

To,
The Additional Chief Executive Officer (Admin.)
Uttarakhand State Disaster Management Authority,
IT Park Sahastradhra Road

Date: 29.08.2024

Subject: Update on the Monthly Progress Report for the Project “Long-term Monitoring of Gangotri Glacier, Garhwal Himalaya”

Dear Sir,

Reference: Letter No. 493/USDMA-2024 dated 7th June 2024.

Regarding the above-referenced letter concerning the submission of the monthly progress report for the project titled “**Long-term Monitoring of Gangotri Glacier, Garhwal Himalaya,**” sponsored by the Uttarakhand State Disaster Management Authority (USDMA) and undertaken by the Wadia Institute of Himalayan Geology (WIHG) in March 2022. This project aims to map and monitor the Gangotri glaciers and their associated glacial lakes, collect meteorological and hydrological data, assess glacial hazards, and disseminate information regarding potential threats to The USDMA. In this context, we would like to inform you that a network of 2 Automatic Weather Stations (AWS), 1 Automatic Water Level Recorder (AWLR), and 2 broadband seismic stations was installed in the basin during October and November 2023.

However, I regret to inform you of an unfortunate incident involving our AWLR installed at Bhojwasa in November 2023 under the project mentioned above. As informed by our watch and ward staff, on 4th August 2024, due to an unusually high discharge and sediment in the river, our AWLR was washed away (**Figure 1**). Despite efforts by the staff to retrieve the instrument, they were unsuccessful due to the high water and sediment in the river. It has also been reported that debris was carried downstream from the Gomukh region with the water.



Figure 1: Location of the Automatic Water Level Recorder during the pre-and post-flood events in Bhojwasa.

Continuous rainfall was observed on the 3rd and 4th of August, which, along with other glacier-related activities, may have contributed to this event. Additionally, travel from Bhojwasa to Gangotri is currently difficult due to the unavailability of bridges at certain locations. The team from the Wadia Institute is going to Gangotri Glacier during the first week of September for assessment and to understand the causes of this flash flood event. The detailed report for this event will be submitted after the completion of fieldwork. This incident has significantly impacted our ongoing data collection and monitoring activities. Manual observations have been initiated to record the water level at Bhojwasa to restore our operations.

Please note that, except for the AWLR at Bhojwasa, the other instruments are currently operational, as confirmed by the watch and ward personnel. Thank you for your attention to this matter.

Dr. Amit Kumar
Scientist C
Wadia Institute of Himalayan Geology, Dehradun