A Case Study on Impact of Climate Change and Adaptation in Kabul Metropolitan Area

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Abstract : The aim of this paper is to study the behavior or influence of climate adaptation and change in Kabul Metropolitan Area (KMA). The Kabul Metropolitan Area (KMA) in Afghanistan includes Kabul existing city and Kabul New City (KNC). Kabul Metropolitan Area has admitted the challenges due to climate change, which includes, natural climate change, social transformations, city landscape, economic and political issues, etc. KMA will withhold a large population within its boundaries. The main problems competed in KMA were the temperature changes over the years, especially in Hindukush and Central Highland of Afghanistan from 1950 up to 2010, 1°C and 1.71°C raised respectively and reduction of water table in existing Kabul city due to the use of more water from underground water resources. Moreover, the cause of temperature rise, the precipitation in spring season and melting of snow early or melting in compressed time as well as the water source is directly related to the capacity of the mountains snow and precipitation. In addition, the temperature increased, and precipitation declined in spring period. It is directly related to separation of dissertation, migration to the cities and other challenges that we will discuss in this paper.

Keywords : climate change, climate adaption, adaptation in Kabul metropolitan area, precipitation

Conference Title : ICUEEE 2017 : International Conference on Urban Engineering, Environment and Ecosystem **Conference Location :** London, United Kingdom **Conference Dates :** July 24.25, 2017

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