

A Short Note on Retreat of Himalayan Glaciers

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DESCRIPTION

The water on earth is covering 71 percent of earth's surface, on that 95 percentage of water is sea water and remaining 5 percent is fresh water, 80 percent of fresh water is in solid state in the form of mountain glaciers, ice caps and snow covers. Glacier is well known as huge fresh water reservoir in the form of snow and ice, the glacier melt provides drinking water. The largest glacier in the world is Lambert Fisher Glacier located at Antarctica with 400 kilometers long. In India Siachen Glacier is the largest glacier with 75 kilometers and it is world's 4th largest glacier and outside of the polar region it is the world's second largest. Siachen Glacier is well known as costliest battlefield. Himalayan mountain system is located in South and East Asia spans along 2,500 kilometers. Himalayas are home for 32,392 glaciers in which most of are unexplored. The total area of greater Himalayan region is 114,800 kilometers, and the data based on Indian remote sensing in last 40 years most of the glaciers disappeared, in 1962 the glacier area is 2077 square kilometers and now the glacier area is reduced to 1603 square kilometers at Chenab, Baspa and Parbati basins having glaciers Patsio, Samudra tapu and Chhota Shigri in Chenab basin and Shaune Garang glacier in Baspa basin and Parbati glacier in Parbati basin. The number of glaciers is increased due to fragmentation but the mean glacier area is reduced from 1.4 to 0.3 square kilometers. Retreat of glaciers is important to save the world from global warming.

During the last three decades of 20th century all the glaciers are under observation. Melting of glacier ice is maximum from mid-

July to mid-august. The source for ten largest rivers in Asia outside the polar region is Hindu Kush Himalayan (HKH) region. In the hydrologic continuum surface water and ground water are inherently interconnected. Physical, biological, chemical and energetic properties of water are modified with the interactions between surface and ground water. The Hindu Kush region is extended in eight countries they are India, Bhutan, Nepal, Bangladesh, Myanmar, Afghanistan, China and Pakistan is over 3,500 kilometers and sources for major river system in Asia, they are Indus, Brahmaputra and Ganges. Nearly 1.3 billion people directly depend on glacier ecosystems for drinking water, power and irrigation. Water scarcity will affect the urban and rural poor most severely.

A recent study states that around two-third of the Hindu Kush Himalayan (HKH) region glaciers will disappears, if the CO₂ emissions are not cut drastically. Partially burnt fossil fuels are reason to air pollution in the form of black carbon dust air. When this black carbon dust deposits on ice it leads to absorb more heat and causes to fast melting of ice. If the melting of ice is more it leads to risk of rivers flooding and breaking of dams build on those rivers. Global warming leads to change of monsoon timings in Asia. With the effect of global warming water flow in the Glacier Rivers is increased in spring season and also monsoon timings are also changed, then summer will face severe water scarcity. Evident danger is in front of us for current and to our future generations with global warming. The only solution to retreat of Himalayan Glaciers is to prevent global warming.

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