



# China-Pakistan Economic Corridor (CPEC): melting glaciers—a potential threat to ecosystem and biodiversity

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Dear editor,

The Northern Pakistan is blessed with three out of seven world's largest glaciers. It is home to 5218 glaciers approx. (spread over an area of about 15,040 km<sup>2</sup>) and ice reserves on 2738 km<sup>3</sup> (Gilany and Iqbal 2016). These glaciers are the important sources of water for the rivers and stabilize both regional and global climatic alterations (Kääb et al. 2012). Tragically, these glaciers are melting rapidly on account of various anthropogenic activities and global warming (Gilany and Iqbal 2016) at the rate of 0.66 m/year (Kääb et al. 2012). According to the Intergovernmental Panel on Climate Change (IPCC), half of the total global mountain glacier mass could disappear by the year 2100 (Watson et al. 1996). Furthermore, with the construction of China-Pakistan Economic Corridor (CPEC) project, approximately 7000 trucks per day will pass through this area, leading to the emission of up to 36.5 million tons of CO<sub>2</sub>. Such emission will severely reduce the mass of the glaciers and will likely result in extreme flooding (Laghari 2013). One of the drastic consequences will be in the form of water famine, which is predicted to be as early as 2025 (Qazilbash 2017), while the ultimate outcome of the water famine will be in the form of negatively affected and downregulated agriculture—low food yield against the swiftly growing population (Qazilbash

2017), hydroelectricity generation, and water-based operating industries. Changes in the pattern, mass, and scale of the glaciers and deteriorated natural environment will not only affect the local biodiversity through the heavily trafficked CPEC highways (Nabi et al. 2017) but will also strongly affect the marine biodiversity in the coastal areas of the Arabian sea and Gwadar Port Pakistan. Seemingly, CPEC appears to be a blessing for the economy of the involved countries (Ebrahim 2016), but on the other hand, it will be a tsunami for the glaciers, natural environment, and biodiversity of Northern Pakistan. Therefore, it is very crucial to have a deeper look down into the potential negative impacts and consequences of CPEC project concerning floral and faunal biodiversity. There is an urgent need for monitoring, planning, and managing the environmental risks and biodiversity-related issues by specialized scientists from both the countries, China and Pakistan. The ecological alterations, melting glaciers, drenching rivers, and alarming threats to the biodiversity should be treated on a priority basis. Moreover, to reduce the emission of carbon, electric vehicles should be employed instead of oil-based vehicles and the resulting hazardous wastes from these vehicles should be managed and disposed of carefully in order to ensure eco-friendly corridor.

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