CHANGE OF EQUILIBRIUM LINE ALTITUDE (ELA) IN RESHUN GLACIER, CHITRAL, KP, PAKISTAN Manzoor Ilahi

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Abstract

The global climate change and associated phenomena has resulted not only in disappearance of some of the glaciers of the world but is also an eminent threat to the existing glaciers. This has resulted in a severe repercussion on the availability of natural water resources for the agricultural, civil and industrial purposes. This study reveals to find out the fast retreating of Reshun Glacier. Chitral lies in the northern temperature zone having high elevated peaks with glaciers. Reshun Gol is comprised of two main valley glaciers, Shahkoh and Lotshal with many tributaries. The data was collected through yearly field visits from 2009 to 2017 and Geographic Information System (GIS). The data obtained from the glaciers shows 29 m snout recede from 2009-2013 and 61 m recede from 2013- 2017 in Shahkoh Glacier. Similarly, 44 m snout recede has been recorded from 2009-2013 and 71 m recede from 2013-2018 in Lotshal Glacier. This study shows that these glaciers are retreating at a very fast rate. If this continues, within a few decades the glaciers in Reshun Gol will disappear. Recommendations are made for reducing the fast rate of retreating of the Reshun glaciers by controlling overgrazing, afforestation and modern methods like glacier sheeting.