

## Tehri dam held raging Ganga and saved lives, July 23rd



India: Tehri dam held raging Ganga and saved lives

Heavy floods affected Uttarakhand in India, at the border with Tibet and Nepal, during last month of June. The water inflow from Bhagirathi and its tributaries reached about 7,000 cubic meters per second. If that flow had gone uninterrupted, it would have caused extreme consequences. In the city of Rishikesh, the Ganga would have been flowing 5 meters above the danger level.

But that water inflow was stopped, thanks to the Tehri dam, which stored most of the supplementary water. As a result, the water inflow was reduced to a mere 500 cubic meters per second and the cities downstream (Rishikesh and Haridwar) were protected. An official from Tehri Dam authority explained that, while most power projects in Uttarakhand had stopped generation due to heavy silt depositing in the turbines, the Tehri and Koteshwar dams continued to generate power (respectively 1000 and 400 MW) as usual because they are reservoir storage projects.

A report quoted in the Times of India said the fury of nature in Uttarakhand was such that waters rose as high as a four-storeyed building at Devprayag, where the Alaknanda and Bhagirathi meet, in a 24-hour period after the June 16-17 cloudburst. This rise was unprecedented and could have resulted in total destruction of Rishikesh town and much of Haridwar if the flow of Bhagirathi was not contained by the Tehri reservoir, according to officials of the Tehri Hydro Development Corporation (THD). Rishikesh is famous for its ashrams, which would have been all wiped out.

In Germany, similarly in June, a recently upgraded Sylvenstein dam has protected the city of Munich. An officiel from the Land of Bavaria, Tobias Lang, commented: "The benefit of this reservoir has been enormous, the investment in upgrading measures have more than paid off during major flood events of 1999, 2005 and 2013. It's not easy to find a structure designed to provide protection against natural disasters which has provided such a quick return on investment."