

**BEFORE THE NATIONAL GREEN TRIBUNAL
EASTERN ZONE BENCH AT KOLKATA
ORIGINAL APPLICATION NO. 171/ 2023**

IN THE MATTER OF:-

IN RE.: NEWS ITEM APPEARED IN EAST MOJO ON 05.10.2023 TITLED
“SIKKIM: HERE’S WHY THE CHUNGTHANG HYDRO-DAM BREACH IS A BIG
DEAL” APPLICANT

Versus

THE STATE OF SIKKIM & ORS. RESPONDENTS

INDEX

S.NO.	PARTICULAR	PG.NO.
1.	Affidavit on behalf of the Respondent No. 1 (The State of Sikkim)	1-28
2.	<u>Annexure R1</u> Copy of the schematic representation of the location of various hydro-power projects along with their distance from the origin of the river	29
3.	<u>Annexure R2</u> Copy of the NESAC’s Report titled ‘A brief report on the rainfall activity over Sikkim on 3rd October, 2023’	30-34
4.	<u>Annexure R3</u> True copy of the Consultation Workshop on Glacial Lake Outburst Flood Risk for South Lhonak and Shako Cho Lakes in Sikkim dated 13.05.2022 between the National Disaster Management Authority, Ministry of Home Affairs and the Swiss Agency for Development and Corporation	35-62
5.	<u>Annexure R4(Colly)</u> True copy of the ‘Report on the Extent of Damage due to Cloudburst Induced Flooding in the Teesta Basin as on 16.00 Hrs. 17 th OCTOBER 2023’ and the detailed list of Relief Camps prepared by the Land Revenue & Disaster Management Department, Government of Sikkim	63-64
6.	<u>Annexure R5</u> True copy of the Press Release of the meeting of the State Cabinet held on 17.10.2023	65-69
7.	<u>Annexure R6</u> True copy of the Reserve Bank of India’s Master Direction No. FIDD.CO.FSD.BC No.10/05.10.001/2018-19 dated	70-82

	17.10.2018 i.e. 'Master Direction – Reserve Bank of India (Relief Measures by Banks in Areas affected by Natural Calamities) Directions 2018 – RRBs'	
8.	<u>Annexure R7</u> True copy of the Minutes of the Special State Level Bankers' Committee Meeting held on 18.10.2023	83-91
9.	<u>Annexure R8</u> True copy of the Notification bearing Reference No. 98/CS/SKM/2023 dated 19.10.2023 of the Office of the Chief Secretary, Government of Sikkim	92-95
10.	Proof of Service	96

Through



(SAMEER ABHYANKAR)
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PLACE: NEW DELHI
Dated:05.04.2024

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AFFIDAVIT ON BEHALF OF THE RESPONDENT NO. 1
(THE STATE OF SIKKIM)

I, T. T. Lepcha, PCE cum Secretary, Power Department, Government of Sikkim do hereby solemnly affirm and most humbly and respectfully submit that:

1. I am the PCE cum Secretary, Power Department, Government of Sikkim and as such am competent to depose to the contents of this affidavit. Vide Order/Letter No. Home/Confdl./111/2023/25/2866 dated 12.02.2024 of the Home Department, I have been appointed as the Nodal Officer in the matter of co-ordination with all departments of the State Government dealing with the event in question, its aftermath and the relief and rehabilitation measures.
2. I am authorized to swear the present affidavit based on the instructions received from the Home Department, Government of Sikkim, the Relief Commissioner-cum-Secretary, Land Revenue & Disaster Management Department, Government of Sikkim and the PCE-cum-Secretary, Energy & Power Department, Government of Sikkim.

3. The present affidavit is being filed on behalf of the State of Sikkim in response to the *suo moto* notice issued by this Hon'ble Tribunal on 20.10.2023 on the basis of the newspaper item published in "East Mojo" dated 05.10.2023 titled "Sikkim: here's why the Chungthang Hydro-dam breach is a BIG DEAL". As noted in the Order dated 20.10.2023 passed by this Hon'ble Tribunal, the following aspects as to the natural disaster which occurred on the intervening night of 03.10.2023 and 04.10.2023 are sought to be placed on record by the State, vide this affidavit:

- A. The cause of the incident;
- B. The remedial measures which have been taken and which can be taken in future;
- C. The casualties which resulted from the incident, and the scheme(s) of the State to pay their families adequate compensation.



4. The aforementioned aspects are dealt with *in seriatim* hereinafter:

A. THE CAUSE OF THE INCIDENT

5. The Teesta river basin extends from Sikkim in India in the Eastern Himalayas, through West Bengal (Darjeeling, Jalpaiguri, Cooch Behar, Uttar Dinajpur, Dakshin Dinajpur and Malda districts), to the Northern Rangpur division in Bangladesh (Lalmonirhat, Nilphamari, Rangpur, Kurigram and Gaibandha districts), where the river joins the Brahmaputra before it flows into the Bay of Bengal, after meeting with the Ganges and the Meghna. The river rises in the Teesta Khangse glacier in North Sikkim. The Teesta River is 414 kms long, out of which 151 kms falls in the State of Sikkim. The total catchment area of the

River is 12,159 km² distributed between mountains and hills and plains. A majority of the catchment area falling in mountains and hills, i.e. 6930 km² is in the State of Sikkim.

6. Several glacial lakes and hydro-power projects are located on the Teesta River. A schematic representation of the location of various hydro-power projects along with their distance from the origin of the river is attached hereto as **Annexure – R1**.

7. After the occurrence of the incident on the intervening night of 03.10.2023 and 04.10.2023, the North Eastern Space Application Centre, Department of Space, Government of India (“**NESAC**”) had carried out an analysis of rainfall activity data as available from satellites positioned over the region on the said date. The NESAC is a society under the aegis of the Department of Space, Government of India. The report of the said analysis has been made available to the State Government. The contents of the report which are summarized below are indicative of a cloud burst event or at least more than usual heavy rainfall in the region preceding the incident:

- I. The said report is based on data from the available AWS Stations installed by the Indian Meteorological Department, Ministry of Earth Sciences, Government of India (“**IMD**”) and satellite-based rainfall measurement. The AWS data from the Namchi and Namthang AWS Stations showed over 100 millimeters of heavy rainfall during 24 hours starting from 3 UTC of 03.10.2023. The Mangan AWS Station showed 2.5 mm rainfall during the same period.



- II. The report further records that in the absence of AWS Stations close to the lakeside, two widely accepted satellite-based daily rainfall products were analyzed to assess rainfall scenario over the site. The INSAT-based data showed heavy rainfall over North-Western Sikkim (where Lhonak Lake is situated) during the relevant time i.e. before 11 p.m. IST on 03.10.2023. The report records that *"The favorable condition over the North Sikkim area and available data suggests that there was high possibility of intense rainfall over the lake area starting from 22:15 Hrs (IST) on 3rd October 2023."*
- III. The analysis of meteorological data pertaining to cloud formation also indicated *"....the probability of a rapid condensation of the available moisture and strong convection leading to tall cloud formation in a very short span of time which may have the capability to bring torrential rains."*
- IV. In a summary of its conclusion, the report states that *".....it is clear that there was heavy rainfall over large part of Sikkim on 3rd October, 2023 and good amount of rainfall happened over the north western Sikkim around 22:00 Hrs (as seen from satellite based rainfall product). The condition was favorable for further heavy rainfall over the northern Sikkim area beyond 22:00 hrs and till the lake burst happened."*



A copy of the NESAC's Report titled 'A brief report on the rainfall activity over Sikkim on 3rd October 2023' is attached herewith as **Annexure R2**.

8. The unusually heavy rainfall over the region appears to have resulted in rapid downstream flow of the Teesta River in much greater volumes than preceded and which exceeded the capacity of the dams installed at

the hydro-power project at Chungthang Dam. It is pointed out that Chungthang Dam is the first dam downstream of the Teesta River from the South Lhonak Lake.

9. It is submitted that while the natural disaster was unprecedented and the avoidance thereof was beyond human capacity, the State Government through a Cabinet decision dated 17.10.2023, has constituted a High-Level Technical Committee to examine the causes that led to the breach of Teesta Stage – III Dam which was triggered by the cloud burst and flash floods. The scope of enquiry of the Committee includes *inter alia* an investigation into the causes of the disaster, and providing of a suggested further course of action in view of the fact that the State has a large number of glacial lakes. The decision taken was to constitute the said Committee with eminent glaciologists, geologists, seismologists, hydrologists in consultation with the National Disaster Management Authority. It is submitted that the High-Level Technical Committee has convened meetings on the following dates:



- I. **30.10.2023:** A Letter was written to the National Disaster Management Authority, Ministry of Home Affairs (“NDMA”) requesting for support and guidance for the formation of the High-Level Technical Committee and for framing the ‘terms of reference’ for the same. The Letter also sought for recommendations by the NDMA of prominent scientists and experts who could be a part of the said Committee.
- II. **23.11.2023:** A video conference was scheduled for this day by NDMA to discuss the formation of the High-Level Technical Committee. However, the conference was postponed.

- III. **06.12.2023:**The Sikkim State Disaster Management Authority, Government of Sikkim; (“**SSDMA**”) sent a follow-up e-mail to the NDMA in regard to the constitution of the High-Level Technical Committee and also requesting a video conference in that regard, at the earliest.
- IV. **10.12.2023:** Another follow-up Letter was sent to the NDMA in regard to the constitution of the High-Level Technical Committee. The matter was also discussed during the PDNA consultation held in the Answering Respondent State i.e. 07.12.2023 to 10.12.2023, wherein it was understood that the NDMA was in the process of constituting an Expert Team to be shared by the State.
- V. **08.01.2024:** Another e-mail was sent to the NDMA requesting for an update in regard to the status of the formation of the Expert Team/ High-Level Technical Committee.
- VI. **11.01.2024 to 19.01.2024:** The 4th meeting of the ‘Committee on Disaster Risk Reduction’ (“**CoDRR**”) (i.e. a NDMA-coordinated platform that discusses all disaster-related issues between the Central Technical Agencies and the State Governments/ Union Territories, as and when required), was held by the NDMA in regard to GLOF with six Himalayan States/ UTs, including the Answering Respondent State. The meeting was attended by the Chief Secretary of the State of Sikkim and a ‘10-Point Action Plan’ was finalized, centered on four basic themes:
1. States/ UTs, with NDMA’s backing, tasked with overseeing glacial lake surveillance. Each State/ UT is to have a designated Lead Technical Agency, drawn from Government of India’s scientific institutions for specialized backstopping. All SDMA’s are required to develop in-house



scientific expertise for continuous monitoring due to the evolving nature of GLOF risks;

2. Comprehensive instrumentation and prioritizing EWS and mitigation strategies is essential, coupled with a dedicated network. That the Centre for Development of Advanced Computing, Ministry of Electronics and Information Technology (MeitY), Government of India (“**C-DAC**”), the Indian Space Research Organisation (“**ISRO**”), the Defence Geo-informatics Research Establishment, DRDO, Ministry of Defence, Government of India (“**DGRE**”) and the National Centre for Polar and Ocean Research, Ministry of Earth Sciences, Government of India (“**NCPOR**”) are already deploying such equipment in the Himalayas;
3. States/ UTs encouraged to expand capacities to conduct expeditions to directly assess all high-risk glacial lakes in 2024; and
4. The Armed Forces and the Indo-Tibetan Border Police (“**ITBP**”) to consolidate and streamline their support to the State/ UT Governments in monitoring glacial lakes during operational patrol duties and operate as manual EWS.



- VII. **05.02.2024:** A Letter in regard to the constitution of the High-Level Technical Committee and the CoDRR was received from the NDMA.

It is stated that four focused meetings have already taken place with the aim of assessing and mitigating risks emanating from the GLOF hazard in the Indian Himalayan Region and planning the AWS and EWS deployments within/ by 2025. It is stated that NDMA has suggested to the SSDMA to contact institutions in

CoDRR, amongst others, to seek nominations from the concerned organizations and form the desired High-Level Technical Committee. The following heads of CoDRR-member organizations were shared:

1. Dr. Samir V. Kamat, Chairman, Defence Research and Development Organisation, Ministry of Defence, Government of India (“**DRDO**”);
2. Sh. Kushvinder Vohra, Chairman, Central Water Commission (“**CWC**”);
3. Sh. Magesh Ethirajan, Director General, C-DAC;
4. Sh. Janardan Prasad, Director General, Geological Survey of India, Government of India (“**GSI**”);
5. Dr. Mrutyunjay Mohapatra, Director General, IMD;
6. Dr. R.P. Singh, Director, Indian Institute of Remote Sensing, ISRO, Department of Space, Government of India (“**IIRS**”);
7. Dr. S.P. Aggarwal, Director, NESAC;
8. Dr. Sudhir Kumar, Director, M=NHI;
9. Dr. Thamban Meloth, Director, NCPOR;
10. Dr. Pramod Kumar Satyawali, Director, DGRE;
11. Dr. Prakash Kumar, Director, National Geophysical Research Institute (“**NGRI**”); and
12. Dr. Prakash Chauhan, Director, National Remote Sensing Centre, ISRO, Department of Space, Government of India (“**NSRC**”).



- VIII. **17.02.2024:** A meeting was convened under the Chairmanship of the Relief Commissioner-cum-Secretary, Government of Sikkim with the Department of Science & Technology, Ministry Of

Science And Technology, Government of India to discuss and understand the cause of the disaster and the formation of the High-Level Technical Committee for the study of glacial lakes post the incident:

1. The Department of Science & Technology and Climate Change, Government of Sikkim (“DST&CC”) to co-ordinate with the C-DAC, Pune to schedule a meeting. The meeting to have the presence of all the members of the High-Level Technical Committee formed, the Army and the ITBP, to study and evaluate the ten vulnerable glacial lakes in the Answering Respondent State;
2. DST&CC to prepare an informative presentation on the number of expeditions planned/ undertaken to various glacial lakes in the Answering Respondent State;
3. A Memorandum of Understanding to be drafted on the Standard Operating Procedure/ Action Plan of GLOF management (as recommended in the meeting of the High-Level Technical Committee), to be finalized by the NDMA; and
4. In regard to the future role of the State Data/ Disaster Centre (“SDC”), the SSDMA to request the SDC to model a GLOF/ dam-break scenario, to help in the capacity-building of the downstream population.



- IX. **20.02.2024:** A meeting was convened under the Chairmanship of Relief Commissioner-cum-Secretary, Government of Sikkim with the Working Group to study the glacial lakes and the sharing of opinions on the ‘10-Point Action Plan’ devised by the NDMA during the 4th CoDRR meeting. The meeting was attended by the

Department of Science & Technology, Government of India, the Mines and Geology Department, Government of Sikkim, the CWC, the C-DAC, Pune, the ITBP and the SSDMA.

- X. **22.02.2024:** A Letter was received from the NDMA inviting the SSDMA to prepare and present a 'Technical Presentation on Reducing GLOF Risks: Lessons from Nepal Himalayas' in virtual mode.
- XI. **23.02.2024:** An invitation to the 5th meeting of the CoDRR with the Indian Himalayan States/ UTs was called for with the following agendas:
1. Review of discussions between each State/ UTs;
 2. Number of expeditions planned and to which lakes, composition thereof;
 3. The type of AWS/ EWS/ mitigation measures planned for each identified lake.



B. REMEDIAL MEASURES

10. In regard to the safety & precautionary measures taken by the Answering Respondent State to prevent adverse effects of a possible natural calamity on account of the dam, the following is stated:

- I. Post 2018, SSDMA has been conducting programs to enhance the resilience of vulnerable communities living along the Teesta River basin;
- II. Awareness and Sensitization Programs have been held at various locations;

- III. Basic search & rescue and first aid trainings were being regularly imparted to the youth and volunteers of the downstream communities;
- IV. SSDMA had conducted participatory rural appraisals to map the hazard, vulnerabilities and associated risks of all the vulnerable locations along the Teesta River basin.
- V. A State Level Mock Exercise (in the presence of NDMA officials) was conducted in May 2023 with the objective to gauge the level of preparedness of the State and District Authorities of the Answering Respondent State. Vide the same, the exercise was earthquake-triggered GLOF and the drill was conducted extensively at various vulnerable locations along the Teesta River basin. Similarly, on 18.09.2023, a Mock Drill on GLOF had been conducted by the Chungthang Sub-Division, with the participation of the Sikkim Urja Hydrel Project developers.
- VI. In August, 2019, the Answering Respondent State constituted an Expert Committee to study the ten vulnerable glacial lakes and suggest suitable mitigation strategies thereof. The Committee comprised of members from the State Departments and Central Agencies and the terms of reference of the Committee were to:
 1. Provide technical inputs wherever and whenever required;
 2. Monitor and review the progress of work at regular intervals; and
 3. Ensure proper documentation of research and study undertaken.



11. In regard to the mechanism of alert in the event, the NDMA, in collaboration with the Swiss Agency for Development and Corporation

("SADC"), had been working on the installation of a suitable warning system at South Lhonak Lake. In this regard, a multi-agency expedition had also taken place from 09.09.2023 to 19.09.2023 with the objective to install monitoring stations with cameras at South Lhonak and Chako Chu lakes. Post this, the data collected from the stations was to be analysed to gather critical data to further improve the design of the suggested early warning system. The forward-looking Early Warning System was to reduce the risks from South Lhonak Lake, Shakho Cho Lake and other surrounding high-priority lakes.

12. The general EWS Setup being considered to be set up consisted of alerting mechanisms, data portals (user interface, visualization, remote control), sensors for the measurement of precursors or events, data processing (recording, calculation, alarm triggers) and communication (measurement data, alerts). The technologies applied for GLOF monitoring was the 'Gauge Radar Stations' to measure river level in real time, 'Trigger Line Stations' for simple detection of a debris flow, 'Camera Stations' for lake and river monitoring, 'Deformation Camera' for glacier and landslide monitoring to identify unstable areas, 'Weather Stations' for various meteorological parameters and the need for experienced and specially trained personnel for installation (rope access work). The proposal for the EWS Design in Thangu Valley, Lhonak Valley (to consist of (i) webcam, (ii) deformation camera, (iii) river level measurement, (iv) trigger line, (v) weather station, (vi) radio link, (vii) alerting station and (viii) satellite internet), in Lachen – Chungthang were arrived at. The EWS Design of the online data platform was also arrived at.



A true copy of the Consultation Workshop on Glacial Lake Outburst Flood Risk for South Lhonak and Shako Cho Lakes in Sikkim dated 13.05.2022 between the National Disaster Management Authority, Ministry of Home Affairs and the Swiss Agency for Development and Corporation is annexed herewith as **Annexure – R3**.

13. It is stated that the Answering Respondent State was in the process of implementation and setting up of the EWS Systems at the time of occurrence of the incident i.e. in October, 2023. However, in the absence of an EWS system, the information flow was mainly via mobile communication, landline communication, police WT system, siren and alarm systems at hydro power projects, warning system of Sikkim Police and Fire & Emergency Services, warning by beat police manually and informal WhatsApp groups.



14. In regard to the agencies involved in monitoring the glacial lakes, it is submitted that as per the NDMA Guidelines, the Ministry of Jal Shakti, Government of India and the CWC have been proposed as the nodal agencies for management of glacial lake outburst floods in India. It is submitted that the NDMA had issued guidelines titled 'Management of Glacial Lake Outburst Floods (GLOFs), October 2020'. It is stated that in the Answering Respondent State, the DST&CC was monitoring and has been conducting studies on glacial lakes and water bodies of the Sikkim Himalayas, especially South Lhonak Lake, since 2012. It is stated that there have been multiple expeditions to study South Lhonak Lake. The following agencies had participated in the same:

- I. Central Agencies:
 1. CWC;
 2. GSI;

3. DGRE,
4. National Remote Sensing Centre (“**NRSC**”);
5. NDMA;
6. National Institute of Hydrology, Ministry of Jal Shakti, Department of Water Resources, River Development and Ganga Rejuvenation (“**NIH**”);
7. C-DAC;
8. NCPOR;
9. Wadhiya Institute of Himalayan Geology, Ministry of Science & Technology, Government of India (“**WIHG**”);
10. The Indian Army;
11. ITBP;
12. Students’ Educational and Cultural Movement of Ladakh (“**SECMOL**”); and
13. Hydel Project Developers.

II. State Agencies:

1. DST&CC;
2. Forest Environment and Wildlife Management Department, Government of Sikkim;
3. The Water Resources & River Development Department, Government of Sikkim;
4. The SSDMA;
5. Department of Mines, Minerals & Geology, Government of Sikkim;
6. Police Department, Government of Sikkim; and
7. Health & Family Welfare Department, Government of Sikkim.



It is stated that the role of the SSDMA was to provide logistical support for the expedition and to enhance the resilience of vulnerable communities living downstream of the lake using various interventions.

C. (1) CASUALTIES WHICH RESULTED FROM THE INCIDENT

15. Immediately after the incident, the Land Revenue & Disaster Management Department, Government of Sikkim carried out a survey of the affected areas so as to ascertain the full extent of damage caused as a result of the natural disaster. A detailed report was prepared based on the said survey which revealed that:

- I. The Districts of the Answering Respondent State that were affected were Mangan District, Gangtok District, Pakyong District and Namchi District. Given the magnitude of the natural disaster, the infrastructure in the four districts has also been damaged to a great extent.
- II. The number of Villages/ Wards/ Nagar Panchayats/ Council affected in the four affected Districts were 100.
- III. The total number of human lives lost was 40, the number of people missing were 76 and the number of persons who suffered grievous injury requiring hospitalization was 26.
- IV. The number of damaged houses was 2002, out of which the number of fully and severely damaged pucca and kutcha houses was 1423, the number of partially damaged pucca houses was 166 and the number of partially damaged kutcha houses was 413. The number of shops affected was 922 and the number of bridges washed away were 33.
- V. The number of people rescued were 2563 and the number of people evacuated were 4418.



- VI. The evacuated persons and the rescued persons were immediately sought to be accommodated in relief camps made operational in all the four affected districts. While the work of accommodation in relief camps was and is being taken up on war-footing, owing to the difficult terrain, the magnitude of the disaster and the dynamic nature of the activity, the exact data as to the number of persons currently housed in the relief camps constantly changes. As per the data currently available, 1852 affected persons were immediately housed in 19 relief camps made operational in the immediate aftermath of the disaster.
- VII. The number of animals lost was 1831, the number of poultry lost was 29,389 and the number of others lost was 507.

The report available as on date is annexed herewith. However, the State craves liberty to produce further reports as and when called upon to do so by this Hon'ble Tribunal.



A true copy of the 'Report on the Extent of Damage due to Cloudburst Induced Flooding in the Teesta Basin as on 16.00 Hrs. 17th OCTOBER 2023' and the detailed list of Relief Camps prepared by the Land Revenue & Disaster Management Department, Government of Sikkim is annexed herewith as **Annexure – R4 (Colly)**.

**(2) SCHEME(S) OF THE STATE TO PAY THEIR FAMILIES
ADEQUATE COMPENSATION (RELIEF AND REHABILITATION
EFFORTS)**

16. In regard to the reliefs and rehabilitation efforts taken by the Answering Respondent State, a meeting of the State Cabinet was held on

17.10.2023 wherein a total of 205 agenda items were discussed and the following decisions were taken:

- I. Adoption of two new Housing Schemes to be implemented by the Rural Development Department:
 - a. Sikkim Punarvaas Awaas Yojana wherein 2100 houses to be constructed in safe and suitable locations and allotted to the owners of the houses that were totally washed away and have been severely/ partially damaged and are no more inhabitable. The Answering Respondent State to construct these houses in a Government land or a land donated/ acquired for this purpose; and
 - b. Sikkim Janta Housing Colony wherein 2000 houses to be constructed in safe and suitable locations to rehabilitate the tenants of houses that were totally washed away and have been severely/ partially damaged and are no more inhabitable. The tenants to be allotted houses on a 'rental basis' with no charge imposed by the State Government for the first three years. On completion of three years, rent as assessed by the Government to be payable by the allottees.
- II. Severely/ partially damaged houses to be inspected by a Technical Team to assess the stability of the houses and certify whether the same are worthy of habitation;
- III. To be eligible for the two new Housing Schemes, the beneficiaries to be in possession of a Sikkim Subject Certification or a Certificate of Identification or a Parcha of landed property anywhere in the Answering Respondent State or a Voter Card or a Residential Certificate in the Answering Respondent State;



- IV. The construction of the houses under the two Housing Schemes to follow the same design and estimate of the Sikkim Garib Awas Yojana and the on-going scheme of the State Government;
- V. For immediate support and assistance to owners of such houses as above and the tenants who were staying in such houses, the State Government to consider granting rent for three months at Rs. 5,000/- per month to enable the victims at the Relief Camps to move to a rented accommodation and get back to normalcy at the earliest;
- VI. In addition, the State Government to provide basic household items i.e. kitchen utensils, gas stoves, gas cylinders, mattresses, blankets and other daily household items to help the victims settle down in the rented accommodation;
- VII. Since there would be an acute demand for rented accommodation in the affected areas, house owners in those areas requested to not increase rental charges beyond the normal market rate. Action would be taken under the Disaster Management Act against house owners who charge exorbitant fees at the hour of crisis;
- VIII. After clearance of debris and muck at the affected areas, Building and Housing Department to carry out a stability study to verify and confirm whether the damaged houses are fit for habitation;
- IX. Similarly, Roads and Bridges Department, Rural Development Department and Border Road Organisation, Government of India ("**BRO**") to carry out a study to know the stability of the bridges affected, in order to take up required repair works;
- X. District Collectors to set up camps at affected areas for issue of Voter Card, Adhaar Card, Land Parcha, Ration Card, Birth Certificate, Certification of Identification, Community Certificate,



Trade License etc. for victims who had lost these documents in the flood;

- XI. To support genuine affected students who have lost all their belongings, State Government to provide a one-time grant of Rs. 10,000/- per student for the purchase of new uniforms and note books. Education Department to provide new text books.
- XII. Cabinet granted administration approval and financial sanction of Rs. 881,91,00,000/- for the construction of 2100 and 2000 houses under the two Housing Schemes.
- XIII. Cabinet directed the Chief Secretary to immediately convene the State-Level Banker's Committee ("SLBC") Meeting and ensure the Reserve Bank of India's ("RBI") Master Direction No. FIDD.CO.FSD.BC No.10/05.10.001/2018-19 dated 17.10.2018 i.e. 'Master Direction – Reserve Bank of India (Relief Measures by Banks in Areas affected by Natural Calamities) Directions 2018 – RRBs' ("**Master Direction**") is implemented in letter and spirit.



A true copy of the Press Release of the meeting of the State Cabinet held on 17.10.2023 is annexed herewith as **Annexure – R5**.

A true copy of the Reserve Bank of India's Master Direction No. FIDD.CO.FSD.BC No.10/05.10.001/2018-19 dated 17.10.2018 i.e. 'Master Direction – Reserve Bank of India (Relief Measures by Banks in Areas affected by Natural Calamities) Directions 2018 – RRBs' is annexed herewith as **Annexure – R6**.

17. Resultantly, a Special State-Level Bankers' Committee Meeting was held on 18.10.2023 to initiate relief measures by the banks for existing borrowers and for non-account holders/ common man affected by the floods. The meeting was chaired by the Chief Secretary, Government of

Sikkim and attended by Sh. Thomas Devasia, Member of Insurance Regulatory and Development Authority of India (“IRDAI”); Sh. Kishore Pariyar, Regional Director, RBI Sikkim, a Senior Official of the National Bank for Agriculture and Rural Development (“NABARD”), Shri N. K. Singh, GM-cum-SLBC Convenor, Senior Officers of various State Government Departments, and all the Zonal Heads of the banks in Sikkim. After deliberation on various issues, the following resolutions were passed in public interest of the people of Sikkim severely affected:

- I. Confirmation of Disaster: The State Government vide its Memo No.399LR&DMD/GoS Notification dated 04.10.2023, declared the catastrophe as a Disaster, in exercise of the powers conferred vide Section 22(2)(b) of the Disaster Management Act, 2005. Accordingly, the four affected Districts to be considered the affected districts for the purpose of restructuring of existing loans, sanctioning fresh loans, relaxing in KYC, etc., as prescribed in the RBI’s Master Direction;18-19 dated October;
- II. Estimation of extent of damage: On the statement of the State Govt. that most of the standing crops were damaged and therefore it decided to provide relief to the populous based on the eye estimates/visual impressions, the Committee is satisfied by the reasons for opting relief measures based on eye estimates/ visual impressions. Accordingly, banks to extend high stab relief measures as per the RBI’s Master Direction based on eye estimates/ visual impressions.
- III. Issuance of Certificates by the District Collectors/ District Magistrates: Banks to provide relief to the applicant identified by the District Collectors i.e. the District Collectors to issue certificates regarding identification of affected people by the flash



flood in order to enable the banks to provide relief measures. Separate communication to be issued by the Office of Chief Secretary, State Government to the concerned District Collectors in this regard.

- IV. Time period for applying relief measure: Applications for relief measure to be accepted for 3 months from 23.10.2023.
- V. Concessional Rate of Interest on Loans: Banks to not charge more than 4% interest p.a. for loans up to Rs. 10 lakhs for a period of 24 months. The banks may, at their discretion, provide this concession for loans above Rs. 10 lakhs. Further, an interest subvention of up to 4% to be provided by the State Government for a period of 24 months.
- VI. Waiver of penal interest: In respect of default in current dues, no penal interest to be charged and the banks to also suitably defer the compounding of interest charges. Further, banks to not levy penal interest and consider waiving penal interest, if any, already charged in regard to the loans converted/ rescheduled.
- VII. Moratorium: A moratorium of one year to be extended to all types of loans and the tenure for the repayment of loans to also be extended by one year.
- VIII. Discretionary Power to Zonal Heads (Regional Heads) of the banks in Sikkim: On the confirmation by the banks that the Divisional/ Zonal Managers/ Cluster Heads/ Regional Heads of scheduled Commercial/ Small Finance banks have been vested with certain discretionary powers to avoid the need to seek fresh approval from their Head Office/ Controlling Office in regard to the line of action decided by this Committee, in order to expedite the relief measures, the discretionary powers to be used for the



adoption of scale of finance, need-based restructuring of loans, loan period, margin, security, sanction of new loans, keeping in view the total liabilities of the borrowers arising out of the old loans where the asset financed was damaged or lost due to the floods and the new loans to be financed for creation/ repair of such asset(s).

- IX. Insurance Companies to expedite the insurance proceeds: IRDAI to direct insurance companies to expedite insurance proceeds of the affected persons in Sikkim and settle the compensations within a maximum period of 3 weeks. Insurance companies to also deploy a team immediately to assess the damages in the Answering Respondent State for early settlement of insurance claims.
- X. Loss of Insurance Document: On a mentioning by the Chairperson that persons affected by the flood might not possess original documents relating to insurance claims, followed by a request to IRDAI to issue instructions to insurance companies not to insist upon submission of original documents, IRDAI to explore alternate way to establish the genuineness of customers, for expediting the disbursement of insurance claims. IRDAI to also ensure that under no circumstances, the insurance claim payment can be withheld for the want of original documents.
- XI. Creating Awareness among the public: On a statement by the Chairperson that the State Government, through its Department for Information and Public Relations, would widely disseminate banking-related relief available for the affected people to enable them to apply for the relief, Department for Information and Public Relations to also specifically publicize the "three-month window



for submission of applications by affected borrowers”, to enable them to avail the relief measures provided by the banks.

- XII. Review Meeting: On a statement by the Chairperson that banks should go beyond the call of duty and extend relief measures to the common public and any extraordinary effort done by them should be documented and submitted to the RBI as a success story, it was decided that as the impact of this measure would take some time, a review to be done in due course to listen to the success stories by the banks.
- XIII. Financial Aid: The Chairperson appreciated the contribution of Rs. 72 crores made by the State Bank of India (“SBI”) for relief efforts and further appealed to the banks to volunteer to provide contributions to the State Government’s Relief Fund, as a part of Corporate Social Responsibility (“CSR”).
- XIV. Modalities for rolling out relief measures: After an extensive deliberation on various modalities for rolling out the relief measures, the following courses of action were agreed upon by the banks present in the meeting:
- a. Periodicity of submission of data: Banks to submit list of beneficiaries to STF on a weekly basis for onwards submission to the Office of the Chief Secretary.
 - b. Rescheduling and Restructuring of Loans:
 - Restructuring of existing short-term agriculture loans without asking for collateral;
 - Moratorium period to be extended for short-term loans;
 - Rescheduling of Long Term Agriculture Loans; and
 - Rescheduling of all other loans besides agriculture.



- c. Moratorium: Moratorium period of one year and tenure of repayment to be extended by one year.
- d. Sanctioning of Fresh Loans:
- To agriculture and allied activities;
 - To Rural Artisans, self-employed persons, micro and small units, etc;
 - To commercial buildings under micro and small units; and
 - Assist new borrower in preparing for documentation.
- e. Insurance:
- Help customers to claim insurance by guiding them and helping them in proper documentations;
 - Help existing borrowers to claim insurance under Agriculture/ MSMEs;
 - Help claim insurance of loans taken for construction of Residential and Commercial Buildings; and
 - Banks to also start restructuring of loans without waiting for insurance proceeds i.e. Agri loans restructuring.
- f. Granting of Consumption Loan: Banks to also grant Consumption Loans up to Rs. 10,000/- to existing borrowers without any collateral. The limit may, however, be enhanced beyond Rs. 10,000/- at the bank's discretion.
- g. Guarantee, Security and Margin:
- Considerate and sympathetic view in case of sanctioning fresh loans;
 - Margin requirements to be waived; and



- Loans to not be refused for want of security/ collateral.

h. Rate of Interest:

- Banks to not charge more than 4% interest p.a. for loans up to Rs. 10 lakhs for a period of 24 months.
- Banks may, at its discretion, provide this concession for loans above Rs. 10 lakhs.
- Interest subvention of up to 4% to be provided by the State Government for a period of 24 months.

i. Penal charges:

- In respect of default in current dues, no penal interests to be charged;
- Banks to also suitably defer the compounding of interest charges.
- Banks to not levy penal interest and consider waiving penal interest, if any, already charged in regard to the loans converted/ rescheduled.

j. Residential Buildings:

- Loans up to Rs. 76 lakhs for repairs to damaged houses are considered under Priority Sector Lending.
- Loans up to Rs. 25 lakhs for purchase/ construction of houses to be given under Priority Sector Lending for houses totally damaged.
- Restructuring/ Rescheduling of loans taken for constructing Residential and Commercial Buildings.



- Moratorium up to 1 year to be provided for loans taken for constructing Residential and Commercial Buildings.
- k. Easing of KYC norms:
- For opening of basic deposit account, photograph along with signature/ thumb impression shall suffice.
 - Where land taken as security, in the absence of original title record, a certificate issued by the Revenue Department officials to be accepted for financing to farmers who have lost proof of their title such as Title Deeds/ Registration Certificates issued to registered share-croppers.
- l. Providing access to Banking Service:
- For people affected by flash flood, waiving of ATM fees, increasing ATM withdrawal limits; waiving of fees towards overdraft/ early withdrawal penalty on time deposits/ late fee for credit card/ other loan instalment payments, etc.
 - Giving option to credit card holders to convert their outstanding balance to EMI's repayable in 1-2 years.
 - All charges debited to the farm loan account, other than regular interest, to/ may be waived considering the hardship caused to the affected people.
 - Banks to/ may make arrangements to render banking services in the affected areas by setting up satellite offices, extension counters or mobile banking facilities, etc. under intimation to the RBI.



- XV. Weekly Status on disbursement of relief measure: For ensurance that benefits of relief given to genuine persons affected and on the advice of the Chairperson, banks to submit the list of beneficiaries who have benefited from the relief measures every week to RBI, Gangtok for onward submission to Office of Chief Secretariat.
- XVI. Setting up of Special Task Force: On a decision by the Chairperson, a Special Task Force to be formed to monitor the status and progress of reliefs provided by banks in the affected areas. Initially, the meeting to be convened on a weekly basis, either physically or over WebEx. Later, the same to be convened on a fortnightly basis/ need based. The Task Force to be chaired by the Regional Director, Reserve Bank of India, Sikkim and its members shall include Senior Officers from the Department of Agriculture, Department of Animal Husbandry, Department of Land Revenue & Disaster Management, State Finance Department, State Rural Development Department, District Collectors of all affected Districts, Bharat Sanchar Nigam Ltd. ("BSNL"), IRDAI, MSME-Development & Facilitation Office ("MSME-DFO"), all the Zonal Heads of the banks in Sikkim and the SLBC Convenor. A separate communication in this regard to be issued by the SLBC under the signature of Chief Secretary-cum-Chairman of SLBC.



A true copy of the Minutes of the Special State Level Bankers' Committee Meeting held on 18.10.2023 is annexed herewith as **Annexure – R7**.

18. Thereafter, vide a Notification bearing Reference No. 98/CS/SKM/2023 dated 19.10.2023 and titled 'Special Task Force to review the relief

measures extended by the banks in Sikkim', the Office of the Chief Secretary, Government of Sikkim intimated the general public of the Answering Respondent State of the resolutions passed in the State Level Bankers' Committee Meeting held on 18.10.2023.

A true copy of the Notification bearing Reference No. 98/CS/SKM/2023 dated 19.10.2023 of the Office of the Chief Secretary, Government of Sikkim is annexed herewith as **Annexure – R8**.

19. I say that the present affidavit is true to the best of my knowledge and information received from the Answering Respondent and nothing material has been concealed therefrom. The annexures are true copies of their respective originals.



[Signature]
DEPONENT

VERIFICATION:

Verified at Gangtok, Sikkim on the 05th day of April, 2024 that the contents of the above said affidavit are true and correct to the best of my knowledge and belief. Nothing material has been concealed therefrom.

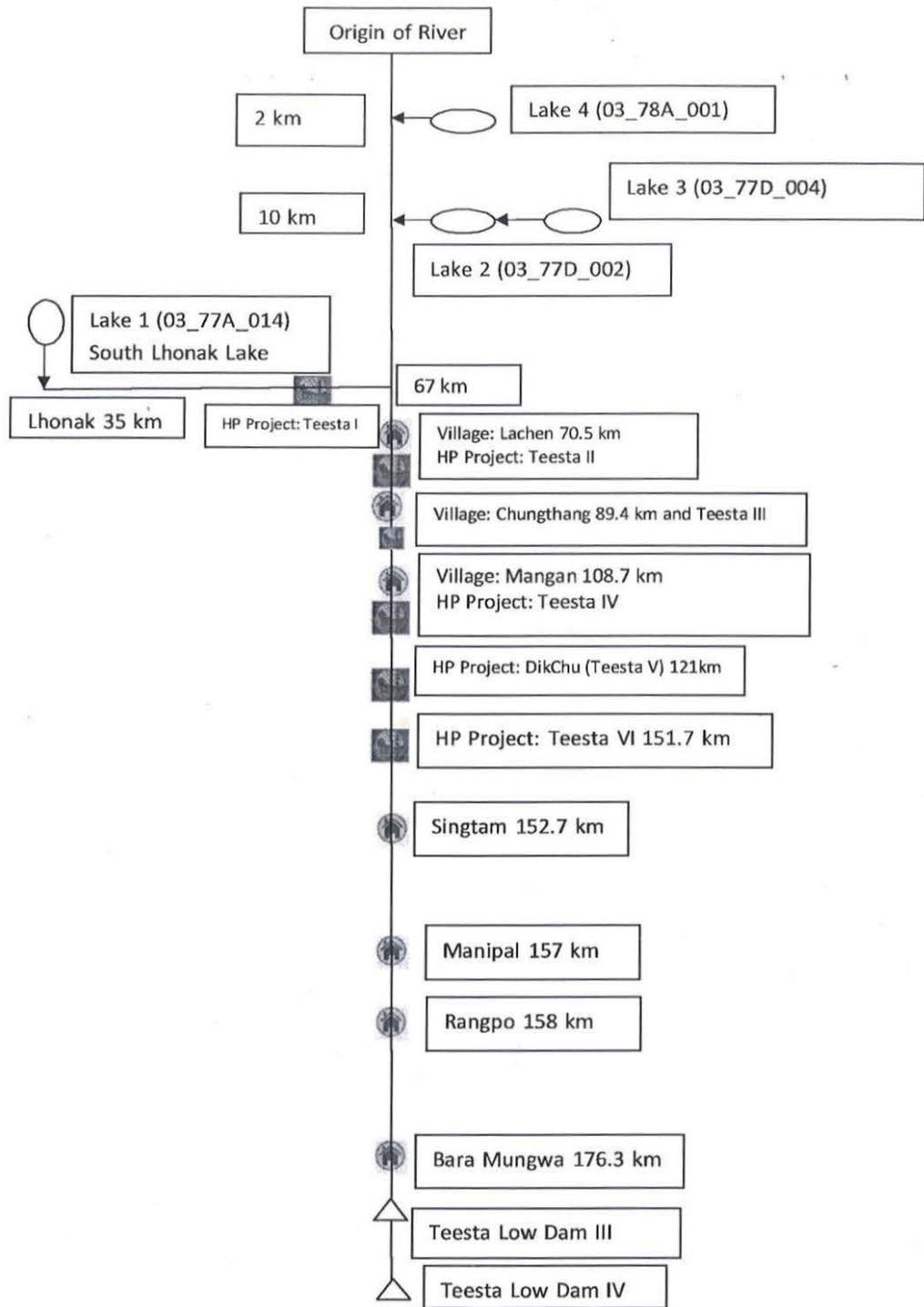
Identified by:

[Signature]
(Tenzin Thirley Kephcha)
(Advocate)

Solemnly Affirmed before me on this
5th Day of April 2024 by Shri/Smt/Kri
T. T. Kephcha of Power Department
Identified by Shri/Smt/Kri Tenzin
Thirley Kephcha, Advocate of Gangtok

[Signature]
DEPONENT

[Signature]
5/04/2024
Mr. Sishir Mothay
Oath Commissioner (GtK)
High Court of Sikkim
Vide Notification No.40/HCS/30.09.23



Line diagram depicting glacial lakes, habitation and hydropower projects along River Teesta

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A brief report on the rainfall activity over Sikkim on 3rd October, 2023

There was a catastrophic flooding over Northern Sikkim area on 4th October, 2023. Initial field reports as obtained from media, suggested outbreak of the Lhonak Lake in Northern Sikkim, which has caused the flooding downstream. It was also reported that there could be intense localized rain (cloudburst) over the lake that caused the outburst of the lake. This report analyses the situation of the rainfall events as well as the synoptic weather condition over and around the lake on 3rd October, 2023 .

It has also been reported that the flood water reached the Chunthang dam area by 11:55 PM on 3rd October, 2023. It may therefore be presumed that rainfall till 11 PM (IST) on the same day could have contributed to the event. It was observed that there is no in-situ rainfall measurement station (AWS) near the lake side, and therefore satellite based rainfall estimates is the only source of rainfall measurement over the station. The available satellite based rainfall estimates and the synoptic weather condition on the day is provided below, to have an idea about the rainfall situation over the lake. The actual rainfall as measured by the available AWS in Sikkim is also provided for reference.

Usually, cloudbursts are localized abrupt heavy rainfall event that can exceed the rain rate of 100 mm per hour. This type of events are usually observed in the mountainous region where orographic effect triggers strong and vigorous updraft of warm and moist air that causes massive cloud formation and subsequently hits the ground with heavy downpour. Ground based observation is the best way to identify such type of event. However, no rain gauge stations were available around the lake side. Figure 1 and Table 1 show the data from the available rain gauge stations over Sikkim. It may be observed that the closest station to the glacial lake site is the Mangan, which reported 2.5 mm of rainfall during 24 hours starting from the 3 UTC of 3 October, 2023. However, two station in South Sikkim, named Namchi and Namthang reported heavy rainfall (>100mm) during the same time. The available AWS data, although indicates heavy rainfall over Sikkim, but do not conclusively indicate cloudburst type of event.

SN	District	Station Name	Total Rainfall (in mm) on				
			30/09	01/10	02/10	03/10	04/10
1	EAST SIKKIM	RANIPOOL KVK	2.5	8.5	12.5	NA	NA
2	EAST SIKKIM	TADONG	3.5	9.5	15.0	36.5	21.5
3	GANGTOK	GANGTOK	NA	7.5	NA	NA	NA
4	NORTH SIKKIM	MANGAN	1.5	3.0	1.5	2.5	1.5
5	SORENG	SORENG	1.5	2.0	3.5	NA	NA
6	SOUTH SIKKIM	NAMCHI	4.0	3.0	10.5	108.0	41.0
7	SOUTH SIKKIM	NAMTHANG	0.5	2.0	10.5	100.0	24.5
8	SOUTH SIKKIM	RAVANGLA	2.0	1.0	5.5	58.5	23.0
9	WEST SIKKIM	MANGA GEYZING KVK	2.0	3.0	0.5	45.0	25.0
10	WEST SIKKIM	SORENG	3.5	11.0	5.5	88.0	34.0
11	WEST SIKKIM	YUKSOM	3.5	7.5	2.0	31.0	29.0

Table 1: Daily rainfall (mm) as measured by IMD AWS stations in Sikkim.


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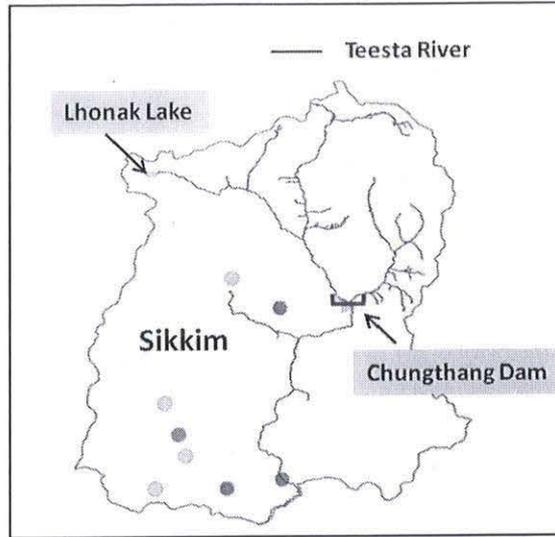


Figure 1: Observed daily rainfall (cumulative rainfall during 3 UTC of 03 October to 3 UTC of 04 October, 2023) from the IMD AWS stations over Sikkim

Since there was no AWS station close to the lake side, two widely accepted satellites based daily rainfall products were analysed to assess the rainfall scenario over the site. One is from Global Precipitation Measuring Mission (GPM) Integrated Multi-satellite retrieval from GPM (IMERG) and another is INSAT-3DR Hydro-estimator Method (HEM) data product. The GPM rainfall estimate could not identify any heavy rainfall event over Sikkim on 3rd October, 2023, but heavy rainfall signature was seen in the INSAT based HEM rainfall estimates over the northern Sikkim area (Figure 2).

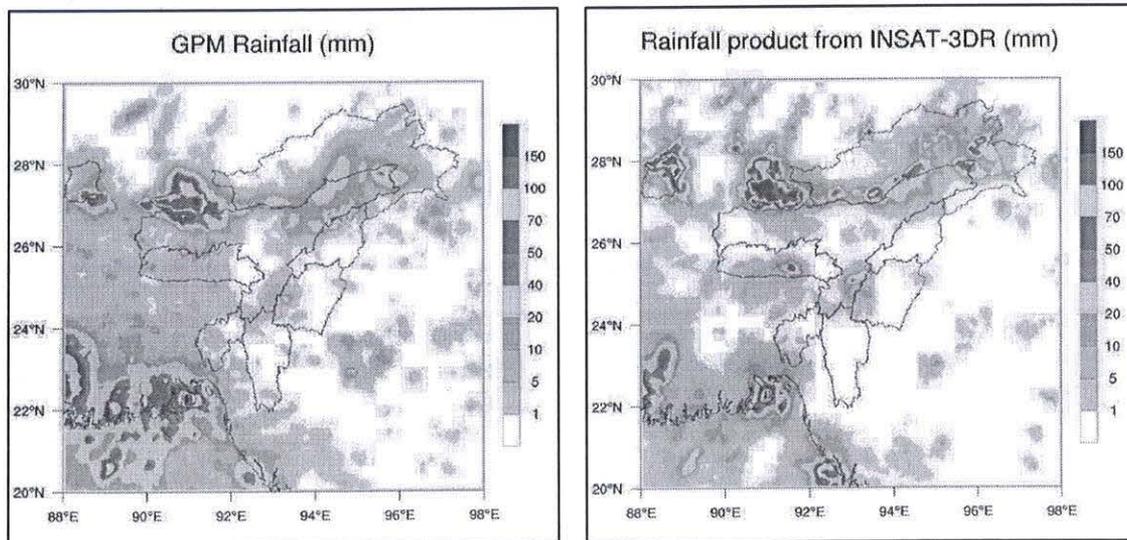


Figure 2: cumulative Rainfall product from GPM (left) and INSAT 3DR (right) from 3rd Oct 0 UTC to 4th Oct 0 UTC

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The half hourly based rainfall products from INSAT HEM estimates are also shown in Figure 3 to have an idea about the time series of rainfall over Sikkim on 03-04 October, 2023.

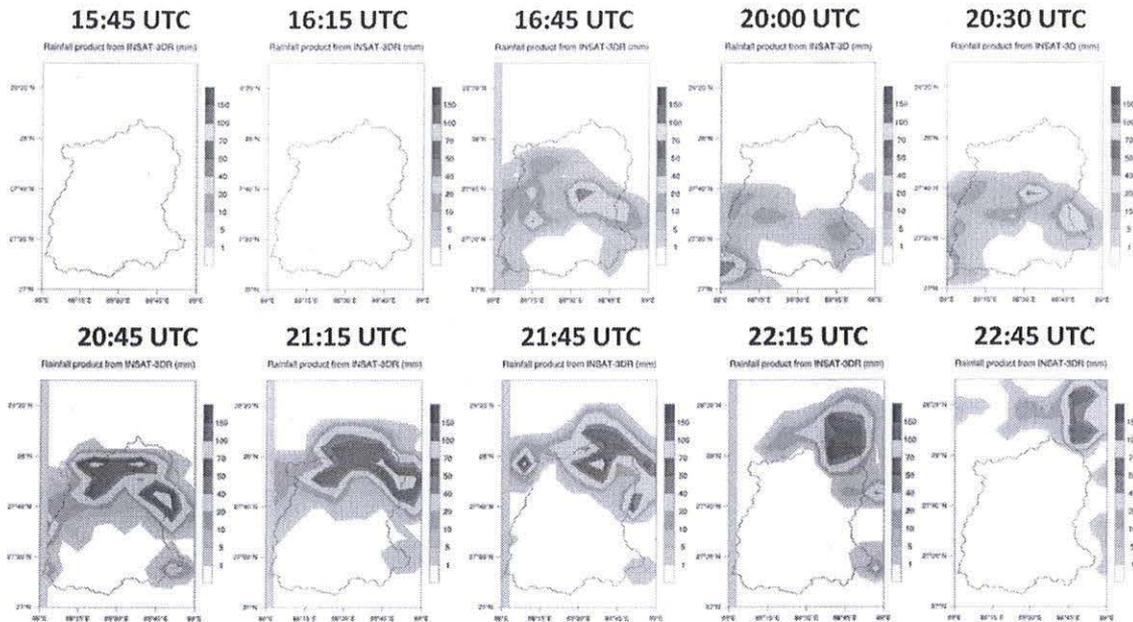
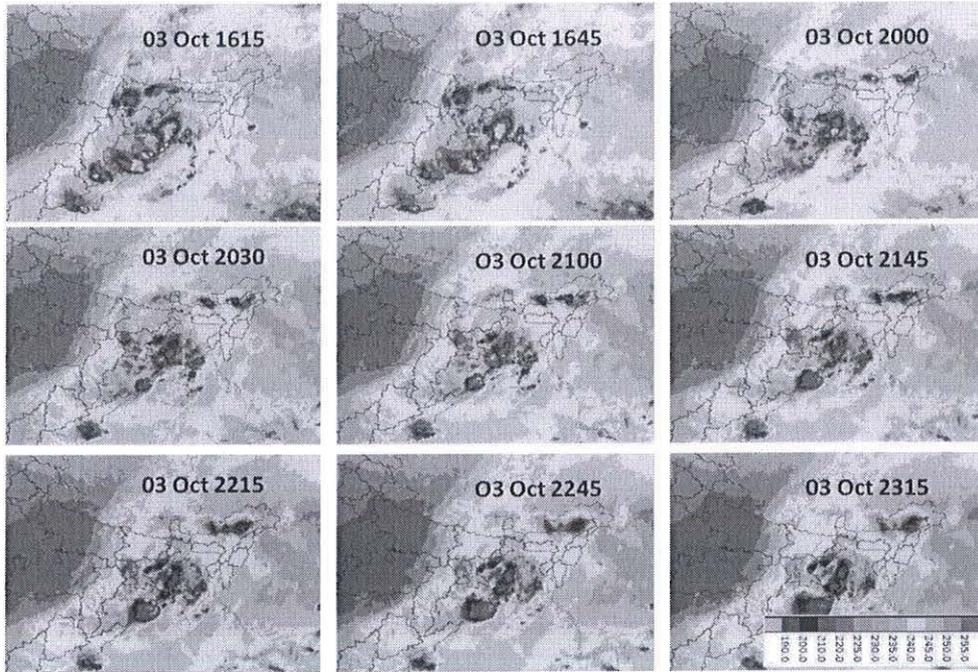


Figure 3: INSAT 3DR HEM products on 3rd October 2023 over Sikkim for different hours (all time are in UTC)

The satellite rainfall products of INSAT showed significant rainfall over the North Western Sikkim (where the Lhonak lake is situated) starting from 16:45 UTC (22:15 IST). However, there was no INSAT 3D/3DR data over the site after 16:45 UTC till 20:00 UTC (1:30 IST of 04 October). The collapse of the lake is estimated to have happened before the 11 PM on 3 October, 2023, so as to reach the water to Chunthang dam area by 11:55 PM on 3rd October, 2023 (as reported in media). There was heavy rainfall of the order of 70-100 mm around 2 AM of 04 October, 2023 over the lake area, but this has probably happened after the lake collapsed. The favorable condition over the North Sikkim area and available data suggests that there was high possibility of intense rainfall over the lake area starting from 22:15 Hrs (IST) on 3rd October, 2023. However, this could not be confirmed because of absence of satellite images after 22:15 PM (IST).

The synoptic weather condition over the area were also analysed using other meteorological data such as water vapor brightness temperature (WV-BT) that gives a good indication of availability of moisture and Outgoing long wave radiation (OLR), that gives indication of presence of clouds. The data as available from INSAT 3DR satellite data products is shown in Figure 4. This has revealed that the condition was favorable for development of severe convective weather systems over the Northern Sikkim area giving intense rainfall.

Water Vapor Brightness Temperature



Outgoing Long wave Radiation

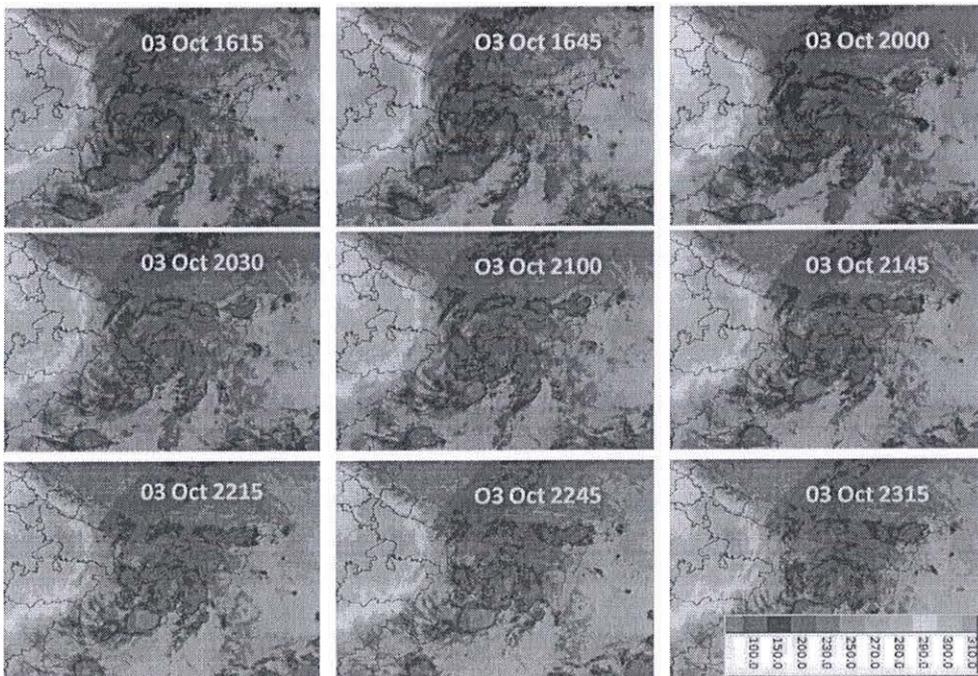


Figure 4: Water vapor brightness temperature (top) and Outgoing longwave radiation (bottom) over the east and north-east Indian region on 3rd Oct 2023


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At 1615 Hrs UTC (2145 Hrs IST) on 3rd October, 2023, WV-BT showed a very high value over parts of Nepal, south of Sikkim and northern part of sub-Himalayan West Bengal which indicates the moisture availability over the region that could move northwards and converge to form deep clouds. However, at 2000 Hrs UTC (0130 Hrs IST on 4th October, 2023), the WV-BT value was high over central and northern Sikkim, while the same reduced over the surrounding areas. The OLR data was also colder over the North Sikkim area from 1615 Hrs UTC (2145 Hrs IST) on 3rd October, 2023, which became even colder from 2000 Hrs UTC (0130 Hrs IST on 4th October, 2023). All these parameters indicate the probability of a rapid condensation of the available moisture and strong convection leading to tall cloud formation in a very short span of time which may have the capability to bring torrential rains. Again, the analysis is limited by absence of data from 1645 Hrs to 2000 Hrs (UTC) on 3rd October, 2023.

The numerical model based weather forecast could not provide indication of any extreme rainfall events over Sikkim on 3rd October, 2023, as shown in Figure 5. The complexity and dynamics of cloud-rain process over the mountainous terrain are often not well captured by such numerical models due to several reasons such as spatial resolution, lack of in situ data feeding into the model, incomplete understanding of physical processes, etc. However, in-situ data would be the best available resource to capture such event and then make the model forecast better. Such events bring our attention to set up a good network of rain-gauge station over complex terrains.

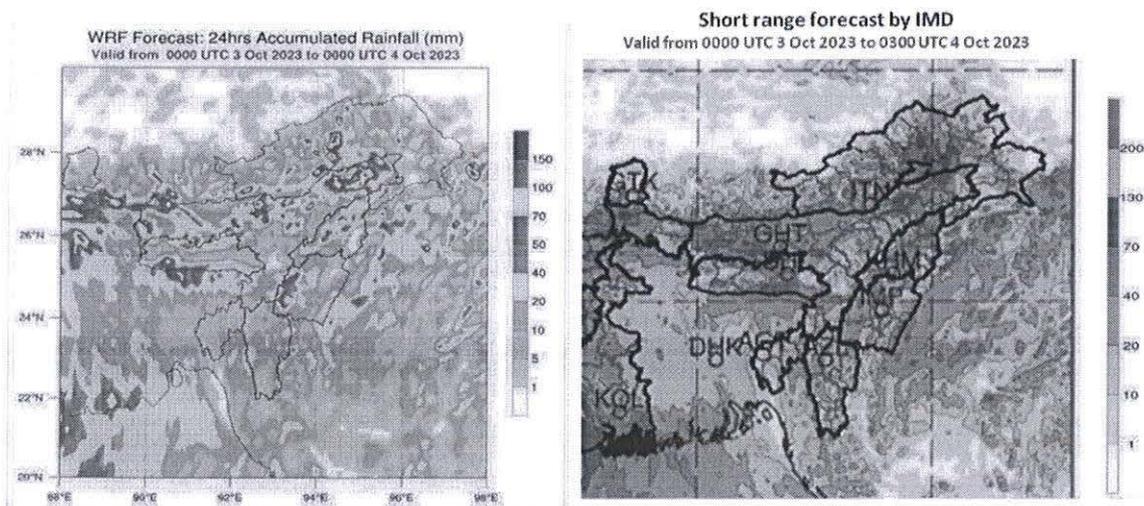
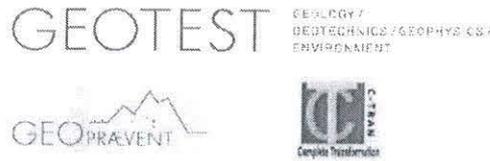
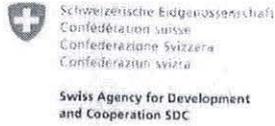


Figure 5: WRF model based rainfall forecast by NESAC (left) and IMD (right) for 3rd Oct 2023

To summarize, it is clear that there was heavy rainfall over large part of Sikkim on 3rd October, 2023 and good amount of rainfall happened over the north western Sikkim around 22:00 Hrs (as seen from satellite based rainfall product). The condition was favorable for further heavy rainfall over the northern Sikkim area beyond 22:00 hrs and till the lake burst happened.

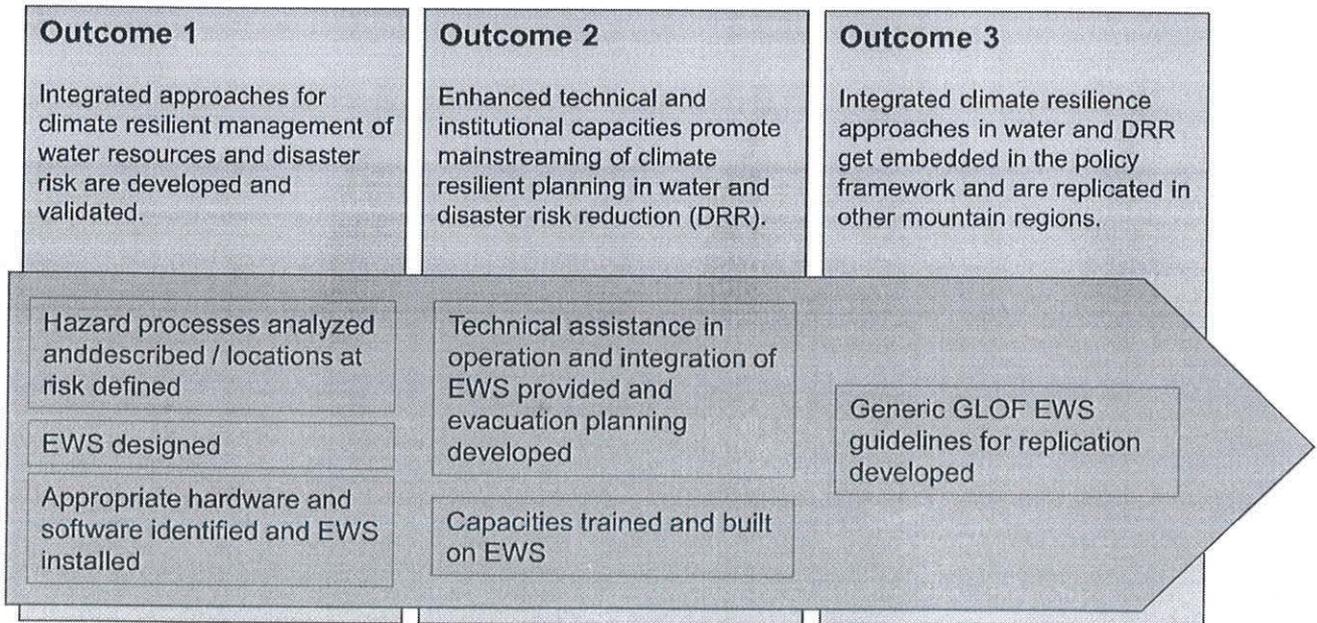

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Consultation Workshop on Glacial Lake Outburst Flood Risk for South Lhonak and Shako Cho Lakes in Sikkim

1 13.05.2022 | Disaster Risk Management Planning and Implementation Support in the Indian Himalayan Region

Early warning and response system for Glacial Lake Outburst Floods



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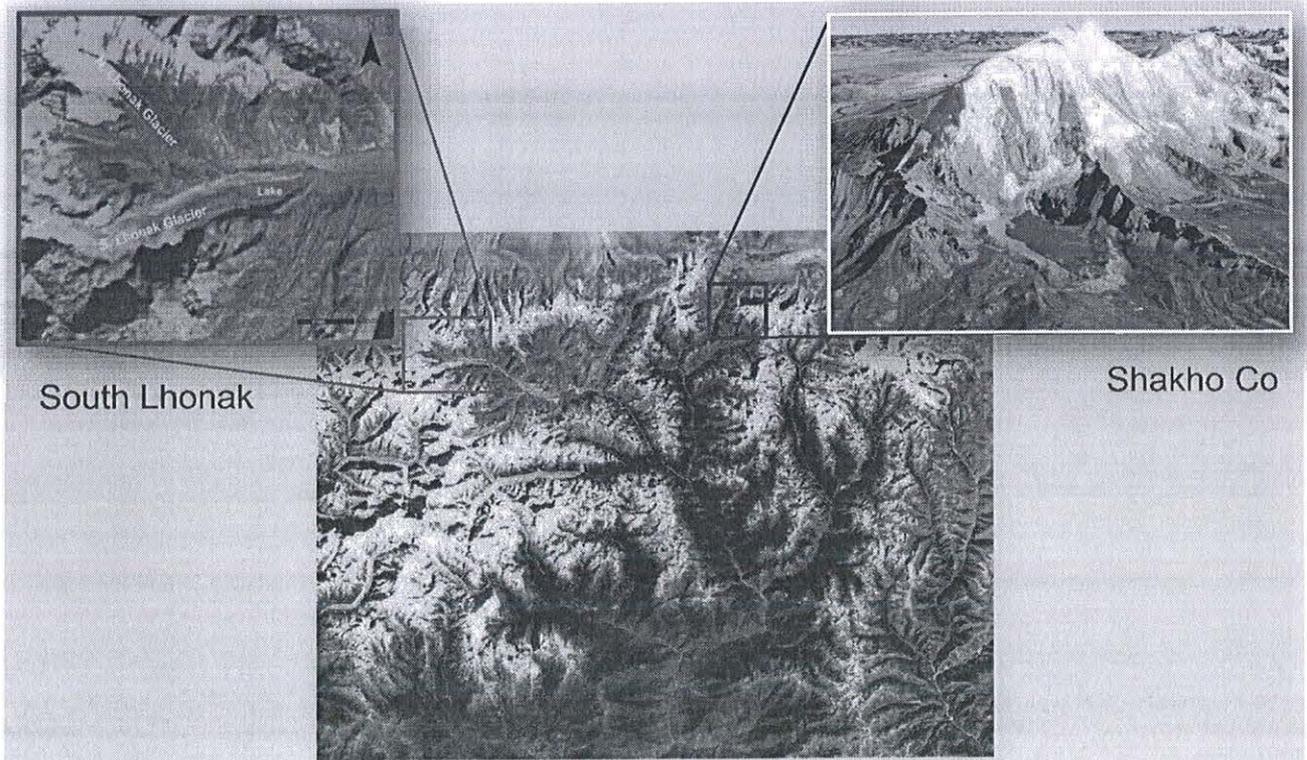


Part 1

Presentation on First-order assessment of Glacial Lake Outburst Flood risk for Sikkim and preliminary detailed hazard modelling of South Lhonak lake

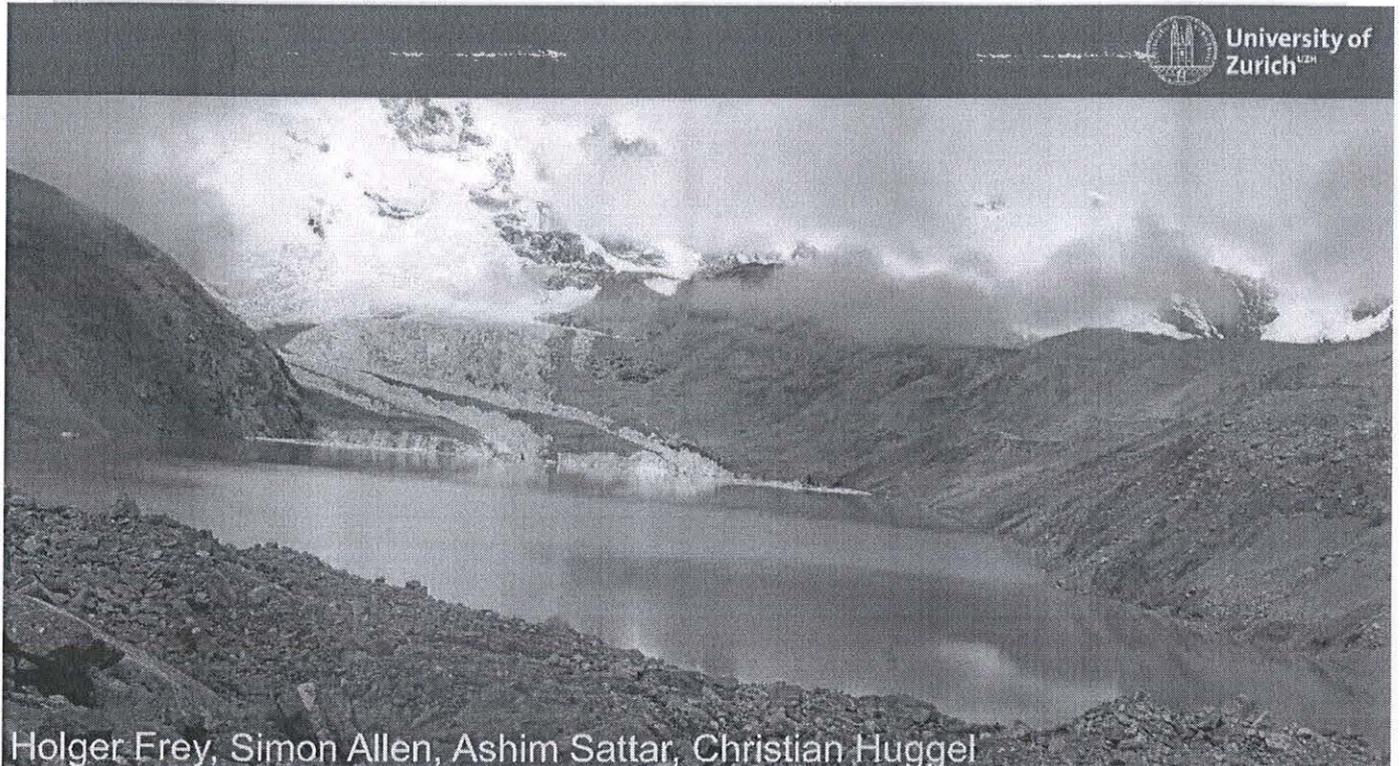
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South Lhonak Lake



4 13.05.2022 | Disaster Risk Management Planning and Implementation Support in the Indian Himalayan Region

First-order assessment of GLOF risk for Sikkim and preliminary detailed hazard modelling of South Lhonak Lake



Holger Frey, Simon Allen, Ashim Sattar, Christian Huggel

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Importance

Why important

- Large amount of knowledge on GLOF risk in Sikkim already exists.
- Conditions are changing rapidly → new threats emerging.
- Provides the scientific basis for identifying where detailed risk studies and response strategies should be focussed.
- The lakes that are widely considered to be dangerous (e.g, South Lhonak and Shakho Cho) can be evaluated in a wider context.

Formation of Glacial Lakes
in the Hindu Kush-Himalayas
and GLOF Risk Assessment

ICIMOD

Water Resources Research

RESEARCH ARTICLE

Glacial Lake Outburst Flood Hazard, Downstream Impact, and Risk Over the Indian Himalayas

Key Words:

Saket Doley¹ and Manish Kumar Juyal¹

Inventory and recently increasing GLOF susceptibility of glacial lakes in Sikkim, Eastern Himalaya

Suruchi Aggarwal^{1,2}, S.C. Rai¹, P.K. Thakur¹, Adam Eammer^{1,3}

Remote sensing and in situ-based assessment of rapidly growing South Lhonak glacial lake in eastern Himalaya, India

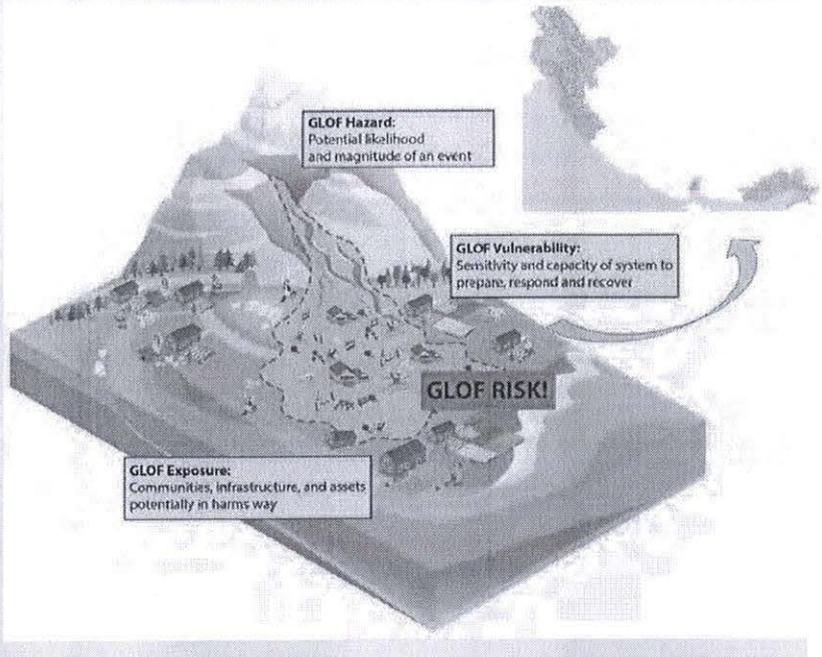
R. K. Sharma¹, Pranay Pradhan¹, N. P. Sharma¹, B. G. Shrestha¹

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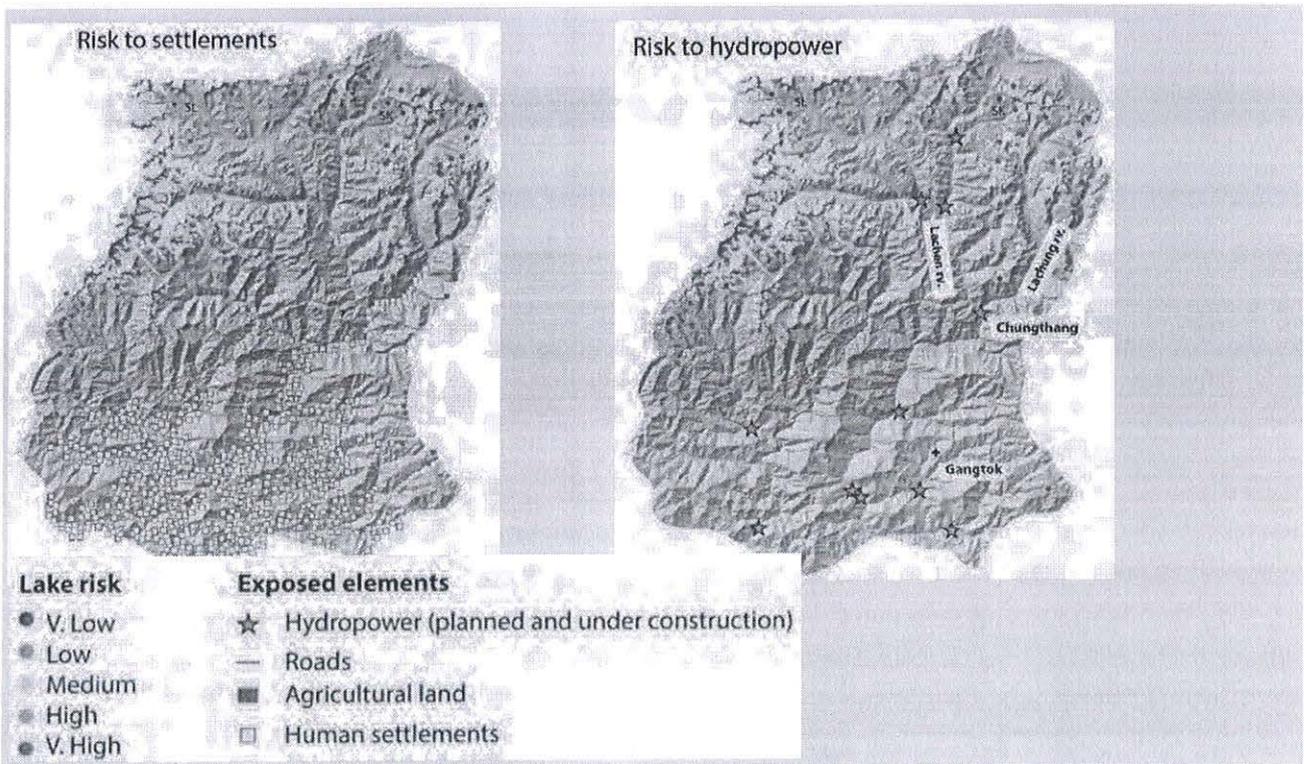
Our approach

1. Desk-based review of latest studies and reports.
2. Our own, semi-automated assessment of GLOF risk to various sectors.



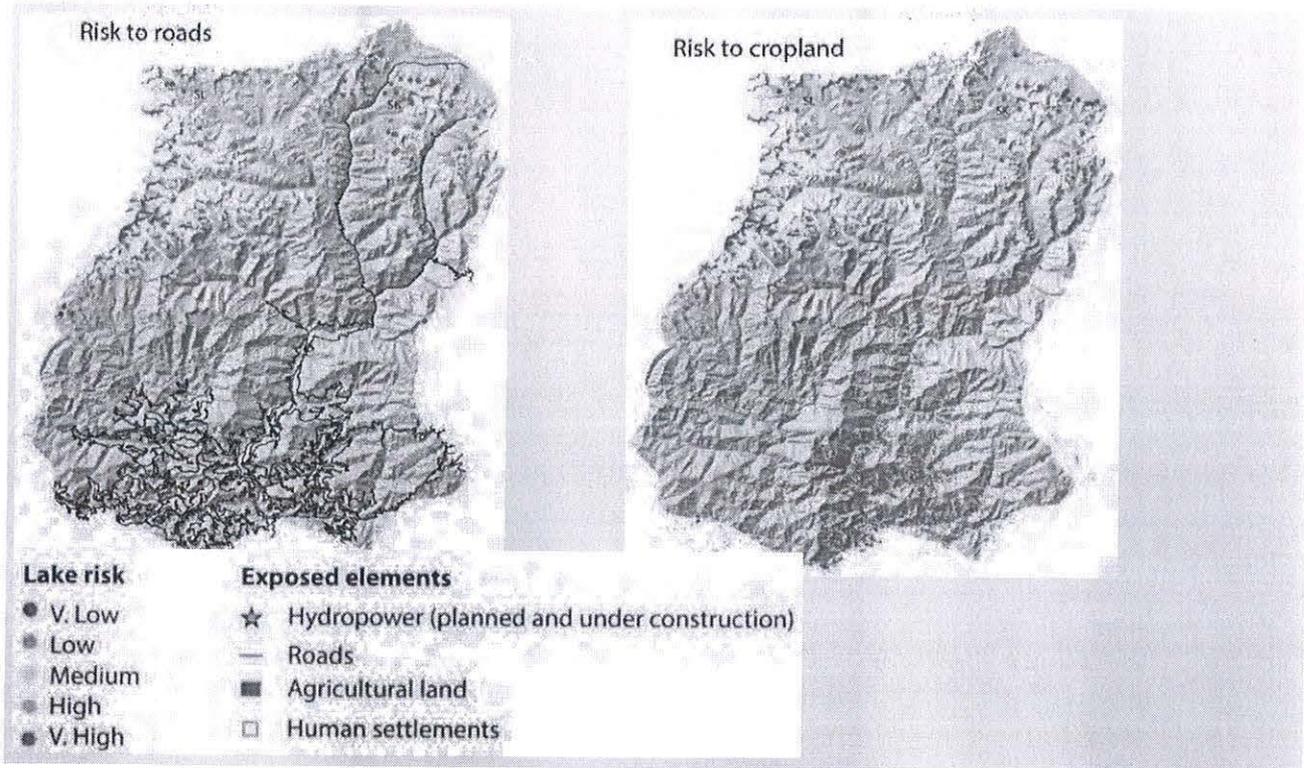
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Risk Overview



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Risk Overview



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Critical lakes

ID	Lat	Long	This study	Worni et al. (2013)	Dubey & Goyal (2020)	Aggarwhal et al. (2017)
➔ 195 (SL)	27.91	88.19	Very high risk	Potentially critical		High Susceptibility
224	28.01	88.56	Very high risk	Critical	Very high risk	Medium Susceptibility
227	27.99	88.54	Very high risk*	Critical	Very high risk	Medium Susceptibility
228	27.98	88.50	Very high risk		Very high risk	Medium Susceptibility
238	28.00	88.71	Very high risk*	Critical	Very high risk	High Susceptibility
239	28.00	88.69	Very high risk	Critical	Very high risk	Medium susceptibility
➔ 258 (SK)	27.97	88.61	Very high risk*	Critical	Very high risk	Medium susceptibility
264	27.86	88.86	Very high risk		Very high risk	
298	27.87	88.63	Very high risk		Very high risk	
569	28.00	88.64	Medium risk	Critical	Very high risk	No Susceptibility

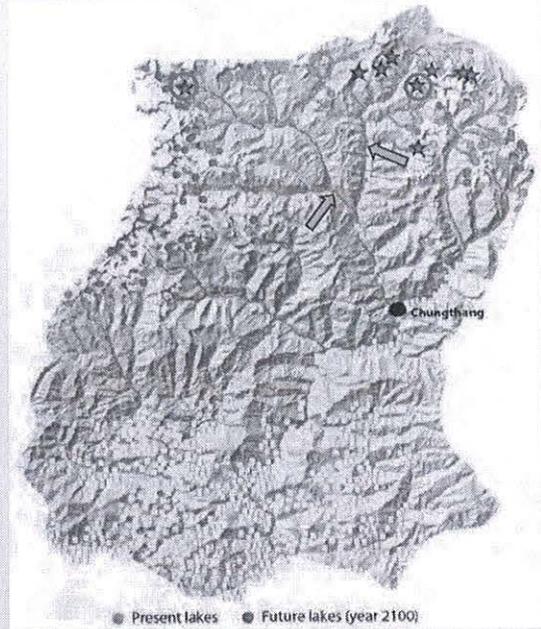
* High potential flood volume from Fujita et al. 2013

Combining multiple studies, we can identify 10 highest priority lakes at state level

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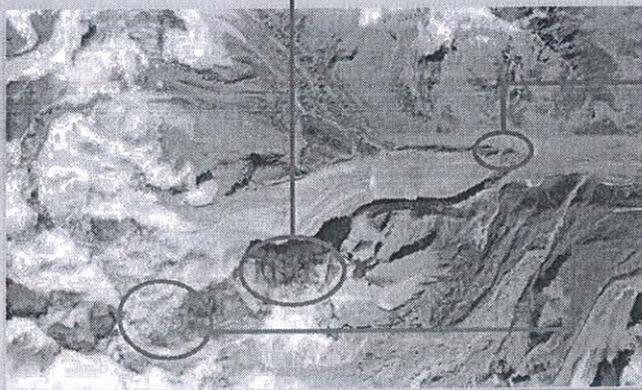
EWS: Integration of other lakes (existing/future)

- well designed Early Warning System will reduce not only the risk from South Lhonak Lake and Shakho Cho, but also other surrounding high priority lakes
- the Early Warning System is forward-looking, in view of the formation of new lakes



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Detailed hazard modelling of South Lhonak Lake

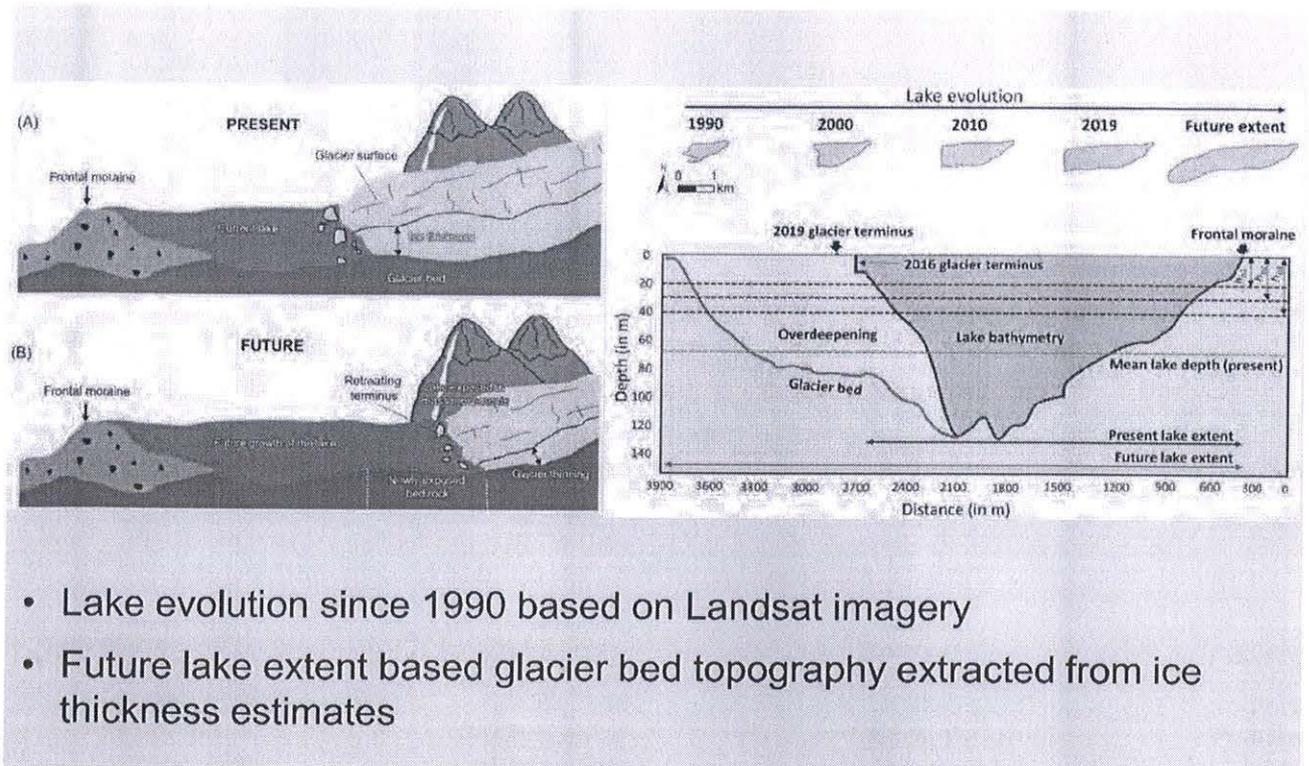


1. Upstream mass movement impacts
2. Breach formation at the dam
3. Large process chains

→ 3x3 scenarios

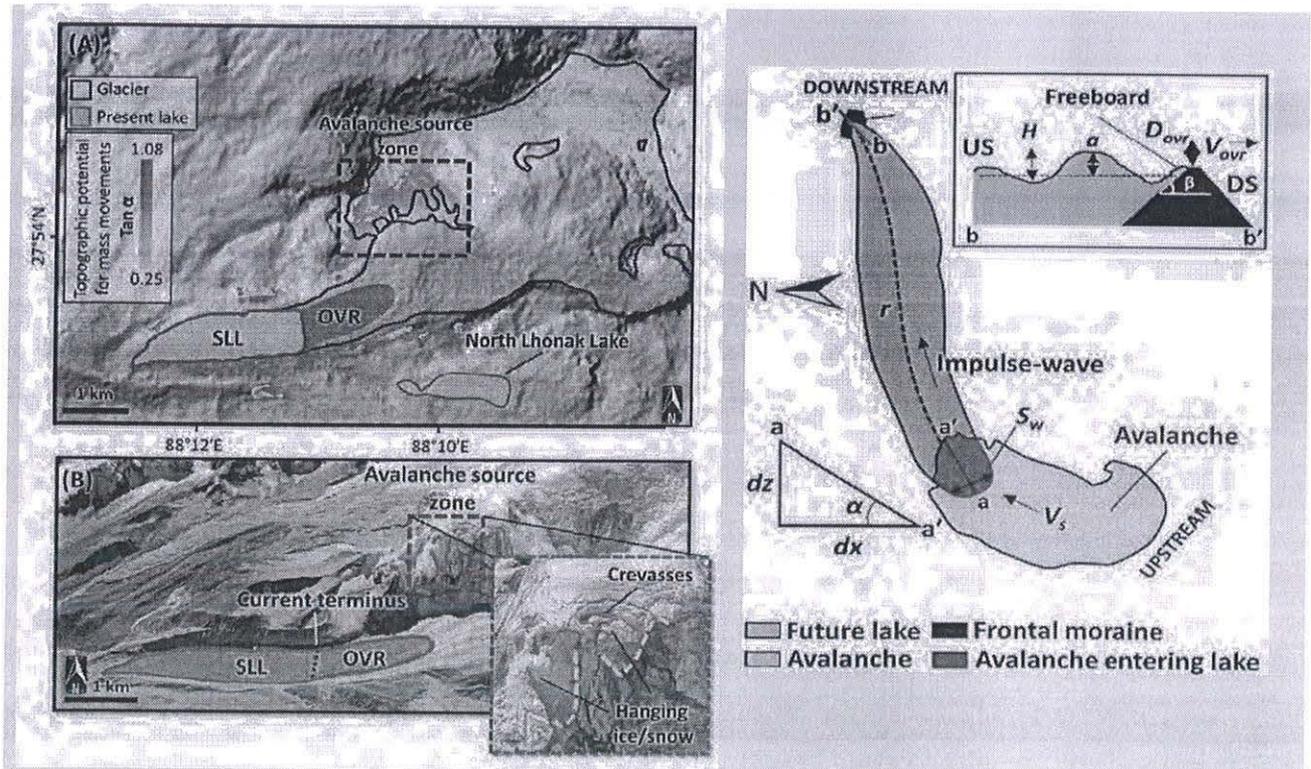
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Evolution and future characteristics of South Lhonak Lake



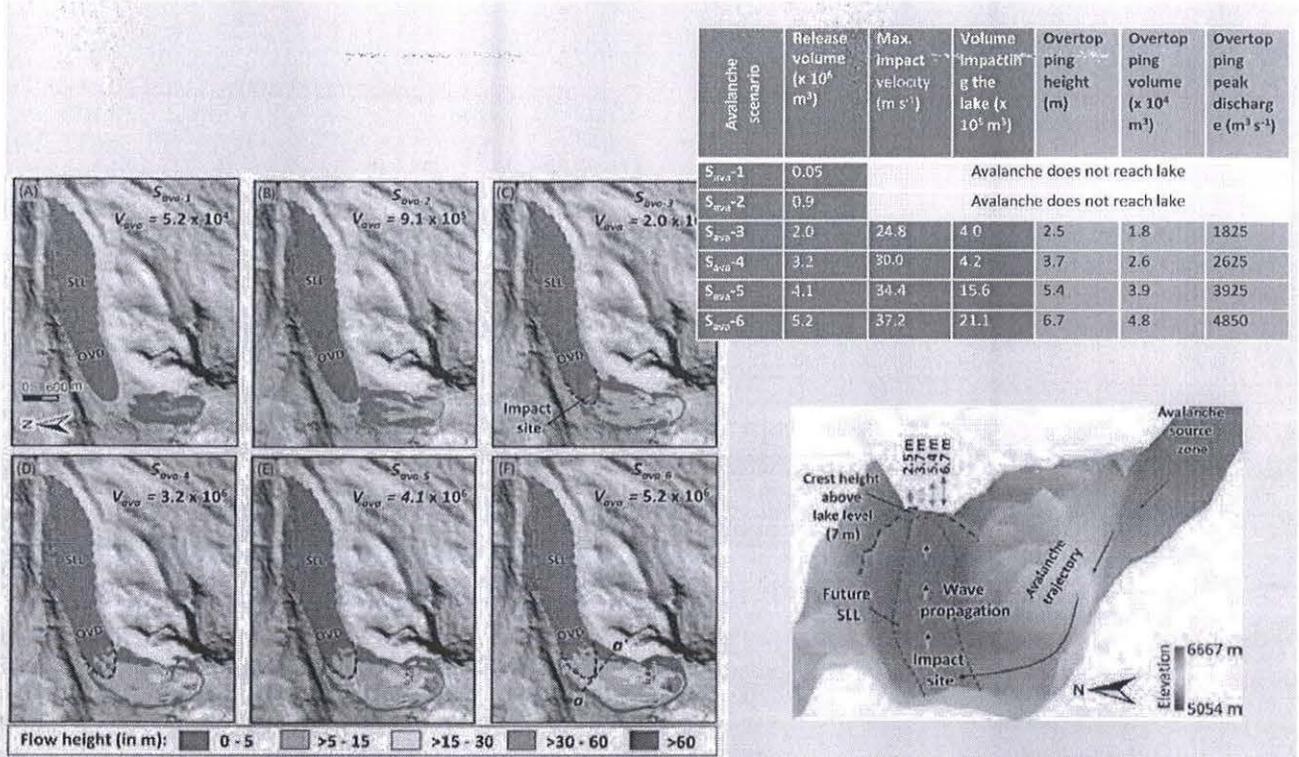
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Upstream mass movement impacts



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Upstream mass movement impacts

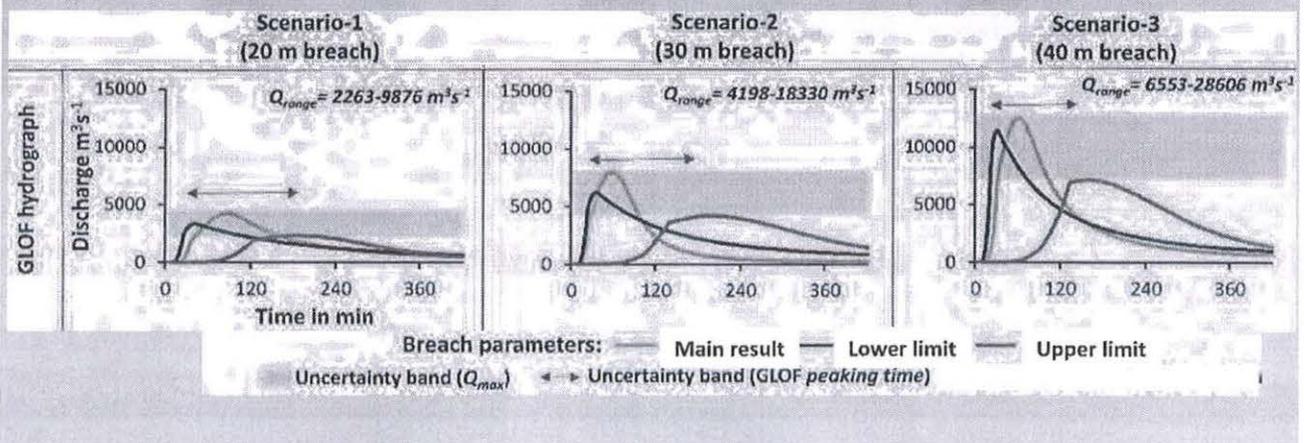


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Breach formation at the moraine dam

Modeling with HEC-RAS

Breach scenario	Breach with (m)	Breach formation time (h)	Peak discharge (m ³ s ⁻¹)
SC-1 (h _{b1})	20 m	119.4 (47.5-286.4)	4'311 (2'263-9'876)
SC-2 (h _{b2})	30 m	146.8 (58.4-352.1)	8'000 (4'198-18'330)
SC-3 (h _{b3})	40 m	169.5 (67.6-407.5)	12'487 (6'553-28'606)

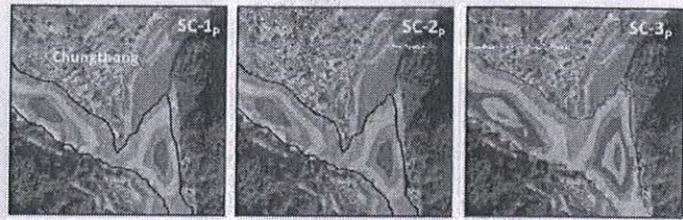


16 13.05.2022 | Disaster Risk Management Planning and Implementation Support in the Indian Himalayan Region

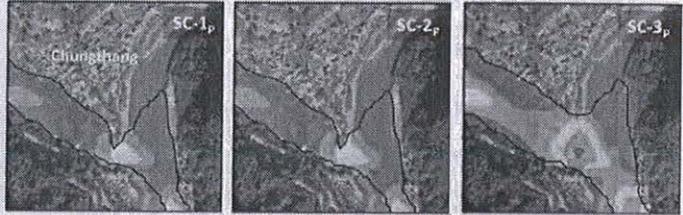
Breach formation at the moraine dam – Impact at Chungthang

Flow depths and flow velocities according to the three breach formation scenarios modelled for Chungthang (HEC-RAS)

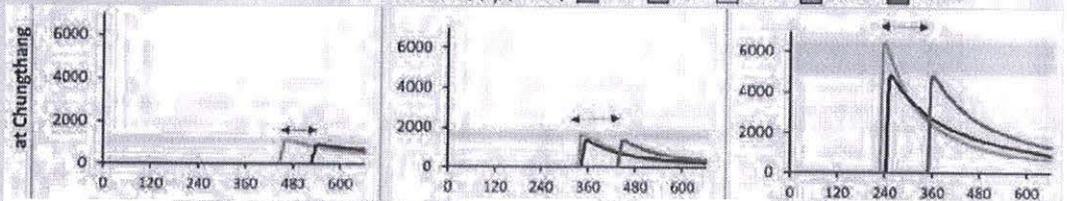
	Peak discharge Chungthang	Time
SC-1p	1'134 m ³ /s	7 h 30 min
SC-3p	6'420 m ³ /s	3 h 40 min



Flow depth (D) (in m) 0-5 >5-10 >10-15 >15-20 >20-25 >25-30



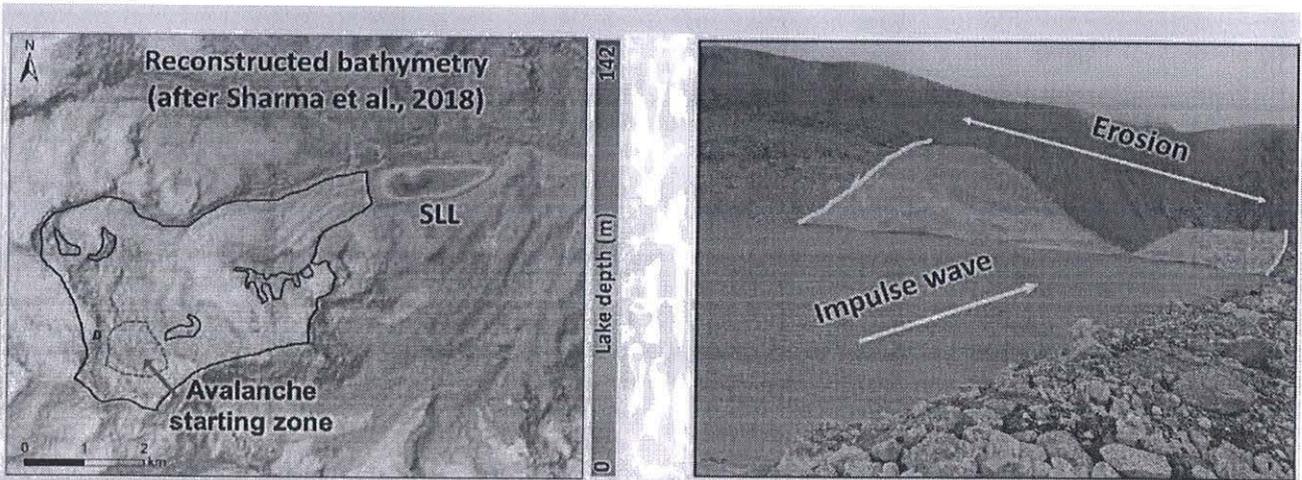
Flow velocity (V) (in m/s) 0-3 >3-6 >6-9 >9-12 >12-15



Breach parameters: — Main result — Lower limit — Upper limit

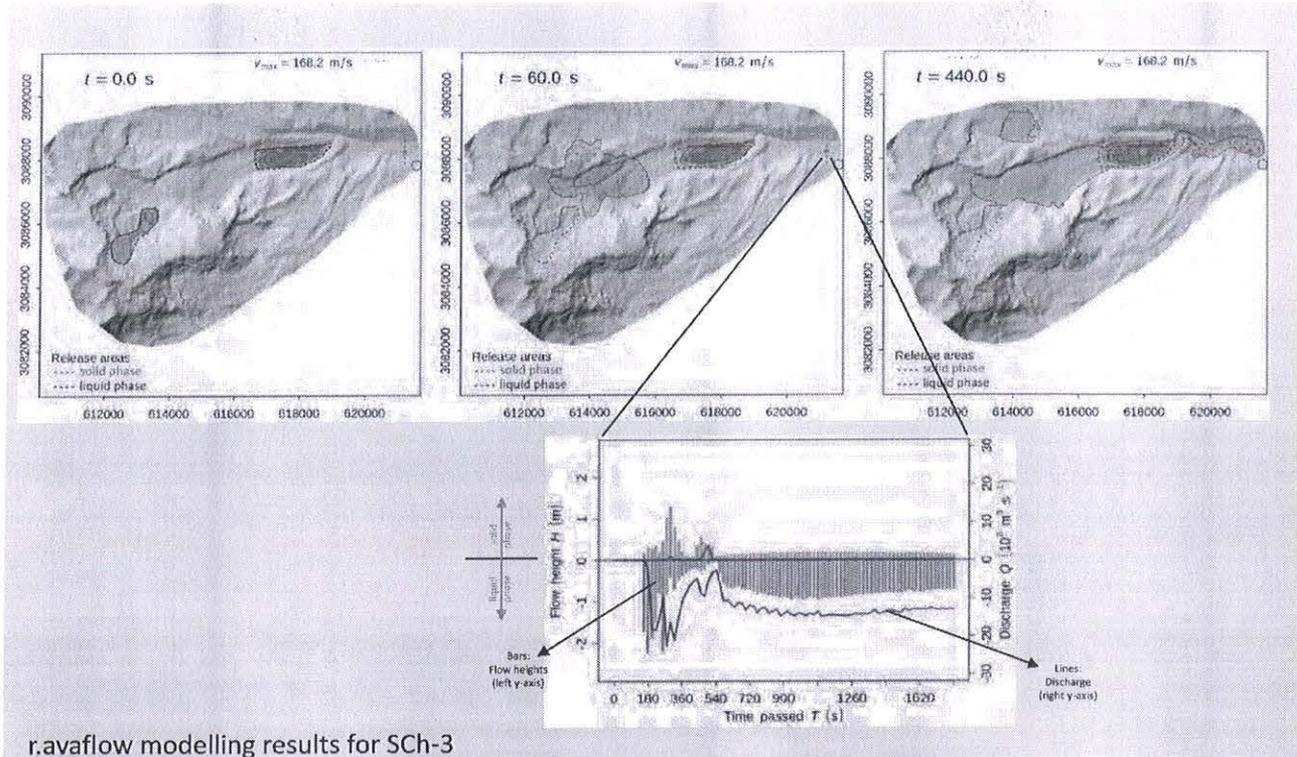
Uncertainty band (Q_{max}) ← → Uncertainty band (GLOF peaking time) ← → Uncertainty band (GLOF arriva

Large process chains



Scenario	Volume	Material
SCh-1	6 x 10 ⁶ m ³	Ice
SCh-2	12.4 x 10 ⁶ m ³	Ice and rock
SCh-3	25 x 10 ⁶ m ³	Ice and rock

Large process chains



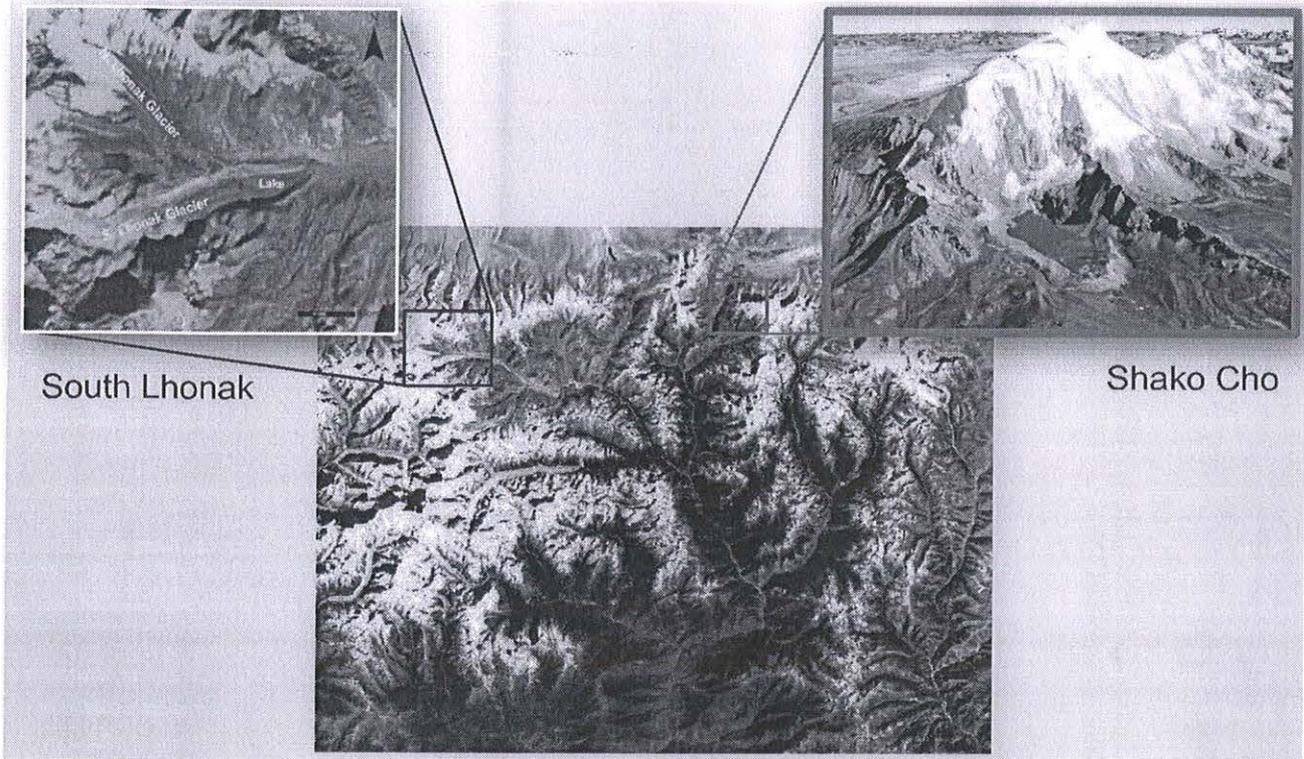
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Summary and conclusions

- Mass movements (ice / rock avalanches) from upstream and breach formation can cause a GLOF from South Lhonak lake.
- Future lake expansion will increase the probability of mass movement impacts.
- Large magnitude avalanches are needed to trigger a GLOF.
- Potential for breach formation are determined by dam properties (geometry, ice content) and their future evolution.
- Topographic situation allows for sufficient warning times in downstream communities.
- Floods can reach Chungthang and potentially beyond. Critical role of the reservoir and its dam.

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Shako Cho Lake



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GLOF hazard assessment of the Shako Cho Lake

No bathymetric measurements available

→ Preliminary modeling based on:

- Volume estimations from empirical area-depth relations
- Assuming symmetric bathymetry

Scaling method	Volume
Evans, 1986	14'056'726.29
Fujita et al., 2013	25'716'358.79
Wang et al., 2012	14'613'945.6
Huggel et al., 2002	14'520'423.7
Loruax and Casassa, 2013	12'876'420.47
Emmer and Vilimek, 2014	17'454'236.79
Cook and quincey 2015	15'470'765.32
Kapista et al., 2017	12'669'511.52
Muñoz et al., 2020	16'131'238.27
Cook and Quincey, 2015	12'416'449.71
Average	15'592'607

Total area of the lake (mapped in 2021)=54'4349 m²

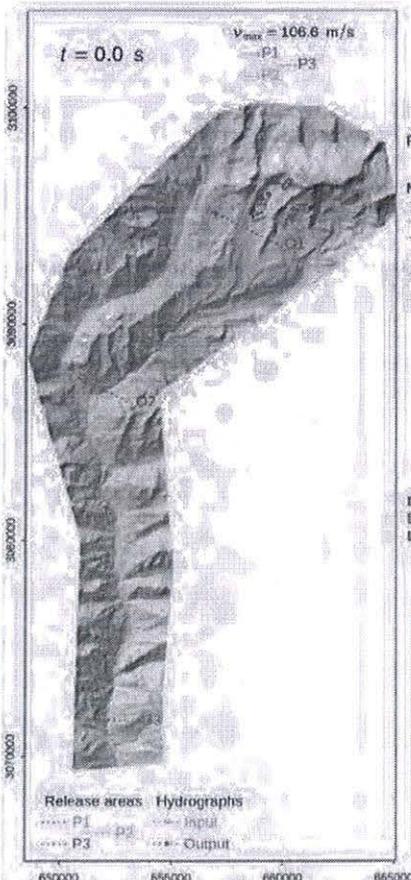
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Scenario based GLOF process chain modeling of Shako Cho

Scenarios	Avalanche Volume (m ³)	Ice volume (m ³)/ %	Rock volume (m ³)	Density of the avalanche (kg/m ³)	Remarks
SC-1	3.5 x 10 ⁶	0.7 x 10 ⁶ 20%	2.8 x 10 ⁶ 80%	2'300	Rock material dominates (Low-magnitude)
SC-2	3.5 x 10 ⁶	3.5 x 10 ⁶ 100%	0.0 0%	1'000	Low-magnitude Ice avalanche
SC-3	8 x 10 ⁶	4.0 x 10 ⁶ 50%	4.0 x 10 ⁶ 50%	1'850	Moderate-magnitude rock-Ice avalanche
SC-4	8 x 10 ⁶	8.0 x 10 ⁶ 100%	0.0 0%	1'000	Moderate-magnitude ice avalanche
SC-5	12 x 10 ⁶	2.4 x 10 ⁶ 20%	9.6 x 10 ⁶ 80%	2'300	Rock material dominates (High-magnitude)
SC-6	12 x 10 ⁶	9.6 x 10 ⁶ 80%	2.4 x 10 ⁶ 20%	1'340	Ice dominates (High-magnitude)

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Results of GLOF process chain scenario 1 (SC-1)

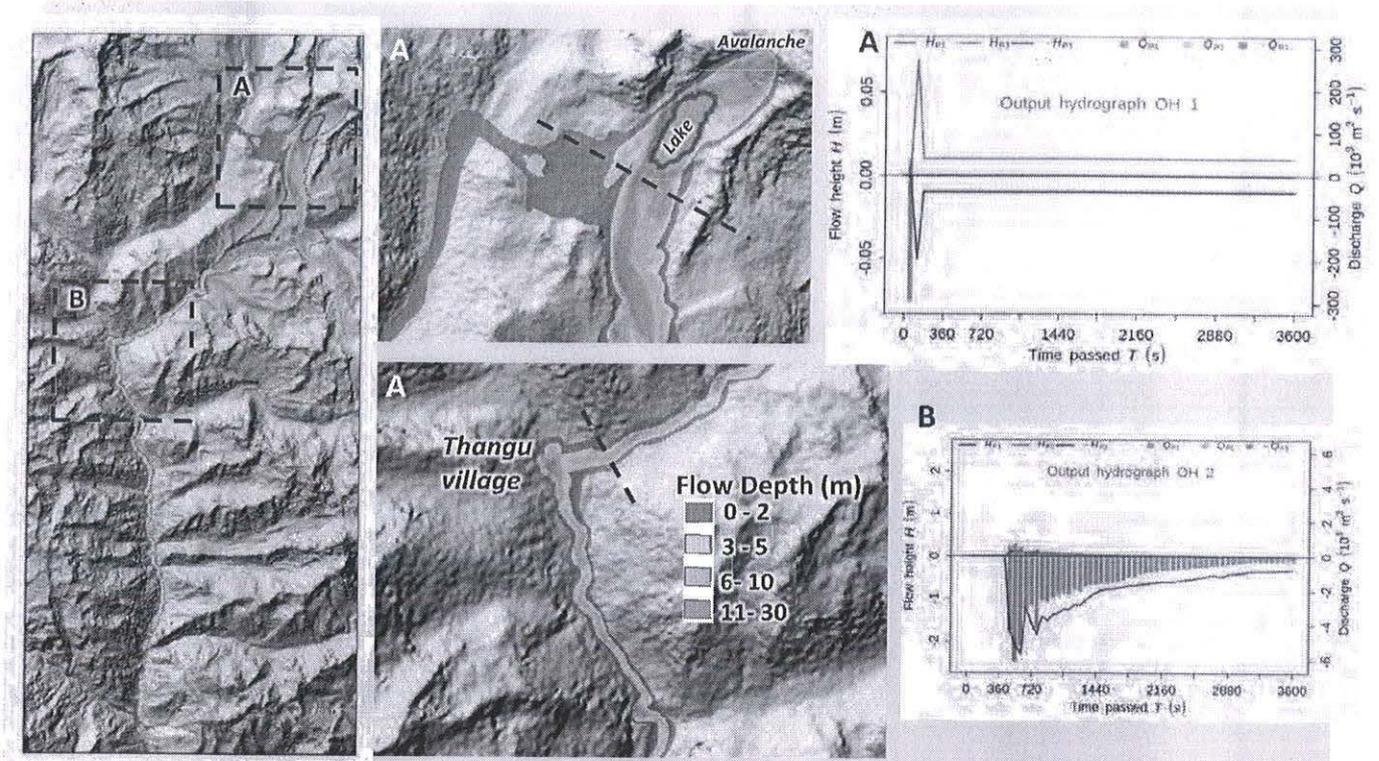


2 outflow patterns

Flow time GLOF → Thangu: approx. 7 min

Scenario	Avalanche Volume (m ³)	Ice volume (m ³)/ %	Rock volume (m ³)	Density of the avalanche (kg/m ³)	Remarks
SC-1	3.5 x 10 ⁶	0.7 x 10 ⁶ 20%	2.8 x 10 ⁶ 80%	2300	Rock material dominates (Low-magnitude)

Modeling results



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Considerations of flood impacts below Chungthang

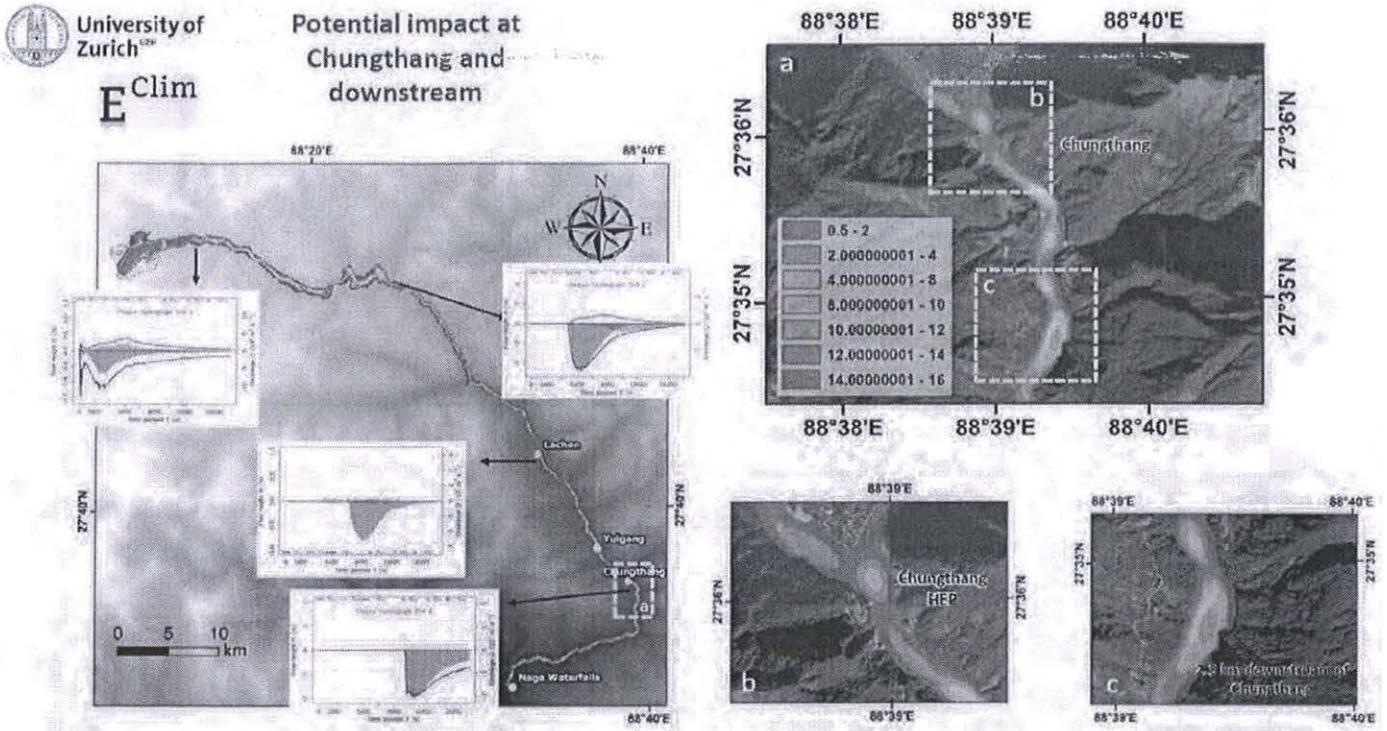
Proposed way forward:

- Consider the HP company operating Chungthang dam as a user (key stakeholder) of the EWS.
- Consider the filling state of the reservoir as a potential DRR tool (potential for lowering the reservoir level in high alert situations, in order to increase retention capacity).



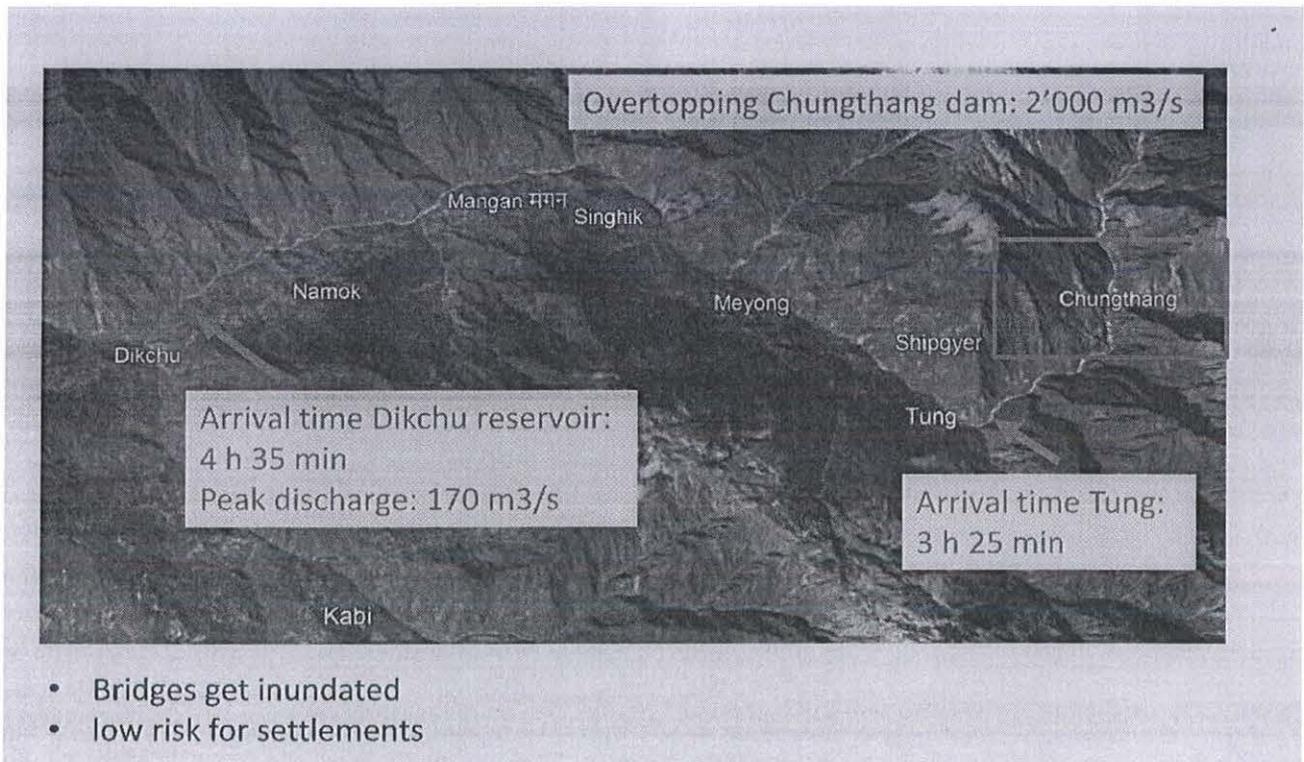
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Extrem event scenario



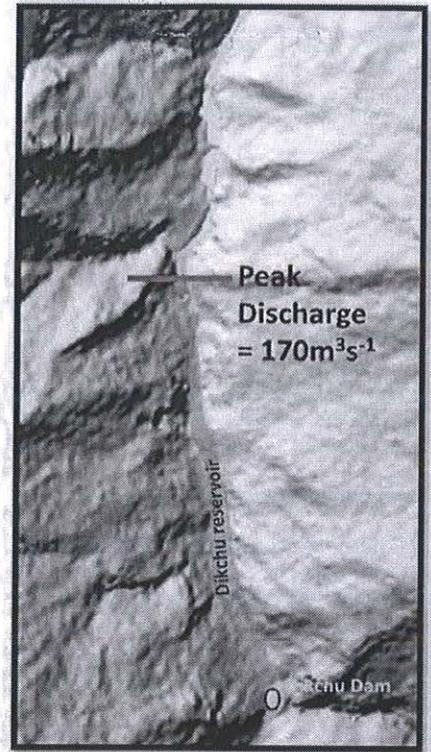
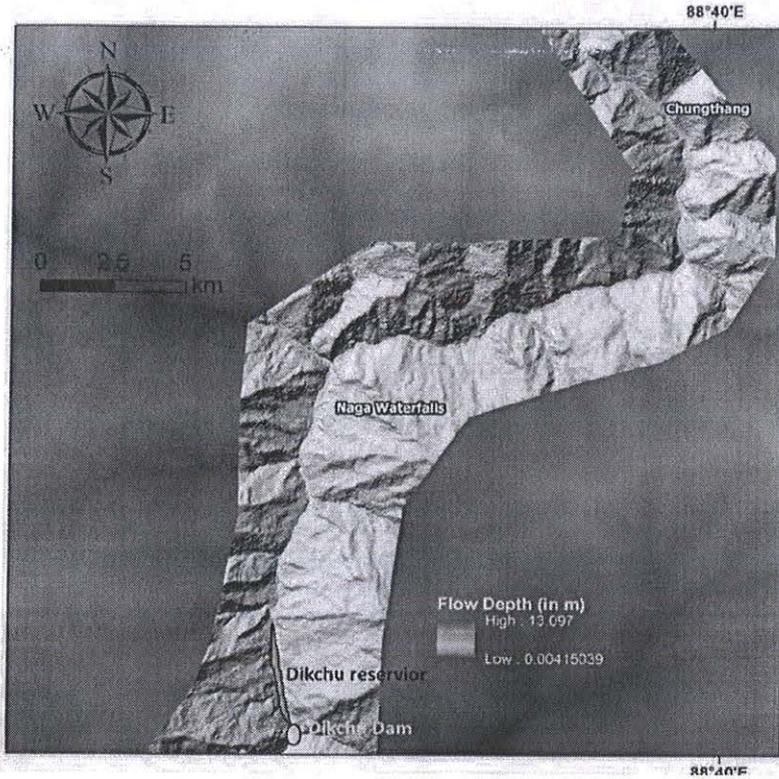
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Arrival times downstream Chungthang



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HEC-RAS result



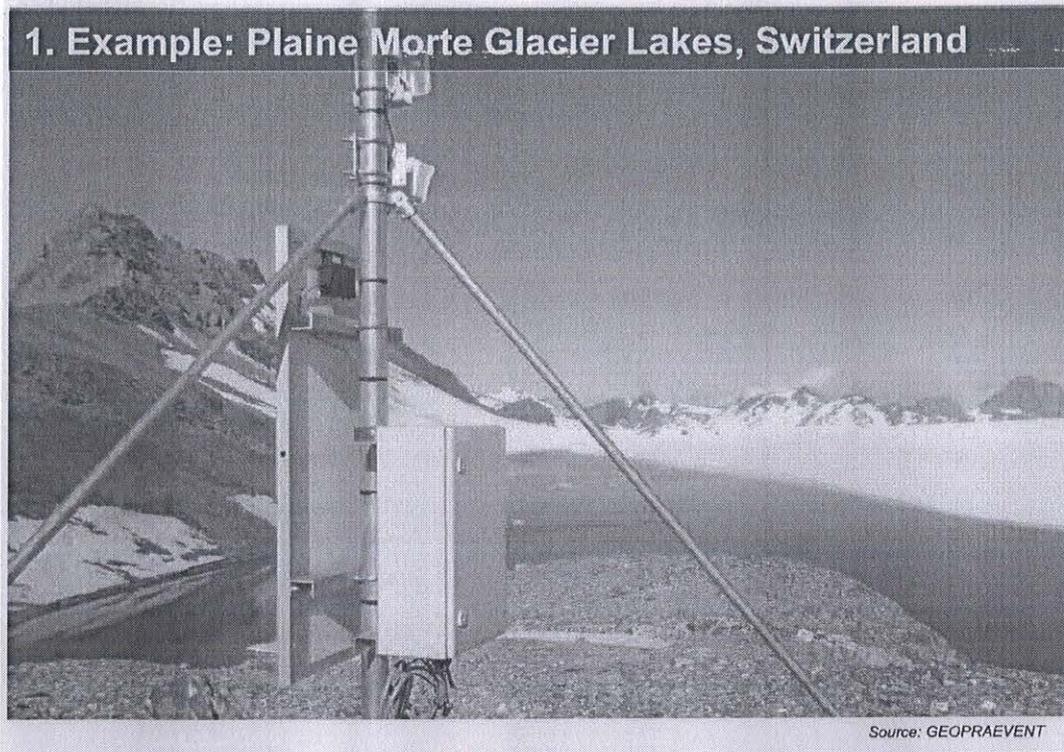
29 13.05.2022 | Disaster Risk Management Planning and Implementation Support in the Indian Himalayan Region

Part 2

Presentation on Proposed & Planned activities of GLOF risk assessment and Early Warning system for both lakes

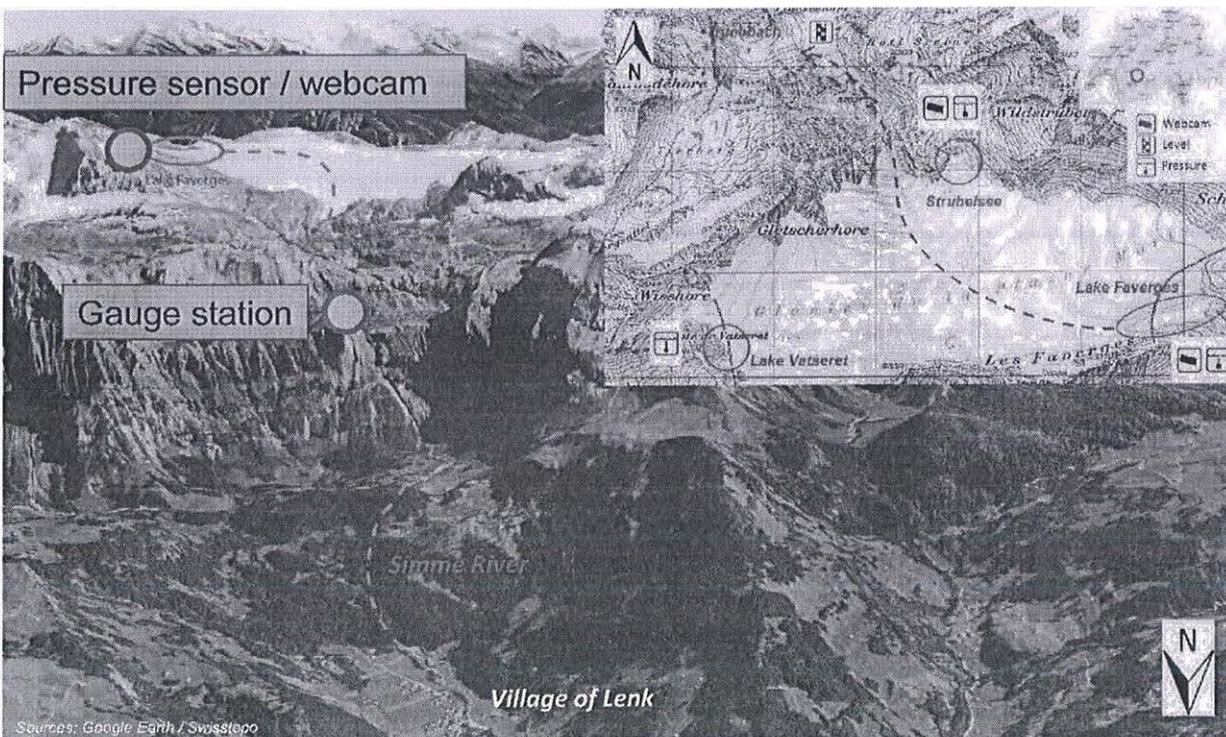

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Example of Best Practice of EWS



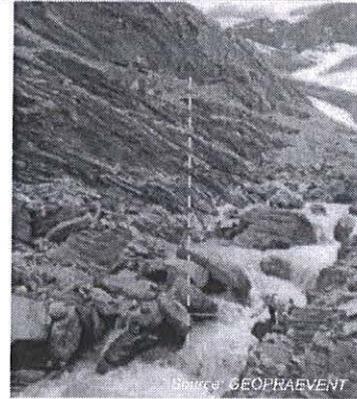
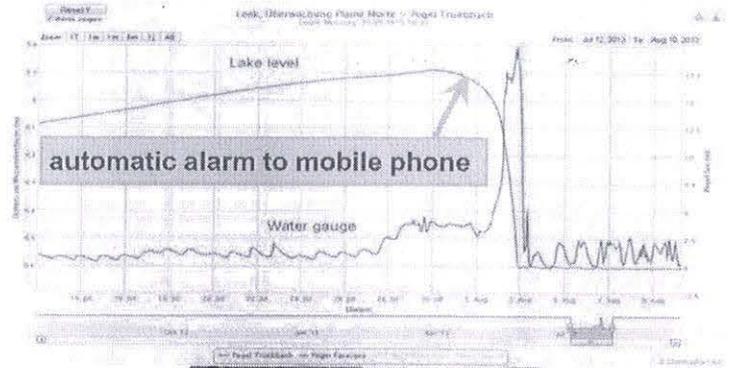
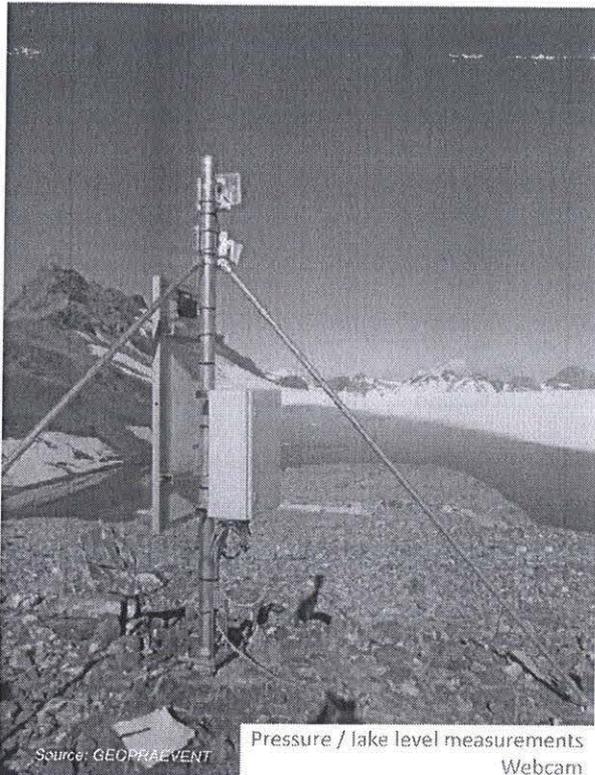
31 13.05.2022 | Disaster Risk Management Planning and Implementation Support in the Indian Himalayan Region

EWS Plaine Morte Glacier Lakes, Switzerland



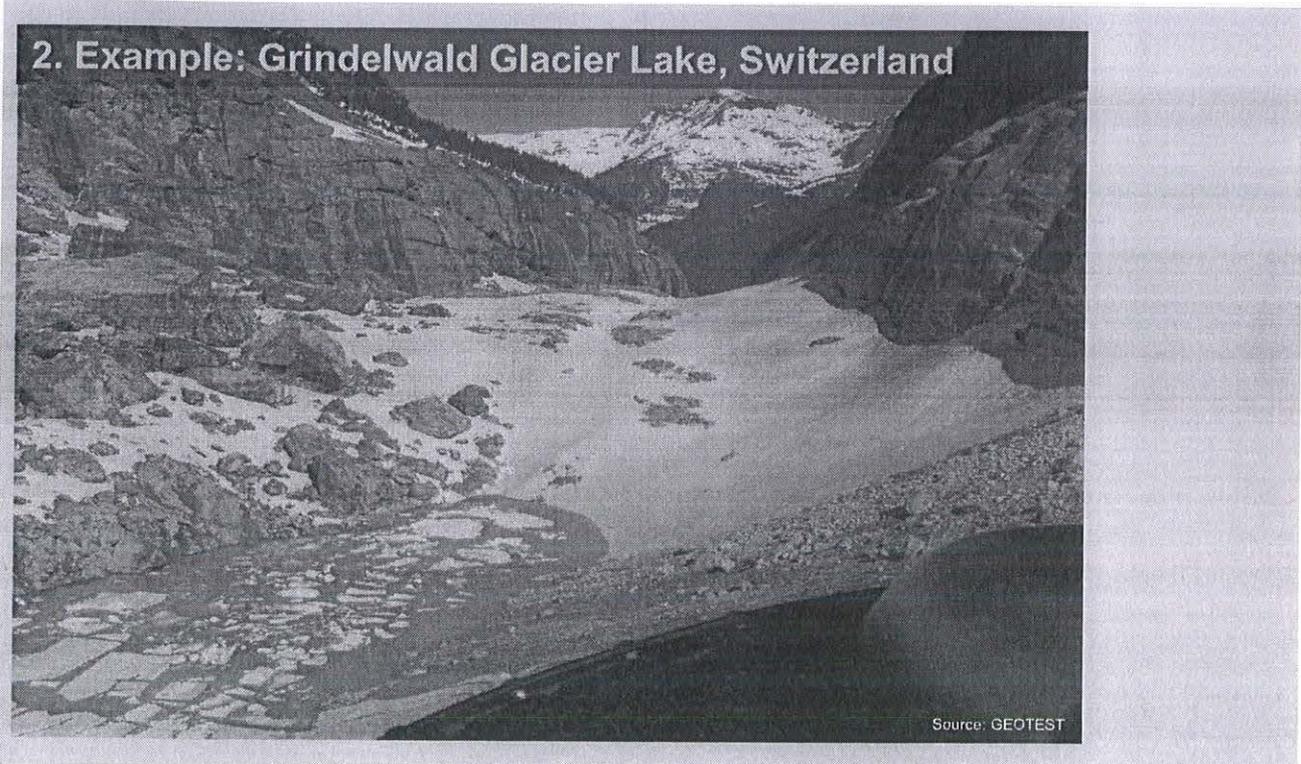
32 13.05.2022 | Disaster Risk Management Planning and Implementation Support in the Indian Himalayan Region

EWS Plaine Morte Glacier Lakes, Switzerland



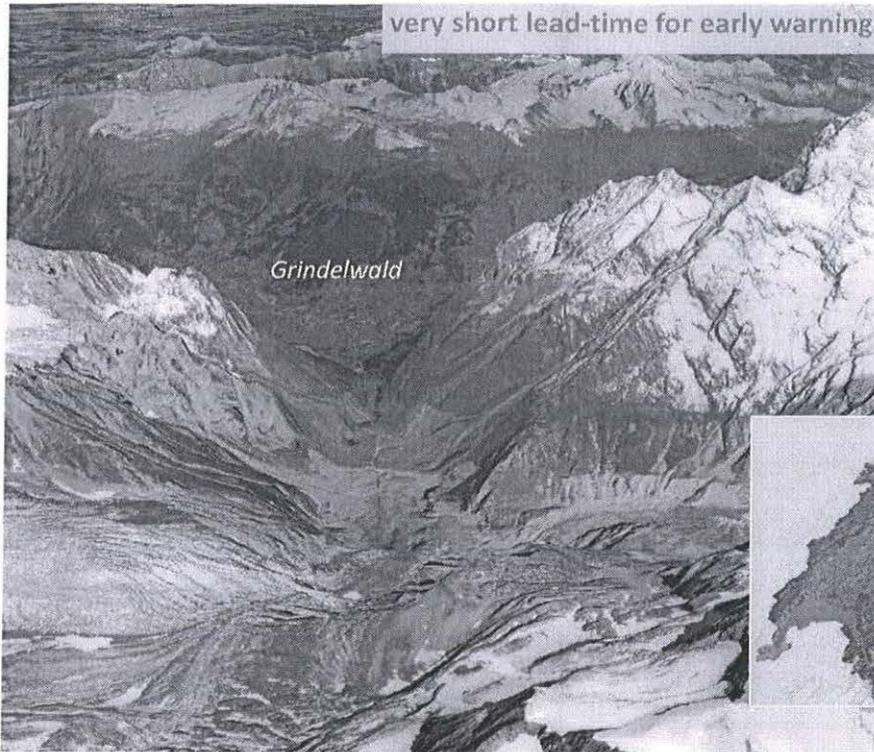
33 13.05.2022 | Disaster Risk Management Planning and Implementation Support in the Indian Himalayan Region

Example of Best Practice of EWS

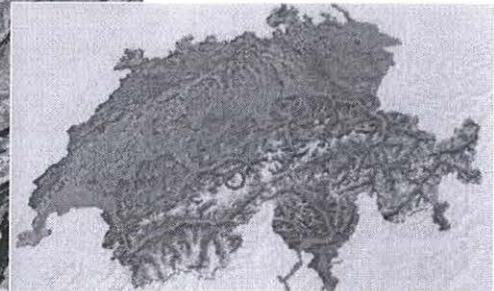


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Grindelwald Glacier Lake, Switzerland



Source: Google Earth



Source: Swisstopo

35 13.05.2022 | Disaster Risk Management Planning and Implementation Support in the Indian Himalayan Region

Grindelwald Glacier Lake, Switzerland

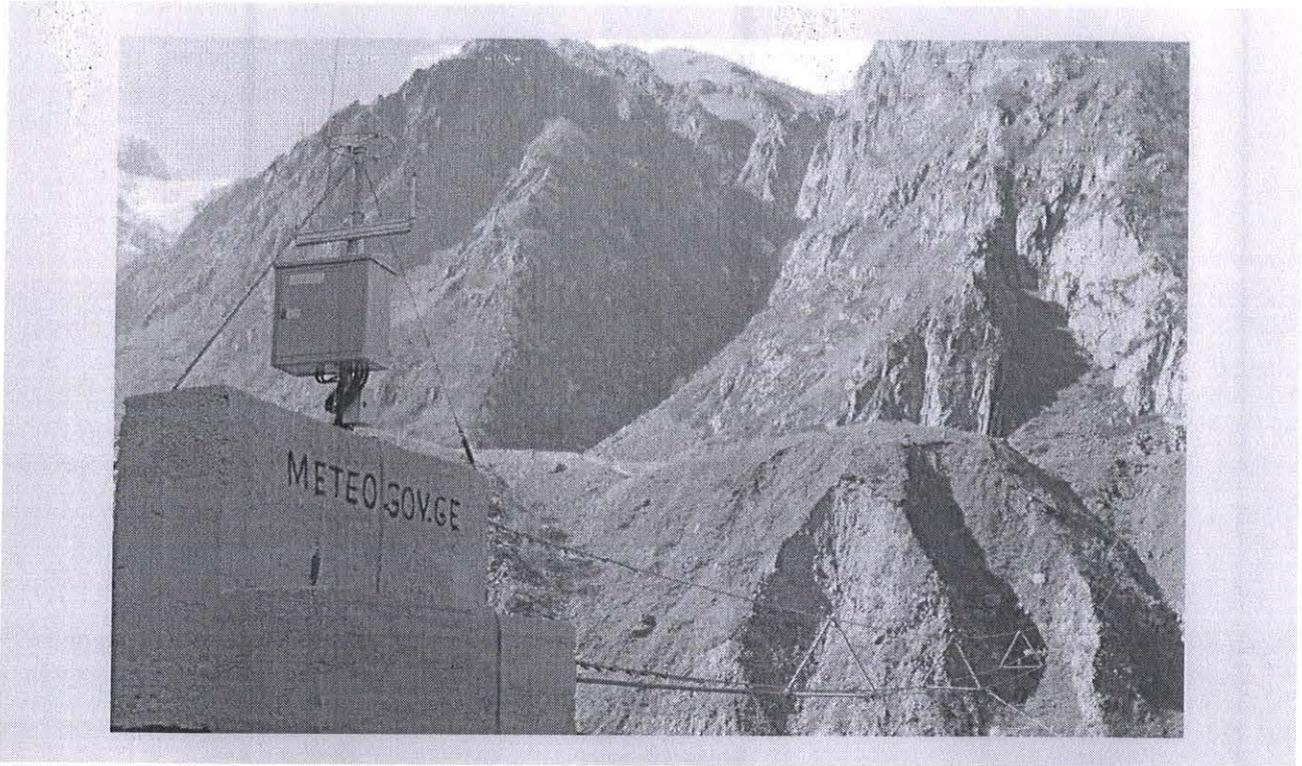
Protection Measures – Monitoring – Early Warning - Draining tunnel

The composite image illustrates the monitoring and protection measures for the Grindelwald glacier lake. It includes:

- Top Left:** A photograph of a solar panel mounted on a tripod, used for power in the monitoring station. Source: OIK I, Canton of Berne.
- Top Center:** A cross-section diagram of the glacier and its drainage system. The vertical axis shows elevation in meters (müM) from 1000 to 1400. The horizontal axis shows North (N) and South (S). A dashed line represents the 'Erdlauf Mitte ca. 2000' (ground flow in the middle around 2000m). A solid line shows the 'Ablauf Mitte 2008' (outlet in the middle in 2008). A draining tunnel is shown with a 20% slope. Two 'Forster Meter' sensors are indicated: 'Forster Meter 655' with a 14% slope and 'Forster Meter 1201' with a 20% slope. A 50m scale bar is provided. Source: GEOTEST.
- Bottom Center:** A photograph of workers in a snowy, rocky environment, likely involved in the construction or maintenance of the draining tunnel. Source: OIK I, Canton of Berne.
- Right:** A photograph of the glacier lake, showing a narrow channel of water flowing from the glacier. Dated 'April 2010'. Source: OIK I, Canton of Berne.

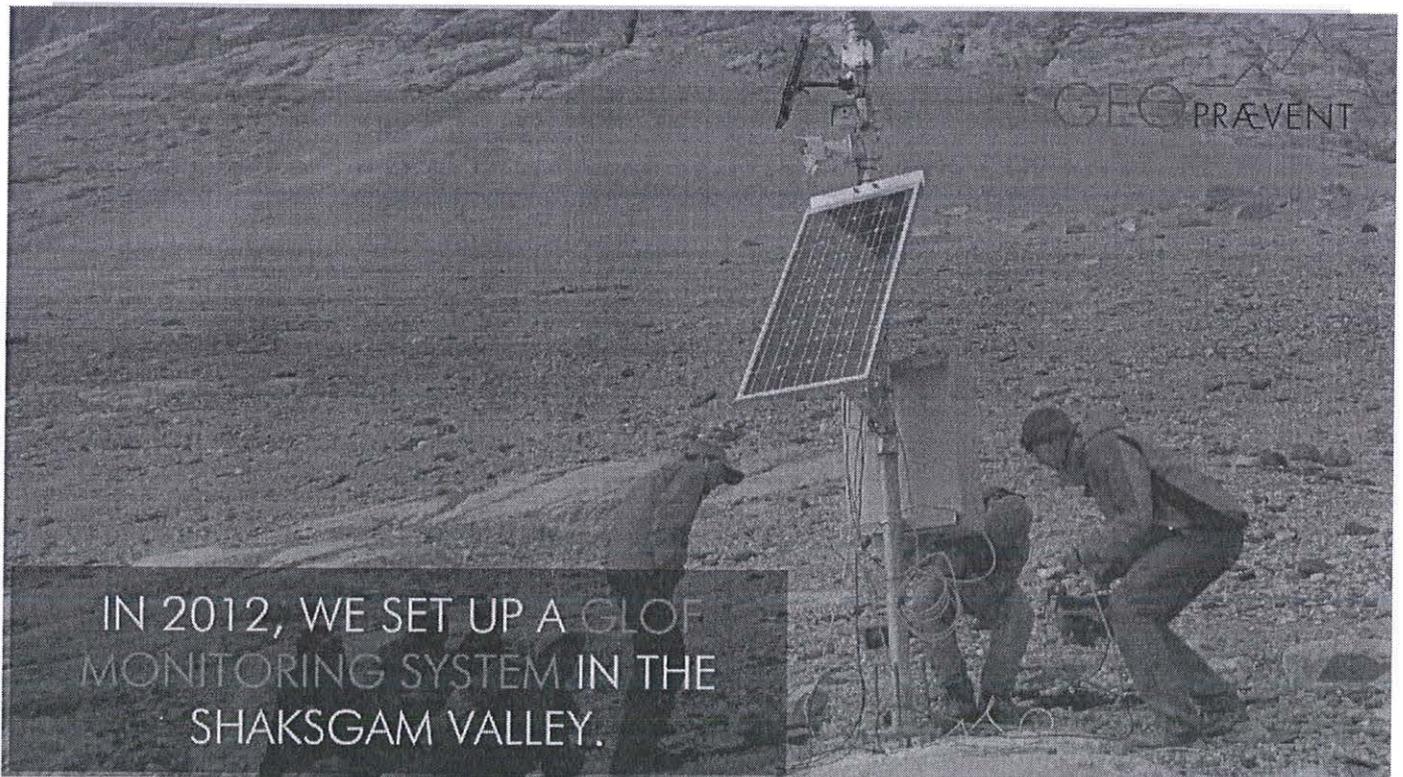
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Kazbegi, Georgia



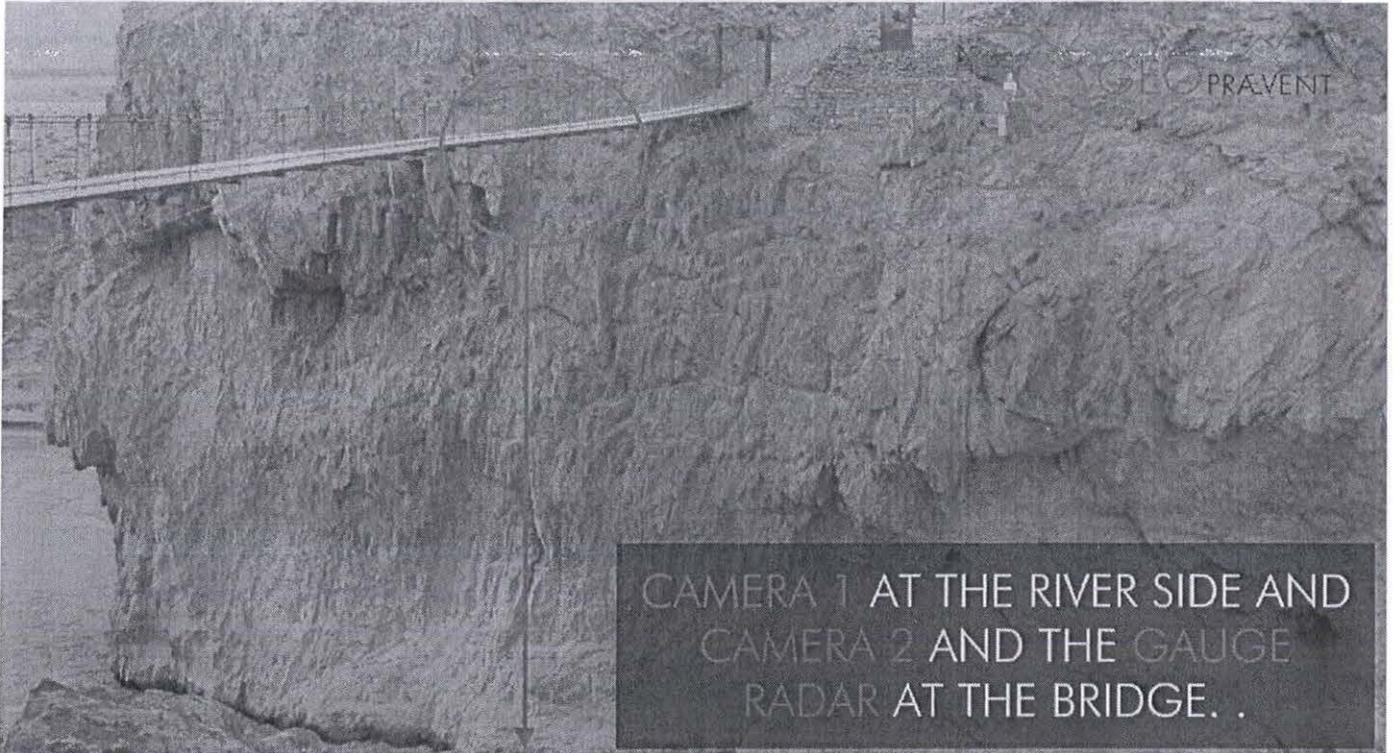
37 13.05.2022 | Disaster Risk Management Planning and Implementation Support in the Indian Himalayan Region

Xingjiang, China



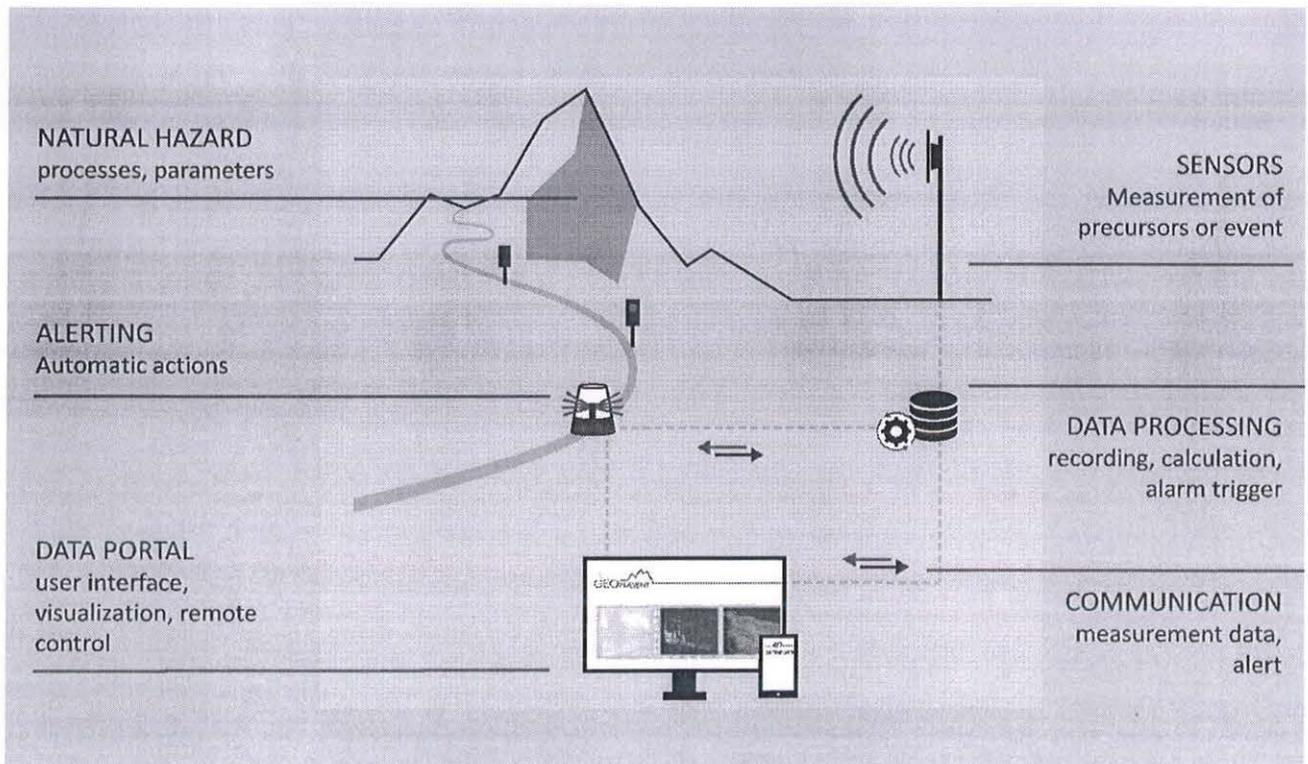
38 13.05.2022 | Disaster Risk Management Planning and Implementation Support in the Indian Himalayan Region

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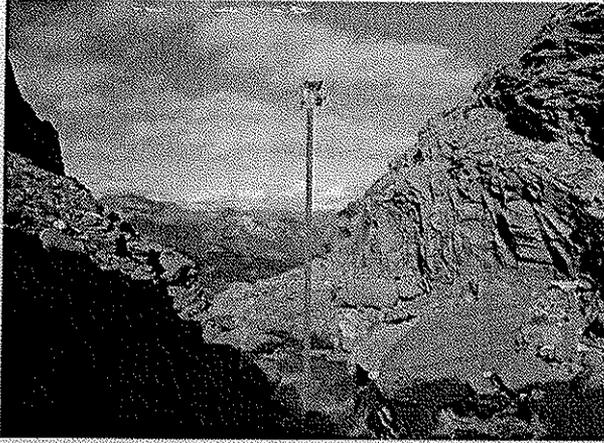
39 13.05.2022 | Disaster Risk Management Planning and Implementation Support in the Indian Himalayan Region

General Early Warning System Setup

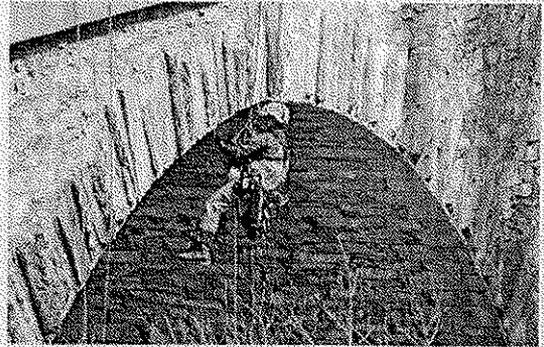
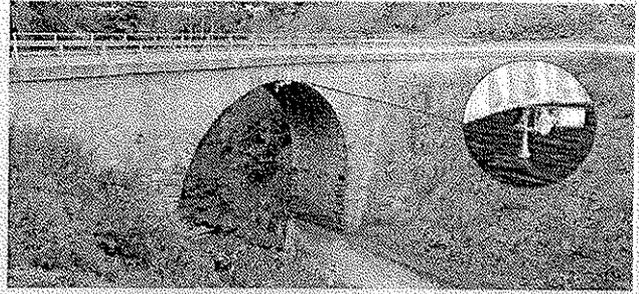


40 13.05.2022 | Disaster Risk Management Planning and Implementation Support in the Indian Himalayan Region

Technologies applied for GLOF monitoring

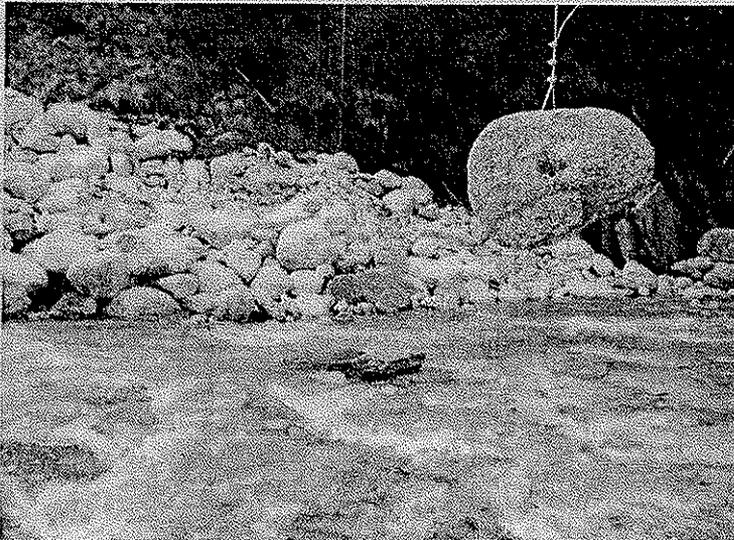


Gauge radar stations to measure river level in real-time and reliably at all times
two units recommended for redundancy



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Technologies applied for GLOF monitoring



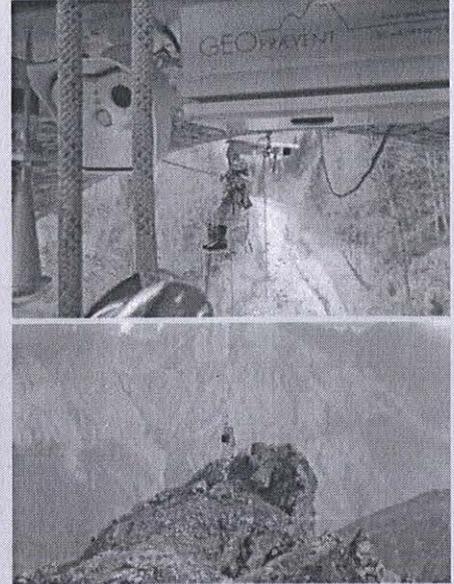
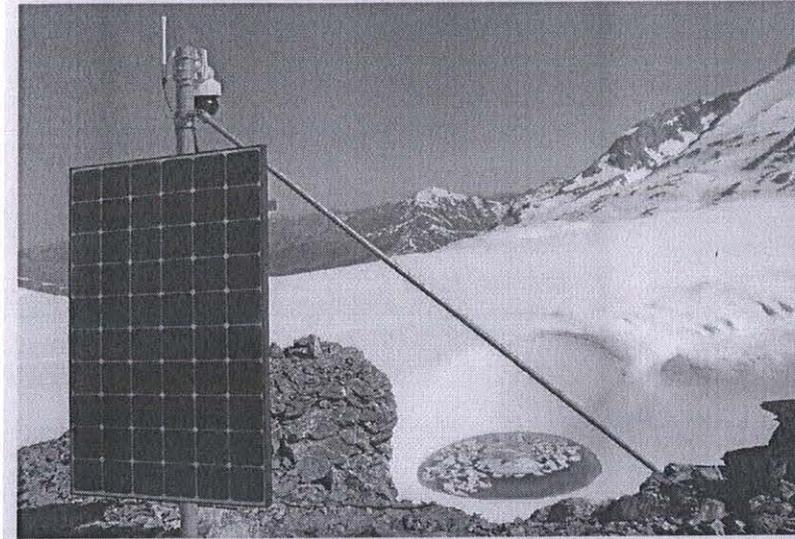
Trigger line stations for simple detection of a debris flow (as redundancy to gauge radars)



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Technologies applied for GLOF monitoring



Camera stations for lake and river monitoring

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Technologies applied for GLOF monitoring



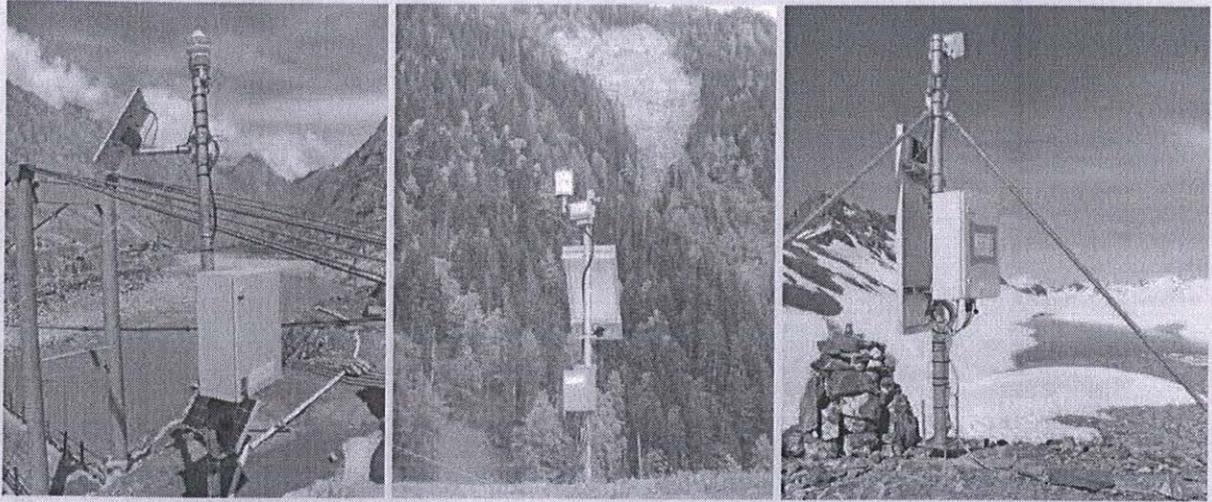
Deformation camera for glacier and landslide monitoring
→ Identify unstable areas

42 MP camera
Robust design for alpine application
Autonomous operation
Processing in backend

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Technologies applied for GLOF monitoring



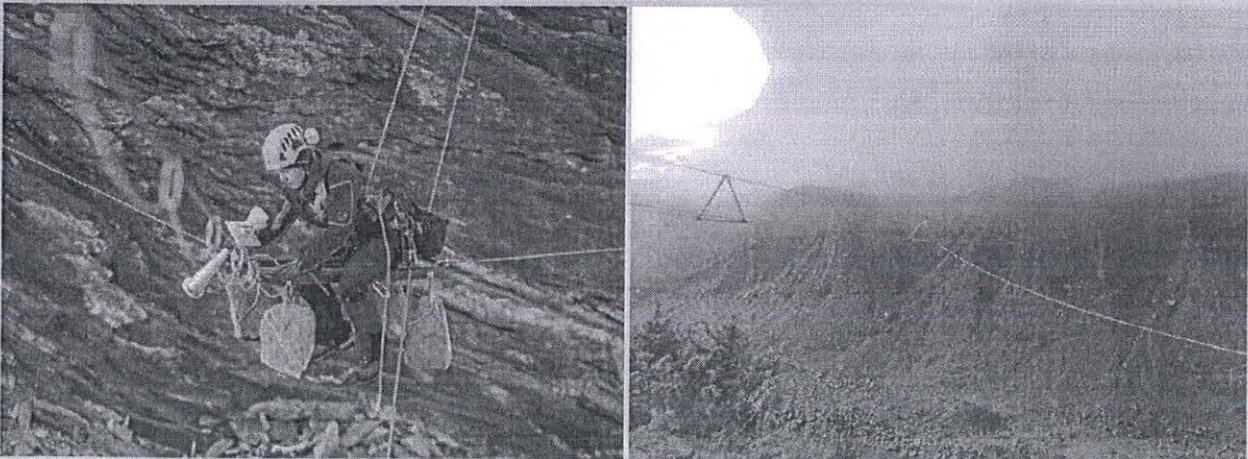
Weather stations for various meteorological parameters

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Technologies applied for GLOF monitoring

Robust and reliable design is essential!

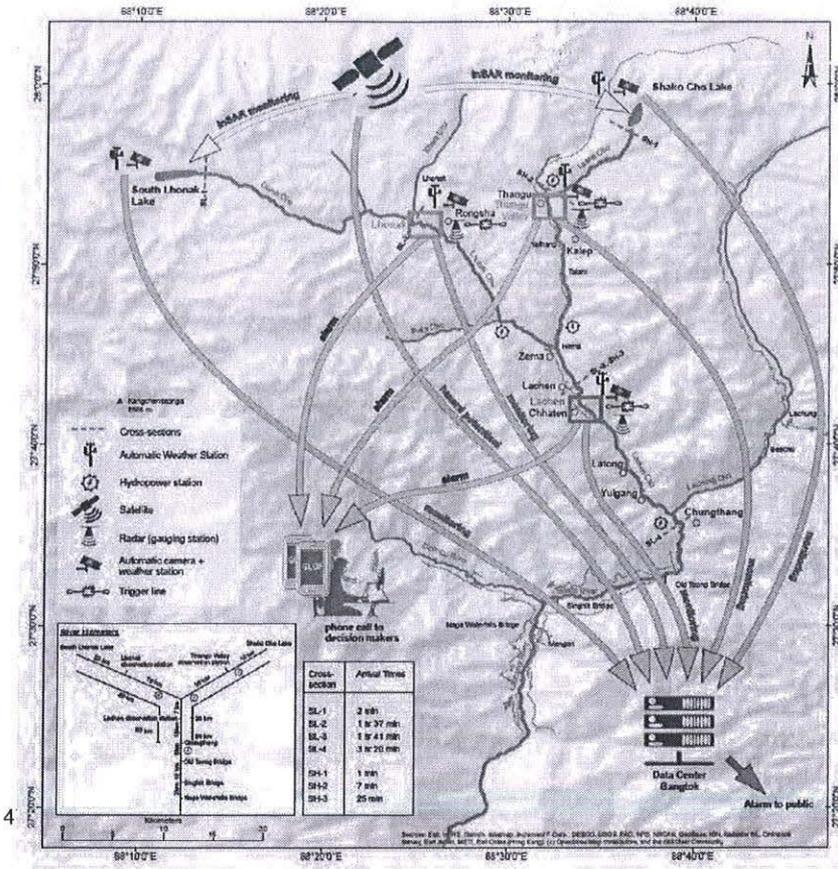
Experience and specially trained personel for installation (rope access work)



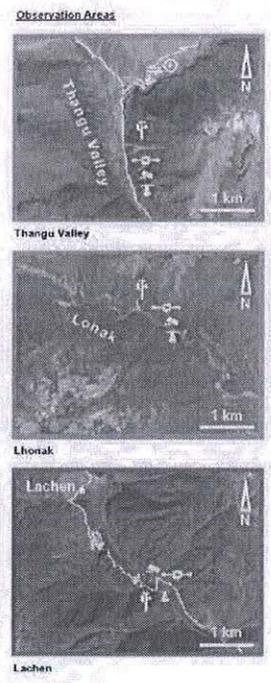
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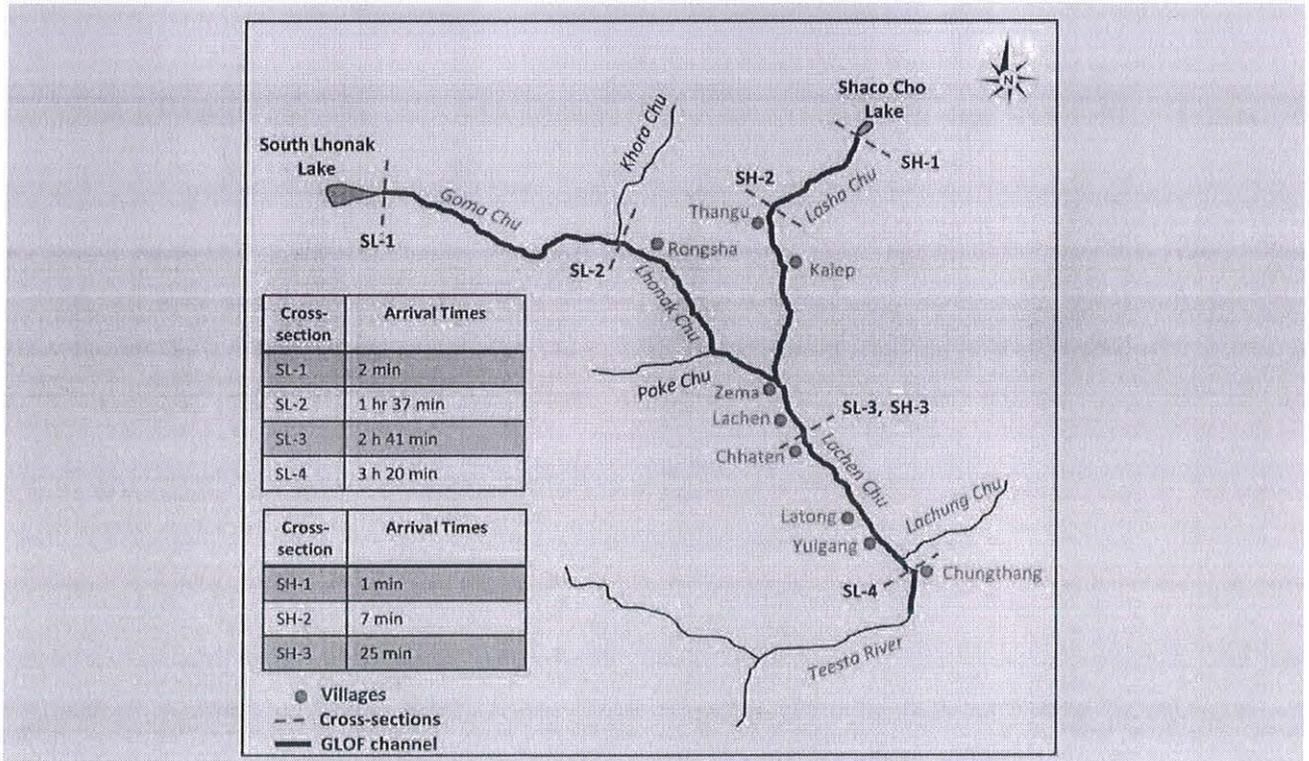
Proposal: EWS Design Sikkim



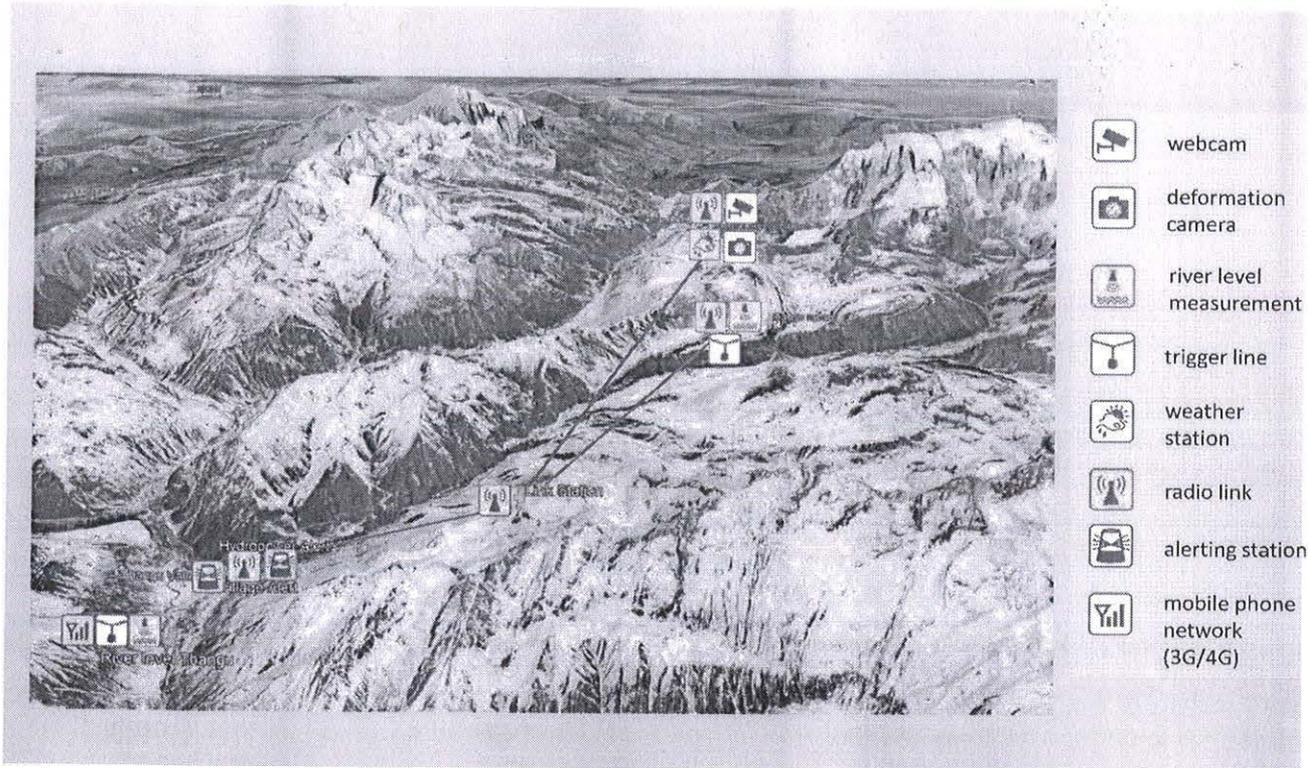
GEOTEST UNIVERSITY OF DISTRICTS
 Order: India, GLOF Disaster Risk Management No: 148043
 Date: Sikkim
GLOF Early Warning System



Arrival Times

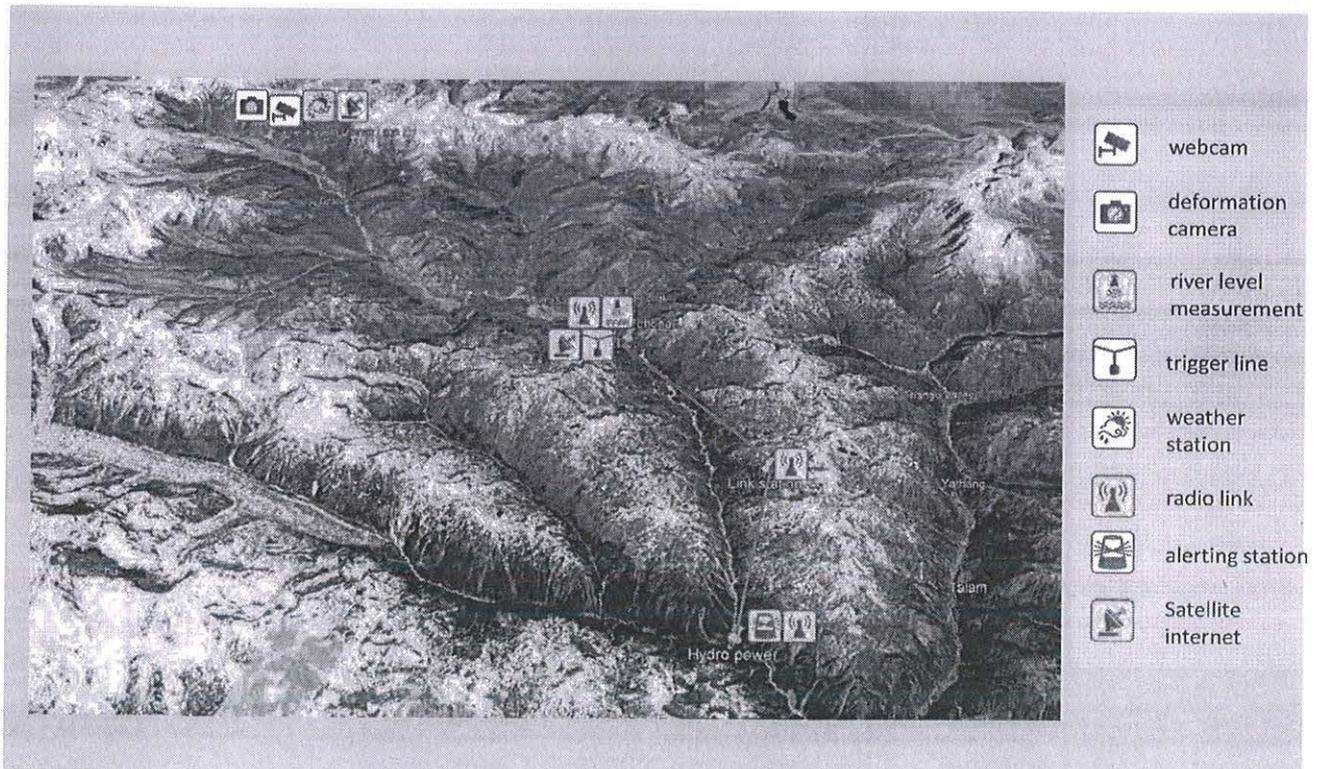


GLOF EWS Sikkim: Thangu valley



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GLOF EWS Sikkim: Lhonak valley



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GLOF EWS Sikkim: Lachen - Chungthang



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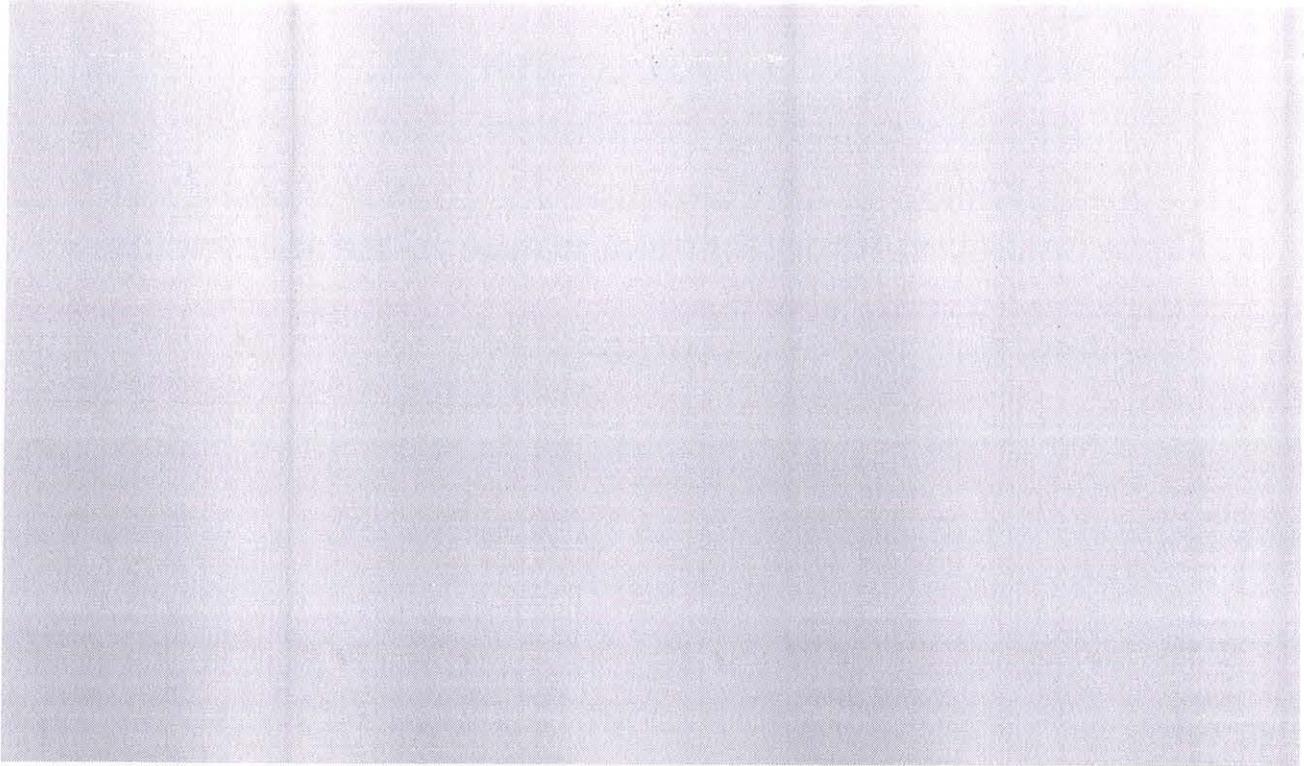
GLOF EWS Sikkim: online data platform

Online data portal with all data

- Visualisation of measurement data
- Time series
- Webcam image
- Deformation analyses
- Data check
- SMS list
- Messenger board
- Data storage and archiving
- Authorized users only
- Accessible via PC, tablet, smartphone

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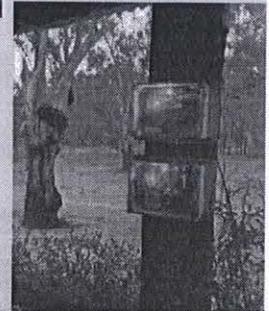
Capacity Building: Input by Ada Lawrence



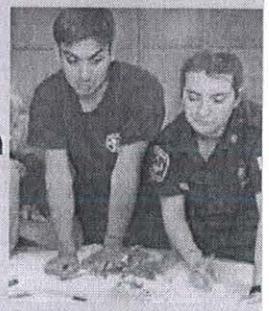
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Cross-cutting approach training and capacity building

- Training and capacity building activities are to be tailored for each of the project locations and processes
- Benefit of creating synergies across these activities



- In-depth assessment of EWS training and capacity building needs
- Training modules, e-learning/online training courses
- Generic guidelines → primarily target EWS operators, first responders, scientific and administrative staff and other stakeholders involved in the design, implementation and managing of EWS across other Himalayan states and regions.



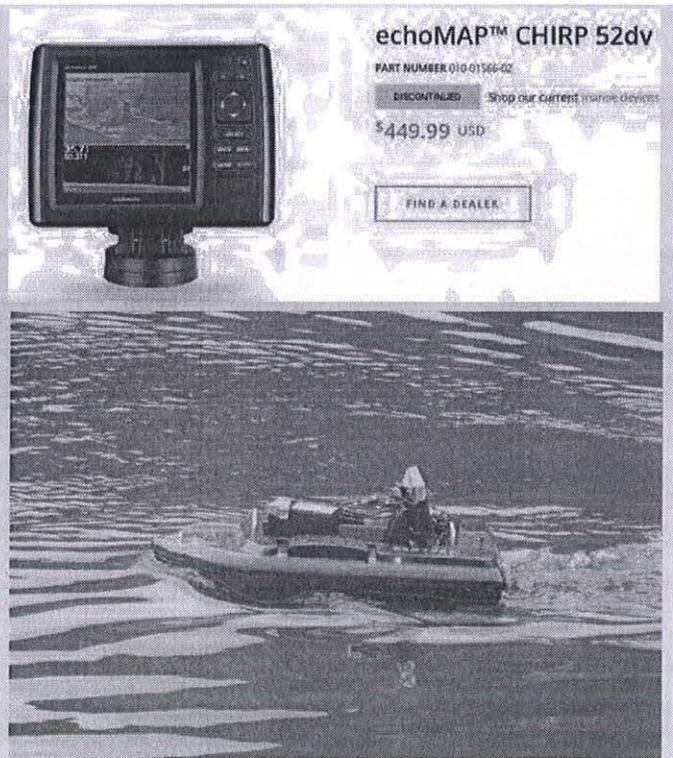
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- Preparation for field survey autumn 2022
 - Detailed survey of installation sites
 - Definition of infrastructure for sensor installation
- Data collection for further calibration of the thresholds for warning (e.g. flow height)
- Capacity building, knowledge briefs

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Prototype bathymetry boat University of Zurich

- Remotely controlled (replace rubberboats)
- GPS + Sonar → depth point measurements
- Range over 1 km
- Boat: 20 kg
- Batteries
- Strong wind and waves → limiting factors



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Report on Extent of Damage due to Cloudburst Induced Flooding in the Teesta Basin as on 16.00 Hrs. 17th OCTOBER 2023

Name of the Districts affected	No. of Villages / Wards/ Nagar Panchayat/ Councils affected	No. of Population affected	No. of Human Lives Lost	No. of people missing	No. of Persons who suffered grievous injury requiring hospitalization	No. of Damaged Houses	Fully and Severely damaged Pucca and Kutcha House	Partially Damaged Pucca House	Partially Damaged Kutcha House	No of people Rescued	No of People Evacuated	No. of Relief Camps Opened	No. of inmates in Relief Camps	Animal and Poultry Lost	No of persons living in the Rented Houses affected	No of Shops affected	No of Bridges washed away
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15			16
Mangan	50	30300	04	20	-	566	247	91	228	850	2705 People evacuated by Chopper/Foot Tourists Locals 1876 829	04	222	Animal - 397 Poultry- 6653 Others- 507	550	58	20
Gangtok	19	20000	08	23	05	319	241	30	48	1025	1025	07	706	Animal - 215 Poultry- 11624	2500	600	05
Pakyong	07	30000	15+ 11 (Indian Army)	28	21	635	635	-	-	58	58	06	779	Animal- 203 Poultry - 8987	1119	200	
Namchi	24	8100	02	05	-	482	300	45	137	630	630	02	145	Animal - 316 Poultry 2125	850	44	04
Total	100	88400	40	76	26	2002	1423	166	413	2563	4418	19	1852		5019	922	33

Copy for kind info. to:

- i. The Chief Secretary, Govt. of Sikkim.
- ii. The Secretary to the Hon'ble Governor.
- iii. Secretary to HCM, Office of the HCM.
- iv. The PS to HM, LR&DM Deptt.
- v. The Secretary/IPR.
- vi. The DC, Gangtok/Mangan/Pakyong/Namchi.



Secretary-cum State Relief Commissioner
Land Revenue & Disaster Management Department
Government of Sikkim, Gangtok

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DETAIL LIST OF RELIEF CAMPS AND INMATES PRESENTLY STAYING IN THE RELIEF CAMPS

Districts	No. of Relief Camp Operational	Loss and Damage to Infrastructure
Mangan	04 Nos. i. ITI, Chaday - 04 ii. Naga - 153 iii. Chungthang Gurudwara- 42 iv. Chungthang Shiv Mandir - 23	i. Chungthang Sikkim Urja Dam washed away. ii. Toong Naga GPU affected. iii. Road damaged between Toong and Naga. vi. Police Office Quarter, Pass-Permit Entry Check Post & Fire Office Damaged at Phidang. v. Office of the Range Officer Territory Damaged at Dzongu. vi. Moon Light Private School Building/ Forest store. vii. Chungthang 4 no. RCC Foot- bridge washed away. viii. Lachung Dzomsa 2 no. RCC Foot Bridge washed away. ix. Passingdong 1 no. RCC Foot Bridge washed away. x. Namprickdang Playground Gallery & 3 units RCC toilet damage. xi. 80% of Chungthang Town severely affected. xii. GREF crusher plant and Toong Police Check-post. xiii. Forest Guest House, Namprickdang xiv. Lepcha Traditional House washed away. xv. Naga/Power Office and Quarter damaged xvi. Lachen Dzumsa 5 no. RCC Foot bridge washed away. xvii. Shippgyer 2 no. RCC Foot Bridge washed away. xviii. Toong Naga 3 no. RCC Foot Bridge washed away. xix. Firing Bridge at Chungthang. xx. Hatchery unit at Chungthang totally washed away xxi. Fisheries Dept. Office Building washed away
Gangtok	07 Nos. i. Singtam Govt. Sr. Sec School - 198 ii. Bihari Bhawan- 335 iii. Food Preservation Factory - 15 iv. Pranami Mandir Singtam - 25 v. Singtam Church - 44 vi. Medhavi Skill University - 31 vii. Marwari Dharamshala - 58	i. Indreni Bridge in Singtam washed out. ii. NH -10 highway has sustained extensive damage. iii. Sewage Treatment plant and pipelines washed in Singtam. iv. Sneha Kinetic Powerhouse and NHPC dam site have been submerged. v. Balutar bridge washed away and extensive damages of State Highway along Balutar/Sirwani/ Goshkhan Area.
Pakyong	06 Nos. i. Chanatar Govt Secondary School -70 ii. Majhigaon Housing Complex - 285 iii. Golitar Nepali Dharamshala - 238 iv. Eco Paradise - 62 v. SDL, Hall Chanatar - 99 vi. EPCH Church - 25	i. Sewerage Treatment Plant and pipelines washed away in Rangpo. ii. NH-10 has sustained extensive damages. iii. IBM totally submerged in floods, Rangpo, Baghey Khola, Majhitar, Bardang are severely affected. iv. Baghey Khola River side habitations have been submerged. v. Course of Teesta River changed and caused extensive damage to the properties at various locations. vi. Power Supply lines have been damaged extensively. vii. PHE/ Storage along with pipelines are extensively damaged at IBM and Golitar. viii. Under construction bridge at Golitar, Singtam has been damaged.
Namchi	02 Nos i. Pranami Mandir, Namphing - 131 ii. NHPC Primary School Linkutar - 14	i. LD Kazi Bridge washed away. ii. Sewerage Treatment Plant and pipelines washed away in Melli. iii. Steel Foot bridge over Teesta River connecting 20 th Mile to Chalamthang in Namchi District. iv. Steel Bridge connecting Kabrey, Namchi District to Majitar in Gangtok District. v. Steel Foot bridge of Lanco Pvt. Ltd over Teesta River connecting Pangphok (Thalthaley to Tar Khola, WB)
Total	Relief Camps - 19 Nos. Inmates in Relief Camps - 1852	


 Secretary-cum-State Relief Commissioner
 Land Revenue & Disaster Management Department
 Government of Sikkim, Gangtok

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PRESS INFORMATION

A meeting of the State Cabinet was held on 17th October, 2023 at 2 Pm in the Cabinet Hall of Tashiling Secretariat, Gangtok. A total of 205 Agenda items were discussed during the meeting and many important decisions were taken.

- I. The Cabinet also adopted a Resolution in the wake of the unprecedented natural disaster caused by flash floods in river Teesta on 4th October, 2023 which has caused massive loss to life, livelihood and property of the people living along the banks of the river. The entire Sikkimese society is mourning the loss of precious lives in this catastrophe. The Council of Ministers expressed their gratitude to the overwhelming support received from the people, Government of India, other State Government and Organizations during this hour of need.

The following Resolution was adopted, namely:-

"The Council of Ministers noted with heavy hearts the profound loss of lives, livelihood, property and some major critical infrastructure at the wake of devastating flash floods on 4th October, 2023. During this hour of grief, the State Government stands by the people of Sikkim and commits itself to ensure all help and support to enable the affected people to re build their lives and livelihoods. The Council of Ministers also express their deep condolences to the bereaved families of people who lost their life in this catastrophe.

We would also like to put on record the incredible solidarity shown by the Sikkimese society at this hour of need and acknowledge the contribution of each and every individual and Organisation who are working tirelessly to support the State administration in surmounting this grave challenge. The contribution of all these Heroes are the bricks by which We will rebuild our State and come out of this catastrophe 'Together' and 'Stronger'.

We urge the people of Sikkim to be strong and resilient at this hour and remain positive."

Following the adoption of this Resolution 2 (two) minute's silence was observed in memory of the people who lost their lives during this disaster.


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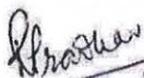
- II. a. The Cabinet has also decided to introduce some interventions to alleviate the loss and suffering faced by the people affected by the catastrophic flashfloods of 4th October and felt that one of the basic needs to be fulfilled by the Government is to provide them a proper place to live in order to enable them to carry on with their life and livelihood.
- b. With this objective, the Cabinet introduced two new Housing Schemes as follows:
- Sikkim Punarvaas Awaas Yojana
 - Sikkim Janta Housing Colony
- c. Under the "Sikkim Punarvaas Awaas Yojana", 2100 houses will be constructed, in a safe and suitable location, and allot them to the owners of houses that have been totally washed away in the Teesta Flash Floods and owners of houses that have been severely/partially damaged by the floods and are no more inhabitable. The Government would construct these houses in a Government land or a land donated/acquired for this purpose.
- d. Under the "Sikkim Janta Housing Colony", 2000 Houses will be constructed in a safe and suitable location, to rehabilitate the tenants of houses that have been totally washed away in the Teesta Flash Floods and tenants of houses that have been severely/partially damaged by the floods and are no more inhabitable. These tenants would be allotted houses under this scheme on a "Rental basis". However, no rent would be charged by the Government for first three years of allotment. On completion of three years, rent as assessed by the government shall be payable by the allottees.
- e. The severely/partially damaged houses would be inspected by a Technical Team which would assess the stability of these houses and certify whether these houses are habitable or not.
- f. In order to be eligible for both these schemes, the beneficiaries should be in possession of Sikkim Subject Certificate or Certificate of Identification or Parcha of landed property anywhere in Sikkim, Voter Card or Residential Certificate of Sikkim.
- g. The construction of houses under the above mentioned schemes would follow the same design and estimate of Sikkim Garib Awaas Yojana, and on-going scheme of the Government.


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3. For immediate support and assistance to the owners of such houses mentioned above and the tenants who were staying in those houses, the Government would consider granting rent for three months @ Rs. 5000/- per month to enable the victims at the Relief Camp to move to a rented accommodation and get back to normalcy at the earliest.
4. In addition, the Government would provide basic household items like kitchen utensils, gas stove, gas cylinder, mattress, blankets and other daily household items to help the victims settle down in the rented accommodation.
5. Since, there will be an acute demand for rented accommodation in the affected areas, the State Government appeals to all the house owners in these areas to not to increase the rental charges beyond the normal market rate. Action will be taken under Disaster Management Act against those house owners who charge exorbitant rent at this hour of crisis.
6. After clearance of debris and muck at the affected areas the Building & Housing Department will carry out a stability study to verify and confirm whether the damaged houses are fit for habitation or not.
7. Similarly, the Roads & Bridges Department along with Rural Development Department and Border Road Organisation (BRO) will carry out a study to know the stability of the bridges that are affected by the flashflood, in order to take up the required repair works.
8. The District Collectors will set up camps at the affected areas for issue of Voter Card, Adhar Card, Land Parcha, Ration Card, Birth Certificate, Certificate of Identification, Community Certificate, Trade License etc. for those victims who have lost these documents in the flood.
9. In order to support the students who have lost all their belonging in Flash Flood in Teesta River, the Government would provide a onetime grant of Rs.10,000/- (Rupees Ten Thousand) per students who have been genuinely affected by the Flash Flood for purchase of new uniform and note books. The new text books will be provided by the Education Department.
10. The Cabinet was also pleased to grant administrative approval and financial sanction of Rs. 881,91,00,000/- (Rupees Eight Hundred and Eighty One Crore and Ninety – One Lakhs Only) towards Construction of 2100 Houses under "Punarvaas Awaas Yojana" and 2000 Houses under "Janta Housing Colony" for the victims of Flash Floods in Teesta River which will be implemented by Rural Development Department.
11. The Cabinet has also taken a decision to constitute a technical committee of eminent scientists of the country comprising of Glaciologist, Geologist, Seismologist, Hydrologist etc. in consultation with NDMA. The committee shall look into the causes of the recent disaster that struck the state. Further, the committee shall undertake necessary

investigation and suggest further course of action to the government. Since, the state has a large number of glacial lakes and some are reported to be increasing in its size, the committee shall also suggest a comprehensive plan of action for its management, in view of the recent disaster.

12. The Cabinet also directed the Chief Secretary to immediately convene the State Level Bankers Committee Meeting and to ensure that Circular dated 17.10.2018 of the RBI on Relief Measures by Banks in areas affected by natural calamities is implemented in letter and spirit.
13. The Cabinet also decided to confer a Special State Bravery Award for the bravery and courage shown by Dr. Pema Tenzing Bhutia and Shri Dawa Tshering Lepcha during the catastrophic flash floods of 4th October, 2023. Their bravery and commitment to the welfare of fellow citizens has saved many lives and the State is forever indebted to these brave hearts. This Award will be conferred during a suitable occasion befitting the stature of this highest commendation. The Cabinet also directed to further recommend their names to Government of India for suitable and appropriate award for their act of bravery.


19/10/2023
ADDITIONAL SECRETARY
CABINET

CON/CAB/327/2023 DT.17.10.2023


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HOME ESSENTIALS

KITCHEN:

1. Gas Cylinder with regulator and pipe.
2. Gas Stove.
3. Gas Stove Lighter.
4. Pressure Cooker 2 ltr.
5. Pressure Cooker 5 ltr.
6. Kadhai.
7. Tawa.
8. Frying Pan.
9. Steel Dekchi.
10. Saucepan.
11. Dinner Set Melamine.
12. Tea Cup Set.
13. Water Jug with Glasses.
14. Tea Strainer.
15. Ladles (Serving Spoons).
16. Spoon Set.
17. Masala Container Set.
18. Mixing Bowl Set.
19. Knife.

BATHROOM:

1. Bucket.
2. Mug.
3. Soap Dish.
4. Towel.

BEDROOM: (Per Member)

1. Single Mattress.
2. Pillow.
3. Bedsheet with Pillow Cover (Single).
4. 2 Blankets.


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भारतीय रिज़र्व बैंक
RESERVE BANK OF INDIA

www.rbi.org.in

RBI/FIDD/2018-19/65

Master Direction FIDD.CO.FSD.BC No.10/05.10.001/2018-19

October 17, 2018

The Chairman
All Regional Rural Banks

Madam / Sir,

Master Direction – Reserve Bank of India (Relief Measures by Banks in Areas affected by Natural Calamities) Directions 2018 – RRBs

The Master Direction on relief measures by banks in areas affected by Natural Calamities was first issued to Scheduled Commercial Banks in 2016.

2. The guidelines applicable to Regional Rural Banks for extending relief measures in areas affected by natural calamities are now issued in the form of Master Direction.

3. This Master Direction consolidates all the guidelines issued on the subject till date. The list of circulars compiled into this Master Direction is given in the Appendix.

Please acknowledge receipt.

Yours faithfully,

(G. P. Borah)
Chief General Manager-in-Charge


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Master Direction - Reserve Bank of India (Relief Measures by Banks in Areas Affected by Natural Calamities) Directions, 2018

In exercise of the powers conferred under Sections 21 and 35A of the Banking Regulation Act, 1949, the Reserve Bank of India being satisfied that it is necessary and expedient in the public interest so to do, hereby, issues the Directions hereinafter specified.

**CHAPTER I
PRELIMINARY****1.1 Short Title and Commencement**

(a) These Directions shall be called the Reserve Bank of India (Relief Measures by Banks in Areas Affected by Natural Calamities) Directions, 2018.

(b) These Directions shall come into effect on the day they are placed on the official website of the Reserve Bank of India.

1.2. Applicability

The provisions of these Directions shall apply to every Regional Rural Bank (RRB) licensed to operate in India by Reserve Bank of India.

**CHAPTER II
BACKGROUND**

2.1 Periodic but frequent occurrence of natural calamity takes a heavy toll on human life and cause wide spread damage to economic pursuits in one or the other part of the country. The devastation caused by natural calamities calls for massive rehabilitation effort from all agencies. The Central, State and local authorities draw up programmes on economic rehabilitation for the people affected by natural calamities. The developmental role assigned to the Regional Rural Banks (RRBs) warrant their active support in reviving the economic activities of those affected by the occurrence of a natural calamity.

2.2 In terms of the National Disaster Management Framework, there are two funds constituted viz. National Disaster Response Fund (NDRF) and State Disaster Response Fund (SDRF) for providing relief in the affected areas. The NDRF framework currently recognizes twelve types of natural calamities viz. cyclone, drought, earthquake, fire, flood, tsunami, hailstorm, landslide, avalanche, cloud burst, pest attack and cold wave/frost. The Ministry of Agriculture is the nodal point for four of the calamities i.e. drought, hailstorms, pest attack and cold wave/frost and for the remaining eight, the Ministry of Home Affairs is the nodal ministry to make the necessary administrative arrangements. A slew of measures for relief are

undertaken by the Sovereign (Central/State Government) from time to time to provide relief to the affected people including, inter alia, provision for input subsidies and financial assistance to farmers including small and marginal farmers.

2.3 The Regional Rural Banks, as members of the State Level Bankers Committee (SLBC) play a key role in providing relief measure through rescheduling existing loans and sanctioning fresh loans as per the emerging requirement of the borrowers. To enable banks to take uniform and concerted action expeditiously, these directions are issued covering four aspects viz. Institutional Framework (Chapter III), Restructuring of Existing Loans (Chapter IV), Providing Fresh Loans (Chapter V) and Other Ancillary Relief Measures (Chapter VI).

CHAPTER III INSTITUTIONAL FRAMEWORK

3.1 Establishing Policy/Procedures for dealing with Natural Calamities

The area, time of occurrence and intensity of the natural calamity cannot be anticipated. It is, therefore, imperative that banks have a blueprint of action duly approved by the Board of Directors for such eventualities so that the required relief and assistance are provided with utmost speed and without any loss of time. Further, all branches of the bank and their regional offices shall be familiar with these standing instructions. The standing instructions shall immediately come to force after the district/state authorities put in place the requisite declaration. It is essential that these instructions shall also be made available to the State Government authorities and all the District Collectors so that all concerned are aware about the action that shall be taken by the concerned authorities in the affected area.

3.2 Discretionary Powers to Branch/Regional Office of banks

The Branch/Regional Office Managers of banks may be vested with certain discretionary powers to avoid the need to seek fresh approval from their Head Office regarding the line of action decided by the District Consultative Committee/State Level Bankers' Committee. Some of the areas, among others where such discretionary powers are vital may be the adoption of scale of finance, need based restructuring of loans, extension of loan period, margin, security, sanction of new loan keeping in view the total liability of the borrower arising out of the old loan where the asset financed was damaged or lost as a result of the natural calamity and the new loan financed for creation/repair of such asset(s).

3.3 Meeting of State Level Bankers' Committee (SLBC)/District Consultative Committee (DCC)

3.3.1 In the event of occurrence of a natural calamity which covers a larger part of a State, the State Level Bankers' Committee convener bank shall convene a special

SLBC meeting immediately. The committee, in collaboration with the State Government authorities shall evolve a coordinated action plan for implementing the relief programme. If the calamity has affected only a small part of the state/few districts, the convener of the District Consultative Committee of the affected district(s) shall convene a meeting immediately. In the special SLBC/DCC meeting, the position of the affected areas may be assessed so as to ensure speedy formulation and implementation of suitable relief measures.

3.3.2 In the areas where the calamity is severe, the relief measure(s) implemented shall be reviewed periodically through a specially constituted Task Force/Sub-Committee by way of weekly/fortnightly meetings as decided by the SLBC/DCC.

3.4 Scope

The Master Directions shall be applicable to farmers/loanees who have been affected by a natural calamity as declared by the State Govt. /Authorities and are willing to avail the benefits under the guidelines.

3.5 Declaration of Natural Calamity

3.5.1 It is recognised that declaration of a natural calamity is in the domain of the Central / State Government. The inputs received from the State Governments revealed that there is no uniform procedure being followed for declaration of a natural calamity and issue of declarations/certificates. These declarations/certificates are called by different names such as Annewari, Paisewari, Girdawari, etc. in different States. Nevertheless, the common thread to extend relief measure towards agricultural loans including rescheduling of loans by banks, is that the crop loss assessed should be 33% or more. For assessing this loss, while some States are conducting crop cutting experiments to determine the loss in crop yield, some others are relying on the eye estimates/visual impressions.

3.5.2 In case of extreme situations such as wide-spread floods, when it is largely evident that most of the standing crops have been damaged and/or land and other assets have suffered a wide-spread damage, the matter shall be deliberated by State Government/District Authorities in a specially convened SLBC/DCC meeting where the concerned Government functionary/District Collector shall explain the reasons for not estimating 'Annewari' (percentage of crop loss – by whatever name called) through crop cutting experiments and that the decision to provide relief for the affected populace needs to be taken based on the eye estimate/visual impressions.

3.5.3 In both the cases, however, SLBC/DCC shall satisfy themselves fully that the crop loss has been 33% or more before acting on these pronouncements.

CHAPTER IV RESTRUCTURING OF EXISTING LOANS

In the event of a natural calamity, the repaying capacity of the people gets severely affected due to the disruption of their economic activities and loss of economic assets. Therefore, relief in loan repayment by restructuring the existing loan may become necessary.

4.1. Agriculture Loans: Short-term Production Credit (Crop Loans)

4.1.1 All short-term loans, except those which are overdue at the time of occurrence of natural calamity, shall be eligible for restructuring. The principal amount of the short-term loan as well as interest due for repayment in the year of occurrence of the natural calamity may be converted into term loan.

4.1.2 The repayment period of the restructured loan may vary depending on the severity of the calamity, the impact on loss of economic assets and distress it caused. A maximum repayment period of up to two years (including the moratorium period of one year) shall be allowed if the loss is between 33% and 50%. If the crop loss is 50% or more, repayment period may be extended upto a maximum of five years (including the one year moratorium period).

4.1.3 In all restructured loan accounts, moratorium period of at least one year shall be considered. Banks may not insist on additional collateral security for such restructured loans.

4.2 Agriculture Loans: Long term (Investment) Credit

4.2.1 The existing term loan instalments shall be rescheduled keeping in view the repaying capacity of the borrower and the nature of natural calamity viz.

4.2.1.1 In a natural calamity where only crop for that year is damaged and productive assets are not damaged, banks shall reschedule the payment of instalment during the year of natural calamity and extend the loan period by one year. Under this arrangement the instalments defaulted wilfully in earlier years will not be eligible for rescheduling. The banks may also have to postpone payment of interest by borrowers.

4.2.1.2 In a natural calamity where the productive assets are partially or totally damaged and borrowers are in need of a new loan, the rescheduling by way of extension of loan period shall be determined on the basis of overall repaying capacity of the borrower vis-a-vis total liability (old term loan, restructured crop loan, if any and the fresh crop/term loan being given) less the subsidies received from the Government agencies, compensation available under the insurance schemes etc.

While the total repayment period for the restructured/fresh term loan may differ on case-to-case basis, generally it shall not exceed a period of 5 years.

4.3 Other Loans

4.3.1 Depending on the severity of the calamity, SLBC/DCC shall take a view as to whether a general rescheduling of all other loans (i.e. besides the agriculture loans) such as loans granted for allied activities, loans to rural artisans, traders, micro/small industrial units or in case of extreme situations, medium enterprises are required. If such a decision is taken, while recovery of all the loans be postponed by the specified period, banks may assess the requirement of the individual borrowers in each case and depending on the nature of his/her account, repayment capacity and the need for fresh loans, appropriate decisions shall be taken by the individual banks

4.3.2 The primary consideration for extending credit to any unit for its rehabilitation shall be based on the viability of the venture as assessed by the bank.

4.4 Asset Classification

The asset classification status of the restructured loans shall be as under:

4.4.1 The restructured portion of the short term as well as long-term loans may be treated as current dues and need not be classified as NPA. The asset classification of these term loans would thereafter be governed by the revised terms and conditions. Nevertheless, banks are required to make higher provisions for such restructured standard advances as prescribed by Department of Banking Regulation¹ from time to time. Further, interest income from such restructured accounts classified as 'standard assets' will be recognized as per the norms prescribed in the DBR guidelines.

4.4.2. The asset classification for the remaining dues, which does not form a part of the restructured portion, will continue to be governed by the original terms and conditions of its sanction. Consequently, the dues from the borrower shall be classified by the lending bank under different asset classification categories viz. standard, sub-standard, doubtful and loss.

4.4.3. Additional finance, if any, shall be treated as "standard asset" and its future asset classification will be governed by the terms and conditions of its sanction.

4.4.4. With the objective to ensure that banks are proactive in extending relief to the affected persons, the benefit of asset classification of the restructured accounts as on the date of natural calamity will be available only if the restructuring is completed

¹ Master Circular – Prudential Norms on Income recognition, Asset Classification and Provisioning pertaining to Advances

within a period of three months from the date of natural calamity. In the event of extreme calamity, when the SLBC/DCC is of the view that this period will not be sufficient for the branches to reschedule all the affected loans, it shall approach NABARD giving the reasons for seeking extension. These requests will be considered on the basis of merit of each case.

4.4.5 The accounts that are restructured for the second time or more on account of recurrence of natural calamities shall retain the same asset classification category on restructuring. Accordingly, for a restructured standard asset, the subsequent restructuring necessitated on account of natural calamity shall not be treated as second restructuring, i.e., the standard asset classification shall be maintained. However, all other restructuring norms shall apply.

4.5 Utilization of Insurance Proceeds

4.5.1 While the above measures relating to rescheduling of loans are intended to provide relief to the farmers, the insurance proceeds should, ideally, compensate the losses. In terms of orders issued by the Ministry of Agriculture, Department of Agriculture, Cooperation and Farmers Welfare, the Pradhan Mantri Fasal Bima Yojana (PMFBY) has replaced the existing schemes of National Agricultural Insurance Scheme (NAIS) & Modified National Agricultural Insurance Scheme (MNAIS) with effect from Kharif 2016. **Under the Prime Minister Fasal Bima Yojana (PMFBY), all Seasonal Agricultural Operations (SAO) loans for notified crops in notified areas are to be compulsorily provided insurance cover for all stages of the crop cycle including post-harvest risks in specified instances².** Farmers' details are required to be entered by banks in the unified portal for crop insurance which is available at www.agri-insurance.gov.in in order to facilitate assessment of coverage of crops insured, premiums deducted, etc.

4.5.2 While restructuring the loans in areas affected by a natural calamity, banks shall also take into account the insurance proceeds, if any, receivable from the Insurance Company. The insurance proceeds shall be adjusted to the 'restructured accounts' in cases where fresh loan have been granted to the borrower. However, banks shall act with empathy and consider restructuring and granting fresh loans without waiting for the receipt of insurance claim in cases where there is reasonable certainty of receiving the claim.

² Operational Guidelines – PMFBY issued by Ministry of Agriculture & Farmers' Welfare

CHAPTER V PROVIDING FRESH LOANS

5.1 Sanctioning of Fresh Loans

5.1.1 Once the decision to reschedule loans is taken by SLBC/DCC, pending conversion of short-term loans, banks shall grant fresh crop loan to the affected farmers based on the scale of finance of the crop and the cultivation area as per the extant guidelines³.

5.1.2 The bank assistance in agriculture and allied activities (poultry, fishery, animal husbandry, etc.) may also be needed for long term loans for a variety of purposes such as repair of existing economic asset(s) and/or acquisition of new asset(s). Similarly, rural artisans, self-employed persons, micro and small industrial units, etc. in the areas affected by a natural calamity may require fresh credit to sustain their livelihood. Banks shall assess the need and decide on the quantum of loans to be granted to the affected borrowers taking into consideration, amongst others, the credit requirement and the due procedure for sanctioning fresh loans.

5.1.3. Banks shall also grant consumption loan up to ₹ 10,000/- to existing borrowers without any collateral. The limit may, however, be enhanced beyond ₹ 10,000/- at the bank's discretion.

5.2 Terms and Conditions

5.2.1 Guarantee, Security and Margin

5.2.1.1 Credit shall not be denied for want of a personal guarantee alone. Where the bank's existing security has been eroded because of damage or destruction by floods, assistance will not be denied merely for want of additional fresh security. The fresh loan shall be granted even if the value of security (existing as well as the asset to be acquired from the new loan) is less than the loan amount. For fresh loans, banks shall take a sympathetic view.

5.2.1.2 Where the crop loan (which has been converted into term loan) was earlier sanctioned against personal security/hypothecation of crop and the borrower is not able to offer charge/mortgage of land as security for the converted loan, she/he shall not be denied conversion facility merely on the ground of his/her inability to furnish land as security. If the borrower has already availed a term loan against mortgage/charge on land, the bank shall be content with a second charge for the converted term loan. Banks shall not insist on third party guarantee for providing conversion facility.

³ Master Circular – Kisan Credit Card Scheme


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5.2.1.3 Where land is taken as security, in the absence of original title record, a certificate issued by the Revenue Department officials shall be accepted for financing to farmers who have lost proof of their title such as title deed or registration certificate issued to registered share-croppers. In the areas covered by the Sixth Schedule of the Constitution, whereby the land is owned by the community, certificate issued by community authorities may be accepted.

5.2.1.4 Margin requirements may be waived or the grant/subsidy given by the concerned State Government shall be considered as margin.

5.3 Rate of Interest

5.3.1 The rate of interest shall be in accordance with the Master Directions – Reserve Bank of India (Interest Rate on Loans and Advances) Directions. Within the areas of their discretion, however, banks shall take a sympathetic view of the difficulties of the borrowers and extend a concessional treatment to calamity-affected people. In respect of default in current dues, no penal interest shall be charged. The banks shall also suitably defer the compounding of interest charges. Banks shall not levy any penal interest and consider waiving penal interest, if any, already charged in regard to the loans converted/rescheduled. Depending on the nature and severity of the natural calamity, the SLBC/ DCC shall take a view on the interest rate concession that could be extended to borrowers so that there is uniformity in approach among banks in providing relief.

5.3.2 As notified by the Government of India⁴ from time to time, to provide relief to farmers availing short term crop loans and affected by a natural calamity, an interest subvention of 2 percent per annum will be made available to banks for the first year on the restructured loan amount. Such restructured loans shall attract normal rates of interest from the second year onwards.

CHAPTER VI OTHER ANCILLARY MEASURES

6.1 Relaxation on Know Your Customer (KYC) Norms

It needs to be recognized that many persons displaced or adversely affected by a major calamity may not have access to their identification and personal records. In such cases a basic saving bank deposit account on the basis of photograph along with signature or thumb impression rendered in front of the bank official shall be opened. The above instruction shall be applicable to cases where the balance in the account does not exceed ₹ 50,000/- or the amount of relief granted (if higher) and the total credit in the account does not exceed ₹ 1,00,000/- or the amount of relief granted, (if higher) in a year.

⁴ Subject to inclusion in the IS Scheme on short term crop loans

6.2 Providing access to Banking Service

6.2.1 Banks may operate its natural calamity affected branches from temporary premises under advice to the concerned Regional Office of RBI/NABARD. For continuing the temporary premise beyond 30 days, banks may obtain specific approval from the appropriate authorities. Banks may also make arrangements to render banking services in the affected areas by setting up satellite offices, extension counters or mobile banking facilities etc. under intimation to RBI/NABARD.

6.2.2 To meet the immediate cash requirements of the affected people, due importance may be given towards restoring the ATMs or other alternate arrangements shall be provided to avail such facilities.

6.2.3 Other measures that banks may initiate at their discretion to alleviate the condition of the affected people could be waiving ATM fees, increasing ATM withdrawal limits; waiving of fees towards overdraft/early withdrawal penalty on time deposits /late fee for credit card/other loan instalment payments etc. and giving option to credit card holders to convert their outstanding balance to EMIs repayable in 1-2 years. Besides, all charges debited to the farm loan account other than the regular interest may be waived considering the hardship caused to the affected people.

CHAPTER VII

RIOTS AND DISTURBANCES: APPLICABILITY OF THE GUIDELINES

Applicability of the guidelines in case of riots and disturbances

7.1 Whenever RBI/NABARD advises the banks to extend rehabilitation assistance to the riot/ disturbance affected persons, the aforesaid guidelines shall broadly be followed by banks for the purpose. It shall, however, be ensured that only genuine persons, duly identified by the State Administration as having been affected by the riots/ disturbances, are provided assistance as per the guidelines. In the event of large scale riots where most part of the State/Area is affected and the State Administration is not in a position to identify the riot/disturbance affected persons and subject to SLBC's specific decision, the onus of identifying 'genuine persons' will rest with banks.

7.2. The issuance of advice to the banks by RBI/NABARD on receipt of request/ information from State Government and thereafter issue of instructions by banks to their branches generally results in delay in extending the assistance to riot-affected people. With a view to ensure quick relief to the affected people, it has been decided that the District Collector, on occurrence of the riot/ disturbance, may ask the Lead Bank Officer to convene a meeting of the DCC, if necessary and submit a report to the DCC on the extent of damage caused to life and property in the area affected by

riot/disturbance. If the DCC is satisfied that there has been extensive loss to life and property on account of the riot/ disturbance, the relief as per the above guidelines shall be extended to the people affected by the riot/ disturbance. In cases where there are no District Consultative Committees, the District Collector may request the convener of the State Level Bankers' Committee of the State to convene a meeting of the bankers to consider extension of relief to the affected persons. The report submitted by the District Collector and the decision thereon of SLBC/DCC shall be recorded and shall form a part of the minutes of the meeting. A copy of the proceedings of the meeting shall be forwarded to the concerned Regional Office of the Reserve Bank of India.



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Appendix

Master Direction - Reserve Bank of India (Relief Measures by Banks in Areas Affected by Natural Calamities) Directions, 2018

List of circulars consolidated for the Master Direction

Sr. No.	Circular No.	Date	Subject
1.	RPCD.No.PS.BC.6/PS.126-84	2.8.1984	Revised guidelines for relief measures by banks in areas affected by natural calamities
2.	RPCD.No.PLFS.BC.38/PS.126-91/92	21.9.1991	Banks' assistance to persons affected by riots/ communal disturbances, etc.
3.	RPCD.No.PLFS.BC.59/05.04.02/92-93	6.1.1993	Guidelines for Relief Measures by banks in areas affected by natural calamities- (Consumption Loans)
4.	<u>RPCD.No.PLFS.BC.128/05.04.02/97-98</u>	20.6.1998	Relief measures to persons affected by natural calamities – Agricultural advances
5.	<u>RPCD.PLFS.BC.No.42/05.02.02/2005-06</u>	1.10.2005	The Advisory Committee on Flow of credit to Agriculture and related activities from the Banking System
6.	<u>FIDD No.FSD.BC.12/05.10.001/2015-16</u>	21.8.2015	Guidelines for Relief Measures by Banks in Areas Affected by Natural Calamities
7.	<u>FIDD NO.FSD.BC.27/05.10.001/2015-16</u>	30.06.2016	Guidelines for Relief Measures by Banks in Areas Affected by Natural Calamities- Utilization of Insurance Proceeds

8.	<u>Master Direction FIDD.CO.FSD.BC</u> <u>No.8/05.10.001/2017-18</u>	03.07.2017	Master Direction – Reserve Bank of India (Relief Measures by banks in areas affected by Natural Calamities) Directions 2017
9.	NABARD Ref.No.NB.DoR.ST/1790/Policy-A-10/2015-16	26.08.2015	Guidelines for Relief Measures by Banks in Areas Affected by Natural Calamities


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Minutes on Special SLBC with regards to the flashflood in the State of Sikkim held on October 18, 2023.

A Special State Level Bankers' Committee meeting was held on October 18, 2023, at the Conference Hall of Tashiling, Secretariat, to initiate relief measures by the banks for the existing borrowers as also for non-account holders/common man affected by flood.

The meeting was chaired by Shri Vijay Bhushan Pathak, Chief Secretary, Government of Sikkim and attended by Shri Thomas Devasia, Member IRDAI; Shri Kishore Pariyar, Regional Director, RBI Sikkim, senior officials from various State Government Departments, senior official from NABARD, Shri N.K.Singh, GM-cum-SLBC Convenor and all the Zonal Heads of the banks in Sikkim.

After deliberating on various issues related to the devastation that resulted from flash floods, the following resolutions were passed in the public interest and especially in the interest of people of Sikkim adversely affected by the flood:

- I. **Confirmation of Disaster:** The government of Sikkim vide its Memo No. 399LR&DMD/GoS Notification dated October 04, 2023, declared *the catastrophe as a Disaster in exercise of the powers conferred vide Section 22(2)(b) of the Disaster Management Act, 2005, (53 of 2005)*. Accordingly, four districts viz., **Mangan, Gangtok, Pakyong and Namchi** will be considered as affected districts for the purpose of restructuring of existing loans, sanctioning fresh loans, relaxing in KYC, etc., as prescribed in RBI Master Direction FIDD.CO.FSD.BC No.9/05.10.001/2018-19 dated October 17, 2018.
- II. **Estimation of extent of damage:** *The State Govt. has stated that most of the standing crops have been damaged and hence decided to provide relief to the populous based on the eye estimates/visual impressions.*
It is hereby resolved that the Committee is satisfied by the reasons for opting relief measures based on the eye estimate/visual impressions. Accordingly,

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banks shall extend high slab relief measures as per the RBI's aforementioned Master Direction based on eye estimate/visual impressions.

- III. **Issuance of Certificate by District Collectors/ District Magistrates:** Banks will provide relief to the applicant identified by the District Collectors i.e. the District Collectors will issue certificates regarding identification of affected people by the flash flood in order to enable the banks to provide relief measures. Separate communication shall be issued by the Office of Chief Secretary to the concerned District Collector in this regard.
- IV. **Time period for applying relief measure:** The Committee deliberated and decided that application for relief measure will be accepted for 3 months from 23rd October, 2023.
- V. **Concessional Rate of Interest on Loans:** It is hereby resolved that banks shall not charge more than 4% interest per annum for loans up to ₹10 lakh for the period of 24 months. The bank may at its discretion provide this concession for loan above ₹10 lakh. Further, an interest subvention of up to 4% shall be provided by the State Government for a period of 24 months.
- VI. **Waiver of penal interest:** In respect of default in current dues, no penal interest shall be charged. The banks shall also suitably defer the compounding of interest charges. Banks shall not levy penal interest and consider waiving penal interest, if any, already charged in regard to the loans converted/rescheduled.
- VII. **Moratorium:** It was hereby resolved that a moratorium of one year will be extended to all types of loans, further, the tenure of the repayment of the loan will also be extended by one year.
- VIII. **Discretionary Power to Zonal Heads(Regional Heads) of the banks in Sikkim:** It is hereby confirmed by the banks that the Divisional/Zonal Managers/Cluster Heads/Regional Heads of scheduled commercial/Small Finance banks have been vested with certain discretionary powers to avoid the need to seek fresh approval from their Head Office/Controlling Office regarding the line of action decided by this Committee. In order to expedite the relief measures, the above discretionary powers shall be used for the adoption of scale of finance, need-based restructuring of loans, extension of



loan period, margin, security, sanction of new loan keeping in view the total liability of the borrower arising out of the old loan where the asset financed was damaged or lost as a result of the natural calamity and the new loan to be financed for creation/repair of such asset(s).

- IX. Insurance Companies to expedite the insurance proceeds:** It was hereby resolved, that IRDAI shall direct insurance companies to expedite the insurance proceeds of the people affected in Sikkim and settle the compensation within a maximum period of 3 weeks. Further, insurance companies shall deploy a team immediately to assess the damage in the State of Sikkim for early settlement of insurance claims.
- X. Loss of Insurance Document:** The Chairperson mentioned that people affected by flood might not possess original documents relating to insurance claims. Accordingly, the Chairperson requested IRDAI to issue instructions to insurance companies not to insist upon submission of original documents, instead IRDAI may explore alternate way to establish the genuineness of the customers, in order to expedite the disbursement of insurance claims and ensure that under no circumstances the insurance claim payment shall be withheld for the want of original document.
- XI. Creating Awareness among the public:** The Chairperson stated that the State Government, through its Department for Information and Public Relations will widely disseminate banking-related relief available for the affected people to enable them to apply for the relief.
IPR will also specifically publicise about the three-month window for submission of applications by the affected borrowers in order for to enable them to avail the relief measures provided by the banks.
- XII. Review Meeting:** The Chairperson stated that banks should go beyond the call of duty, and extend relief measures to the common public. Further, he added that any extraordinary effort done by them should be documented and submit the same to RBI as a success story. As the impact of this measures will take some time, a review shall be done in due course to listen to the success stories by the banks.
- XIII. Financial Aid:** The Chairperson appreciated the contribution of ₹2 crore made by State Bank of India for the relief efforts. Further, he appealed to the

banks to volunteer to provide contributions to the Government relief fund, as part of Corporate Social Responsibility (CSR).

XIV. Modalities for rolling out relief measures: The Committee extensively deliberated on various modalities for rolling out the relief measures and the following courses of action were agreed upon by the banks present in the meeting:

- a. **Periodicity of submission of data:** Banks to submit list of beneficiaries on to STF weekly basis for onwards submission to Office of the Chief Secretariat.
- b. **Rescheduling and Restructuring of Loans**
 - i. Restructuring of existing short-term agriculture loans. (Without asking for collateral)
 - ii. Moratorium period to be extended for short-term loans.
 - iii. Rescheduling of Long Term Agriculture Loans.
 - iv. Rescheduling of all other loans (i.e. beside agriculture)
- c. **Moratorium:** Moratorium period of one year and tenure of repayment to be extended by one year.
- d. **Sanctioning of Fresh Loans:**
 - i. To Agriculture and Allied Activities
 - ii. To Rural Artisans, self-employed persons, micro and small units, etc.
 - iii. To commercial buildings under micro and small units.
 - iv. Assist new borrower in preparing for documentation.
- e. **Insurance**
 - i. Help customers to claim insurance by guiding them and helping them in proper documentations.
 - ii. Help claim insurance of existing borrowers under Agriculture/MSMEs.
 - iii. Help claim insurance of loans taken for construction of Residential and Commercial Buildings.
 - iv. Banks shall also start restructuring of loans without waiting for insurance proceeds. (Agri loans restructuring)


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f. Granting of consumption loan

- i. Banks shall also grant consumption loan up to ₹10,000/- to existing borrowers without any collateral. The limit may, however, be enhanced beyond ₹10,000/- at the bank's discretion.

g. Guarantee, Security and Margin

- i. Considerate and sympathetic view in case of sanctioning fresh loan.
- ii. Margin requirements may be waived.
- iii. Loan should not be refused for want of security / collateral

h. Rate of Interest

- i. Banks shall not charge more than 4% interest per annum for loans up to ₹10 lakh for the period of 24 months.
- ii. The bank may at its discretion provide this concession for loan above ₹10 lakh.
- iii. An interest subvention of up to 4% shall be provided by the State Government for a period of 24 months.

i. Penal charges

- i. In respect of default in current dues, no penal interest shall be charged.
- ii. Banks shall also suitably defer the compounding of interest charges.
- iii. Banks shall not levy penal interest and consider waiving penal interest, if any, already charged in regard to the loans converted/ rescheduled.

j. Residential Buildings:

- i. Loans up to ₹6 lakh for repairs to damaged houses are considered under Priority Sector Lending.
- ii. Loans up to ₹25 lakh for purchase/ construction of house can be given under Priority Sector Lending for houses totally damaged.
- iii. Restructuring/ Rescheduling of loans taken for constructing Residential and Commercial Buildings.
- iv. Moratorium up to 1 year may be provided for loans taken for constructing Residential and Commercial Buildings.


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k. Easing of KYC norms

- i. For opening of basic deposit account, photograph along with signature or thumb impression shall suffice.
- ii. Where land is taken as security, in the absence of original title record, a certificate issued by the Revenue Department officials shall be accepted for financing to farmers who have lost proof of their title such as title deed or registration certificate issued to registered share-croppers.

l. Providing access to Banking Service

- i. For people affected by flash flood: Waiving of ATM fees, increasing ATM withdrawal limits; waiving of fees towards overdraft/ early withdrawal penalty on time deposits/ late fee for credit card/ other loan instalment payments, etc.
- ii. Giving option to credit card holders to convert their outstanding balance to EMIs repayable in 1-2 years.
- iii. Besides, all charges debited to the farm loan account other than the regular interest may be waived considering the hardship caused to the affected people.
- iv. Bank may also make arrangements to render banking services in the affected areas by setting up satellite offices, extension counters or mobile banking facilities, etc. under intimation to RBI.

XV. Weekly Status on disbursement of relief measure: In order to ensure that the benefit of relief is given to genuine persons affected by the flood, the Chairperson advised that banks shall submit the list of beneficiaries who have benefited from the relief measures every week to RBI Gangtok for onward submission to Office of Chief Secretariat.

XVI. Setting up of Special Task Force: As decided by the Chairperson, a Special Task Force may be formed to monitor the status and progress of reliefs provided by banks in the affected areas. Initially, the meeting may be convened on a weekly basis, either physically or over WebEx. Later, the same may be convened on a fortnightly basis/need based. The Task Force shall be

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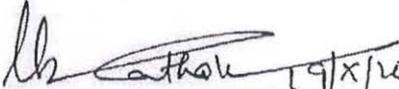
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chaired by the Regional Director, Reserve Bank of India, Sikkim. Its members shall include senior officials from the Department of Agriculture, Department of Animal Husbandry, Department of Land Revenue, State Finance Department, State Rural Development Department, District Collectors of all the affected districts, BSNL, IRDAI, MSME-DFO, all the Zonal Heads of the banks in Sikkim and SLBC Convenor. The Terms of Reference for Special Task Force (STF) are given in the Annexure.

A separate communication in this regard will be issued by SLBC under the signature of Chief Secretary-cum-Chairman of SLBC.

The above minute is submitted for kind approval, please.


(Shri N. K. Singh)
GM-cum-SLBC Convenor


18/10/2023
(Shri Kishore Pariyar)
Regional Director, RBI, Sikkim & Chairman of Steering Committee


(Shri Vijay Bhushan Pathak) IAS
Chief Secretary
Government of Sikkim
October 19, 2023


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LIST OF PARTICIPANTS FOR SPECIAL SLBC HELD ON 18/10/2023

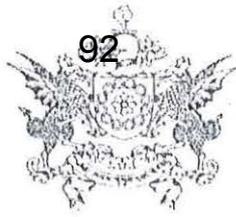
SL NO	NAME	DESIGN./BANK
1	Shri V.B Pathak	Chief Secretary, Govt. of Sikkim
2	Shri Kishore Pariyar	Regional Director, RBI, Gangtok
3	Shri Thomas Debasia	Member Non Life, IRDAI Virtually
4	Shri R S Jagpal	ED, Non Life , IRDAI, Virtually
5	Shri DVS Ramesh	CGM, IRDAI, Virtually
6	Shri M. T Sherpa	Secretary UD & HD
7	Shri Karma R Bonpo	Secretary, Comm & Industries Dept
8	Shri Anil Raj Rai	Secretary, LR & DM Dept
9	Shri S K Tamang	PD cum Secretary, Horticulture Dept
10	Shri S. K Tamang	PD cum Secy Horticulture
11	Dr. Sanjay M. Gajmer	Director, AH & VS, GOS
12	Shri Nitesh Gururng	Dy Director Fisheries, AHVS
13	Shri N. K Singh	SLBC Convenor cum GM SBI
14	Smt C Latha	GM, IRDAI, Virtually
15	Shri Goda Ravishankar	DGM, RBI
16	Shri P W Bhutia	MD, State Bank of Sikkim, Gangtok
17	Smt Pema Chezom	MD, SISCO Bank, Gangtok
18	Smt Swarnali Maity	AGM, RBI, Gangtok
19	Smt Bhama Deuri	AGM, NABARD, Gangtok
20	Shri Atanu Bandopadhyay	RM, SBI, Gangtok
21	Shri Biswajit Haldar	RH, Union Bank of India
22	Shri Alok Taneria	RH, Central Bank of India
23	Shri Tapas Pal	MD, Citizens Urban Coop Bank, Gangtok



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49	Shri Soumnil Nandhi	Br. Head South Indian Bank
50	Shri Subhasis Sarkar	AM NABARD
51	Shri R Sharma	Manager SIDBI
52	Shri M Amarjit Singh	Manager RBI
53	Ms V Spandana	Manager, IRDAI Virtually
54	Shri Narbu Bhutia	Sr. Manager PNB
55	Shri Somnath Sarkar	C.M PNB
56	Shri Gadadhar Ray	CM SLBC
57	Shri Anit Lamichaney	LDM
58	Shri Kallol Bhattacharya	CM Lead Bank
59	Mrs Geeta Chettri	Sr. Manager, NESFB
60	Shri Madhav Koirala	Asst Manager, Lead Bank, SBI


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ANNEXURE -R8

OFFICE OF THE CHIEF SECRETARY
GOVERNMENT OF SIKKIM
GANGTOK

Ref. No. 98/CS/SKM/2023

Dated: 19.10.2023

Special Task Force to review the relief measures extended by the banks in Sikkim

A Special Task Force to monitor the status and progress of relief measures provided by banks in the areas affected by the flash flood in Sikkim is formed as decided in Special State level Bankers' Committee meeting held on October 18, 2023.

2. The Special Task Force shall be chaired by Shri Kishore Pariyar, Regional Director, RBI, Sikkim. The other members of the Task Force shall be as under:

A. Officials of the Government of Sikkim not below the rank of Special Secretary/ Director shall represent the following departments:

- i. Department of Agriculture
- ii. Department of Animal Husbandry
- iii. Department of Land Revenue
- iv. State Finance Department
- v. State Rural Development Department

B. District Collectors of the affected districts viz., Gangtok, Mangan, Pakyong and Namchi

C. Other institutions:

- i. MSME-Development and Facilitation Office
- ii. Insurance Regulatory and Development Authority of India

D. Convenor of State Level Bankers' Committee, Sikkim

E. Zonal/Regional/Cluster Heads of all the banks operating in Sikkim

3. The Special Task Force shall initially meet on a weekly basis, and later the same may be convened on a fortnightly basis/need-based to deliberate various modalities for rolling out the relief measures.

4. The composition of the Special Task Force may be expanded and other members may be added as and when necessary.

5. The Terms of Reference for rolling out the relief measures are enclosed in the Annexure.



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(Vijay Bhushan Pathak) IAS
Chief Secretary, State of Sikkim

1. **Issuance of Certificate by District Collectors/ District Magistrates:** District Collectors to issue certificates for people affected by the flash flood, in order to enable banks to provide relief measures.
2. **Periodicity of submission of data:** Banks to submit list of beneficiaries on to STF weekly basis for onwards submission to Office of the Chief Secretariat.
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4. **Moratorium:** Moratorium period of one year and tenure of repayment to be extended by one year.
5. **Sanctioning of Fresh Loans:**
 - a. To Agriculture and Allied Activities
 - b. To Rural Artisans, self-employed persons, micro and small units, etc.
 - c. To commercial buildings under micro and small units.
 - d. Assist new borrower in preparing for documentation.
6. **Insurance**
 - a. Help customers to claim insurance by guiding them and helping them in proper documentations.
 - b. Help claim insurance of existing borrowers under Agriculture/MSMEs.
 - c. Help claim insurance of loans taken for construction of Residential and Commercial Buildings.
 - d. Banks shall also start restructuring of loans without waiting for insurance proceeds. (Agri loans restructuring)
7. **Insurance Companies to expedite the insurance proceeds:**
 - a. IRDAI shall direct insurance companies to expedite the insurance proceeds of the people affected in Sikkim and settle the compensation within a maximum period of 3 weeks.
 - b. Further, insurance companies shall deploy a team immediately to assess the damage in the State of Sikkim for early settlement of insurance claims.



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8. Granting of consumption loan 94

- a. Banks shall also grant consumption loan up to ₹10,000/- to existing borrowers without any collateral. The limit may, however, be enhanced beyond ₹10,000/- at the bank's discretion.

9. Guarantee, Security and Margin

- a. Considerate and sympathetic view in case of sanctioning fresh loan.
- b. Margin requirements may be waived.
- c. Loan should not be refused for want of security / collateral

10. Rate of Interest

- a. Banks shall not charge more than 4% interest per annum for loans up to ₹10 lakh for the period of 24 months.
- b. The bank may at its discretion provide this concession for loan above ₹10 lakh.
- c. An interest subvention of up to 4% shall be provided by the State Government for a period of 24 months.

11. Penal charges

- a. In respect of default in current dues, no penal interest shall be charged.
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- b. Giving option to credit card holders to convert their outstanding balance to EMIs repayable in 1-2 years.
- c. Besides, all charges debited to the farm loan account other than the regular interest may be waived considering the hardship caused to the affected people.
- d. Bank may also make arrangements to render banking services in the affected areas by setting up satellite offices, extension counters or mobile banking facilities, etc. under intimation to RBI.

15. **Time period for applying relief measure:** Application for relief measure will be accepted for 3 months starting from October 23, 2023.




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proof of service

Office of Sameer Abhyankar <contactadvsa@gmail.com>

Service for Original Application No. 171/2023/EZ In re : News item appeared in East Mojo on 05.10.2023 titled "Sikkim: Here's why the Chungthang Hydro-dam breach is a BIG DEAL" vs The State of sikkim & Ors

1 message

Office of Sameer Abhyankar <contactadvsa@gmail.com>

Fri, Apr 5, 2024 at 4:45 PM

To: "cc: amritalegal" <amritalegal@gmail.com>, ashokadvhc <ashokadvhc@gmail.com>, legumjure <legumjure@gmail.com>, vidhan Vyas <vidhan.advocate@gmail.com>

Dear sir

Please find attached scanned copy of the affidavit on behalf of Respondent No.1(State Of Sikkim) in the captions Matter.

Thanks

Prince Kumar

For

Mr. Sameer Abhyankar

Standing Counsel sikkim

--

Address for Correspondence:

D-247, LGF, Defence Colony,

New Delhi 110024

Ph. +91-11-49402169

**affidavit on behalf of the R1 State of sikkim.pdf**
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