GLOBAL WARMING AND DRYING OUT OF GLACIER BED ON THE HIMALAYAS

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ABSTRACT

The present work deals with the important issue – whether or not the global warming is taking place? Here, the reasons behind the melting away of the Himalayan glaciers are discussed first. This is confirmed by evidences presented.

INTRODUCTION

There have been recent controversies regarding global warming – whether or not it is real. The issue is very serious since it affects large fraction of world population which lives on banks of rivers arising from the Himalayan Mountains. These populations cannot remain at the present locations mainly on the water fed by rain only.

The scientists working in this field have relied on data which can have interpretations either way – for or against the global warming [1-4].

EVIDENCE OF GLOBAL WARMING

Important factors which will support the global warming are: (1) Defective heat transfer model of glacier melting at higher elevations near the Tibetan plateau, (2) Secrecy of relevant governments in publishing the flow data of the rivers arising from the Himalayas.

The heat transfer model is defective since it has been assumed by mainly western researchers that the temperature decreases with height above sea level irrespective of topography. However, in the case of Himalayas, the Tibetan plateau has large surface area and is elevated which causes large radiosity of sun's energy thereby warming up the atmosphere near it where the glaciers are located at.

The lack of availability of flow data has the effect of keeping a lid on the seriousness of the water shortages along the banks of the rivers.

To understand conclusively that the global warming is real, all one has to do is to look at Figs 1 to 4 which show the dried out glacier bed. This drying up of the glacier bed can be easily understood from the fact that the elevated Tibetan plateau has kept the temperature above the ice surface much higher than the melting temperature of ice. Secondly, the high winds at that level cause high heat transfer exchange between the ice surface and the atmosphere at those elevations thereby melting the glaciers.

CONCLUSIONS

In this work, at first the difference in opinion about the global warming was discussed. After that, the factors which could have clarified the matter were mentioned.

Finally, evidence of global warming and its causes were presented.

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DRIED OUT GLACIER- BED (BALTORO GLACIER) IN KASHMIR ON THE HIMALAYAN MOUNTAINS (courtesy by Adil Kalyal)



FIG 1



FIG. 2



FIG. 3



FIG. 4