

A REVIEW OF POTENTIAL NATURAL DISASTER IN THE NORTHERN REACH OF CPEC PAKISTAN

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Abstract

China Pakistan Economic Corridor (CPEC) is an important segment of the President Xi Jinping of China, One Belt One Route (OBOR) philosophy to extend their reach to the global market by 2030. CPEC is considered a destiny changer for Pakistan, which will usher multitude of opportunities for economic, infrastructure and energy sector developments. The northern part of the CPEC route is faced with multitude of natural disaster such as earthquake, slope Instability in terms of rock fall, landslide, floods, Flash Floods and Glacial Lake Outburst Flood (GLOF). The frequency of earthquakes and its intensity in last two decades due to the plate tectonics of the region has made it the seismically the most active part of the world. The major slides leading to formation of lakes like Attabad, flash floods in the region and debris flows due to GLOF are some of the most recent natural disasters observed in the last two decades. To mitigate these impacts detailed analysis of various natural and manmade phenomenon is required which include Seismic Hazards/Vulnerability Analysis, Flood Hazard Analysis, Landslide Hazard Analysis , Forestation and Reforestation Analysis, Snow and Debris Hazard Analysis, Environmental Impact Assessment , Land Erosion Analysis – Climate Change Impact on Glaciers – GLOF etc. In this review paper a detailed account of the natural disasters experienced by the northern part of the CPEC has been provided with further recommendations for its mitigation. The success of CPEC in terms of economic prosperity of the region will also depend on the safety of the corridor from natural and man-made hazards.

Keywords- CPEC, natural disaster, GLOF, earthquakes