

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

Date: 29.07.2024

Subject: Submission of monthly progress report

Dear Sir,

Regarding letter no. 493/USDMA-2024 dated 7th June 2024, 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). I would like to provide the following update. Funded in March 2022, this project aims to map and monitor the Gangotri glaciers and their associated glacial lakes, track meteorological and hydrological parameters, assess glacial hazards, and disseminate information regarding potential threats to local authorities from the Goumukh region.

The project includes several key activities: mapping and monitoring the Gangotri group of glaciers and their associated glacial lakes; tracking meteorological parameters (temperature, rainfall, and snowfall) and hydrological factors (water levels and velocity) while identifying extreme events; assessing risks related to glacial hazards such as glacial lake outburst floods (GLOF), debris flows, and flash floods through an integrated approach using meteorological, hydrological, seismological, and satellite data; and disseminating information to local authorities about potential threats from these glacial hazards.

In this context, we would like to inform you that a network of 2 Automatic Weather Stations, 1 Automatic Water Level Recorder, and 2 broadband seismic stations was installed in the basin during October and November 2023. On 4th July, the area experienced continuous rainfall, which resulted in damage to the bridge and track route. This incident occurred in the evening on the Gangotri-Gaumukh trek, where a culvert over a nullah was damaged due to rising water levels due to the flood-like conditions in the tributaries leading to the Gangotri Glacier. According to the watch and ward personnel, the Bhagirathi River level reached the base of the Automatic Water Level Recorder in Bhojwasa, causing river erosion.

We plan to collect data from these instruments after the monsoon. Currently, the instruments are operational, as confirmed by the watch and ward personnel.

Sincerely,

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

I/216306/2024

493
Letter No: /USDMA- (2024)

From,

Additional Chief Executive Officer (Admin.),
Uttarakhand State Disaster Management Authority,
36 , IT Park, Sahastradhara Road Dehradun

To,

Director,
Wadia Institute of Himalayan Geology,
Dehradun

USDMA

Dehradun Date: 07 June, 2024

Subject: Regarding submission of monthly progress report for the 'Long term monitoring of Gangotri Glacier project'

Dear Sir,

This bears reference to the **High Court Order No: 148/2017 Ajay Gautam vs. State** it is mandatory to maintain monthly monitoring reports of Gangotri glacier to check any sudden breach at the site. Consequently, with respect to the meeting held on 22nd April 2024, under the chairmanship of Secretary, Disaster Management & Rehabilitation it was discussed that WIHG has installed AWS (02), AWLR (01), and BBS (02) instruments in and around Gangotri glacier.

It is inferred from the last quarterly progress report of WIHG, that data is being recorded in these instruments from May 2024. But as the VSAT connection of these instruments is yet to be established, the real time monitoring of the glacier activity will take time.

In this regard, it is directed that from June 2024 onwards WIHG should also submit monthly reports to USDMA comprising activity of the data recorded in these instruments. This would further help in the maintenance of a database and the activities around the glacier can be kept in USDMA's purview theoretically. Alongwith the monthly report, WIHG should also submit the quarterly reports accordingly.

In view of the above, it is requested to comply with the monthly report submission accordingly.

Yours sincerely,

Signed by Anand Swaroop
Date: 07-06-2024 14:01:30
(Anand Swaroop)

Additional Chief Executive Officer (Admin.)

Copy to the following for information and further necessary action:

1. - Secretary, Disaster Management and Rehabilitation Department, Government of Uttarakhand.

USDMA/91/2023-USDMA-Disaster Management Department

216306/2024

2. - Additional Chief Executive Officer (Operation), Uttarakhand State Disaster Management Authority.
3. - Dr. Amit Kumar, Scientist, Wadia Institute of Himalayan Geology, Dehradun
4. - Guard File

(Anand Swaroop)

Additional Chief Executive Officer (Admin.)

