trend has served to deepen the prospective longevity of harmful anthropogenic impacts, originating from mankind's excessive carbon footprint.

Since the impact of Climate Change in our region are predicted to be on wider scale than single country borders, and targeting mitigation of climate risks should be to our view a shared target and efforts for regional transformation by neighboring countries, governments, researchers and civic society organizations - AEJI has established Climate justice group to act regionally.

Climate change in Israel and the Middle East (ME)¹

The Middle East region faces distinct pressures from climatic effects projected to target the Mediterranean Basin and the ME in particular. According to scientific researches, in the last few decades, in the ME since 1950 there has been an increase in aggregate temperatures, a decrease in the number of cold days, and an increase in the amount of warm days.¹ Eastern Mediterranean and the ME may be exposed to 2–3 months more combined tropical nights and hot days, while the northern part could experience increased heat wave amplitudes ranging from 6-10 degrees Celsius.² Regional climate change models for the Eastern Mediterranean predict a further increase in the frequency and duration of severe droughts;³ the observed wintertime Mediterranean drying over the last century corresponds to the region's "sensitivity to a uniform global ocean warming and to modest changes in the ocean's zonal and meridional sea surface temperature (SST) gradients."⁴

¹ The full background is included in AEJI CCS|NS|RS Synthesis report no. 1 by Joel A. Gordon, ed C. Lubanov (2017) "Mitigation of Climate Risk and Adaptation to Climate Security in Israel and the Middle East: Policy Measures toward Geopolitical Cooperation and Regional Transformation".



The Intergovernmental Panel on Climate Change (IPCC) has identified the Mediterranean region as a climate change 'hot spot,'⁵ with most counties of the Eastern Mediterranean already experiencing temperature rises;⁶ accompanied by growing rates of desertification, increases in freshwater scarcity, forest fires, and increasing drought frequency.⁷ The warming trend witnessed in recent years is expected to continue based on IPCC models, with average temperatures in Israel set to rise a further 1.5 °C within the next few years; reaching 5 °C towards the century compared to 1960-1990 levels.⁸ The largest form of climate change, however, corresponds to a decrease in precipitation in the Eastern Mediterranean and the ME caused by a decrease in storm track activity over the Eastern Mediterranean.⁹ While precipitation is predicted to decrease by 20% by 2050, sea level rise in the Mediterranean is estimated to hit one meter by 2100, following 0.5 meters by 2050.¹⁰ In terms of regional hydrology, the combination of higher temperatures and lower levels of precipitation will reduce the flow of rivers and streams.

In the ME region, climate change will bring a stream of consequences, especially for agriculture, river flows and the rate at which groundwater aquifers replenish.¹¹ Furthermore, increased rainstorms, erosion and runoff will affect the natural rates at which aquifers recharge, adding further water stress to the region.

The ME's transboundary rivers provide about 60 % of its freshwater supplies, which the World Bank reported to be the highest rate of dependence on international basins in the world.¹² To make matters worse, these transboundary rivers have asymmetrical upstream and downstream power relations, which further complicates access and control over water resources.¹³

In sum, climate change is highly likely to influence ME's water resources, while agriculture, biodiversity and public health are extremely vulnerable to changes in climatic conditions. Due to the unequal distribution and scarcity of water in the Middle East, there is an underlying reason for it to be deemed a long-term security concern linked to climate change. Strategic policy must be formulated and implemented to anticipate for the widespread and interconnected impacts of climate change, with social security and climate refugees. These impacts are already visible today and will further intensify in the days to come, with probable damages more severe in the Middle East than in other regions of the world.



References:

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- ⁹ <http://link.springer.com/article/10.1007/s10584-008-9438-5>
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