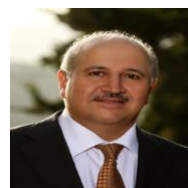


The need for a specialized center for drought, flood management in Jordan



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Like most of the countries in arid and semi-arid regions with seasonal variations in rainfall patterns, Jordan faces high risks due to climate change, particularly from droughts and flash floods. According to a 2015 joint study by Stanford University and the Ministry of Water and Irrigation, which analyzed data from 58 climate stations between 1970 and 2013, annual rainfall has dropped by about 0.4 mm each year. Projections suggest it could decline by as much as 30% by century's end, with temperatures expected to rise over 2°C above the global average unless effective countermeasures for adaptation and mitigation are implemented. These climate shifts as per the study results will likely lead to more frequent and severe droughts and flooding in the years ahead, as also confirmed by many other regional and international studies.

In the past five years alone, Jordan has experienced several severe flash floods. For e.g., the 2018 Wadi Zarqa-Ma'in incident and recent flooding in Wadi Abu al-Zeigan, as well as the severe drought that affected the country last year. During that period, rainfall did not exceed 45 per cent of the long-term average, significantly influencing economic performance. These events highlight the need for a dynamic and local understanding of such phenomena, best supported by a specialized research and study center. This is crucial given their extensive impacts on water resources, agriculture, municipal operations, and civil defense. A center dedicated to these studies would be able to address the challenges holistically across all relevant sectors.

The proposed center would collect, store, and analyze vital data, utilize advanced simulation modeling techniques in partnership with national institutions, integrate with global climate and weather prediction models, and leverage AI and satellite technology. It would also suppose to enhance and boost national capacity building and expertise in this field. The drive to create such a center would likely attract international financial support aimed at combating climate change and strengthen Jordan's ability to predict, formulate policy, and develop legislation around these issues. Its findings would be directly linked and shared with key ministries and institutions, such as The National Center for Security and Crises Management, the Municipality of Amman, Ministries of Municipalities, Water, Agricultural, and Environment.

By taking this step, Jordan can foster greater NEXUS, coordination and integration among all concerned parties, bolstering their resilience against climate change and improving the management of challenges affecting citizens and farmers alike. Since climate change poses a persistent, long-term threat rather than just a seasonal event, preparing now is essential to safeguarding the country's future generations.