

June, 2025

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

Subject: Monthly Progress Report for the Project “Long-term Monitoring of Gangotri Glacier, Garhwal Himalaya” (**Reference:** Letter No. 493/USDMA-2024 dated 7th June 2024 and email dated 04.11.2024)

Dear Sir,

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.

During the visit, it is observed that the glacier snout, along with the emerging Bhagirathi River, was clearly visible, with sediment-laden meltwater actively flowing out from the glacier’s snout (**Figure 1**).



Figure 1. View of the snout of the Gangotri Glacier (Gomukh) in June, showing the emerging Bhagirathi River and the base camp with the position of installed instruments.

A decrease in snow cover was observed with the onset of melting, driven by gradually rising temperatures during June. The instruments installed at Bhojwasa and Chirwasa were found to be functioning properly, as verified during the visit. In addition, satellite imagery was analyzed to detect any major events, such as debris flows or the formation of new glacial lakes. Both field observations and remote sensing analyses conducted during this period confirmed the absence of debris flows, major glacial lake formation, or significant geomorphic disturbances in the vicinity of the Gangotri Glacier. However, a few small supraglacial lakes were observed over the ablation zone of the Gangotri Glacier.

Thank you for your attention to this matter.

Amit Kumar

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