GEOTHERMAL SPRING DISCOVERED AT SIACHEN INDIAN HIMALAYAS

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Majority of natural geothermal springs are manifestations of Agneyodgara which means energy from Lava at shallow to produce Giga Watts of sustainable renewable and economical energy for all depths. These springs are found in abundance in the Himalayan region, generally confined to tectonic boundaries related to tectonic collision, subduction and geodynamic upliftment of the Himalayas. Estimated Geothermal potential 10000Mw(GSI) but more than 100GWs if Angeyodgara sites are developed[1].

Their use for bathing and religious purposes has known to be in use since time immemorial. The present paper highlights the discovery of warm-water by drilling in the snout of Siachen glacier Base, which is sandwiched between the granites of Karakorum, Indian Himalayas, at an altitude of more than 3000 m above the mean sea level.

The discovery of geothermal reservoir at Siachen in the granites is important because it is the first geothermal fluid actually discovered by drilling a borehole at a site where no hot water was reported earlier to discharge at the surface. Using geothermal source for direct heating in the remote areas of the Himalayan region specially for bathing, washing, clothes, utensils, space heating in green houses to grow vegetables and fruits even in winters and make cold storage to be used in summers. This micro-geothermal utilisation of the resource could revolutionize the energy scenario in the remote area and reduce the dependency on fossil fuel which is not only expensive but also unavailable in remote corners. Moreover developing these sites for geothermal tourist destinations by building good infra structural facilities can also change the socio – economic status of the local inhabitants on sustainable basis.