

REPORT ON THREE DAYS ONLINE TRAINING PROGRAM

Jointly Organized by



NATIONAL INSTITUTE OF DISASTER MANAGEMENT

MINISTRY OF HOME AFFAIRS, GOVERNMENT OF INDIA

and



DEPARTMENT OF EARTH & PLANETARY SCIENCES

UNIVERSITY OF ALLAHABAD, PRAYAGRAJ

on

GEO-HAZARD ANALYSIS AND MANAGEMENT

From 26th to 28th JULY 2021

Submitted at



NIDM, MINISTRY OF HOME AFFAIRS, GOVERNMENT OF INDIA, DELHI

National Institute of Disaster Management
Ministry of Home Affairs, Government of India
and
Department of Earth & Planetary Sciences
University of Allahabad, Prayagraj
Jointly Organizes

3 Days Training Programme on Geo-hazard Analysis and Management

**Date : 26 - 28 July 2021,
Time 11.30 am - 01.30 pm**

Registration Link: training.nidm.gov.in

PATRONS



Maj Gen M K Bindal
Executive Director,
NIDM



Prof Sangita Srivastava
Vice Chancellor,
University of Allahabad

CONVENORS



Dr Amir Ali Khan
Assistant Professor,
NIDM



Dr Ravindra Pratap Singh
Assistant Professor,
DEPS, UoA

CO-CONVENOR



Dr Prakash Kumar Singh
Assistant Professor,
DEPS, UoA

Steering Committee:

Prof. Chandan Ghosh, NIDM
Prof. Jayanta Kumar Pati, Head, DEPS, UoA
Prof. Jayant Nath Tripathi, DEPS, UoA

Advisory Board:

Prof. A K Rai, DEPS, UoA
Prof. S S Das, DEPS, UoA
Dr. Priyamvada Singh, Asst. Professor, DEPS, UoA

Coordinator:

Ms. Yogita Garbyal,
Young Professional, NIDM

Moderators:

Rahma Rafat, Research Scholar, DEPS, UoA
Digvijay Singh, Research Scholar, DEPS, UoA
Nilesh Kumar Rai, Research Scholar, DEPS, UoA
Shailendra Kumar Chaudhary, Research Scholar, DEPS, UoA



**Stay Protected
from Corona**



**Wear your Mask
Properly**



**Follow Proper
Hand Hygiene**



**Maintain Social
Distancing**



**Get
Vaccinated**

INTRODUCTION:

An online training program ***“Geo-Hazard Analysis and Management”*** was conducted jointly by the National Institute of Disaster Management, Ministry of Home Affairs, Government of INDIA, New Delhi (NIDM) and Department of Earth & Planetary Sciences, University of Allahabad, Prayagraj, Uttar Pradesh (DEPS, UoA) from 26th to 28th July 2021 in online mode. The training program aimed to create awareness among masses related to general forms of natural hazards and their key procedures for analysis and management with an inclusive approach. The training program has been arranged in six sessions with three different themes:

- **The Concept:** The theme provided a notion of natural hazard to the participants with recent examples and also created a sense of awareness about such phenomenon.
- **The Analysis:** There are several analytical processes adopted for the geological hazard analysis and some of them are available in the public domain, so the theme aims to discuss user-friendly tools and techniques.
- **The Management and Mitigation:** The intensity of natural hazard can only be neutralised with proper management procedures, so a general approach have been discussed under this theme.

The training program is ordered in three days as per the above-mentioned themes. The morning sessions of a day discussed the basics for the theme of the day and the second session provided information on the availability of hands-on tools for the same. Generally, the emphasis is given to the disaster preparedness of authorities or administrative bodies but this training program was an attempt to enhance the community-based localised preparedness capacity by introducing tools and techniques available in public domains. Many institutions have predicted that extreme climatic changes will make the monsoons very extreme and India is one of the countries to take the wrath of this. The message from the training program was made loud and clear that it is the right time to invest the energy in analysis, prediction and mitigation of geohazards more importantly in the prediction of extreme events which causes mass destruction.

OBJECTIVE OF TRAINING PROGRAM:

The observation of natural hazards is different from the other natural phenomena; hence this online training program aims to train the participants with a geo-perspective for a hazard. This online training program is focused on sensitization about a geo-hazard and endorsing the information on the geo-hazard with the following objectives:

- To develop a basic understanding of the geo-hazards.
- To discuss common technical characteristics of a geo-hazard
- To provide access to major tools for identification of areas under threat
- To identify the general analytical procedures for natural hazards
- To discuss tools and techniques available in the public domain for geo-hazard analysis
- To let participants explore the appropriate management techniques for natural hazards
- To promote knowledge dissemination and capacity building towards the mitigation techniques for geo-hazard risk reduction

TARGET TRAINEES:

The training program was well received by a large audience in the form of young researchers, professionals, students and faculty members from across India. More than **600 registrations** were received with over **300 active participation** throughout. The sessions were conducted by highly distinguished speakers from prestigious institutes, like, IIT Mandi, IIT Delhi, University of Delhi, University of Allahabad, LEED Labs Haryana and IIRS Deharadun. The trainees were expected from all different subject domains with or without basic knowledge of hazards or disasters. Generally, the research scholars from universities and research institutes were found enthusiastic about the program.

SCHEDULE OF TRAINING PROGRAM:

The online training program is

Date	Session	Time	Theme	Speaker(s)
26 th July 2021	Morning	11:30AM	Concept of the Training Program and code of conduct	Yogita Garbyal , <i>Coordinator</i>
		11:35AM	Key Note Address	Prof. Jayant Kumar Pati , <i>Director, NCEMP, UoA and Head, DEPS, UoA</i>
		11:45AM	Welcome Address	Dr. Amir Ali Khan , <i>Convenor</i>
				Dr. Ravindra Pratp Singh , <i>Convenor</i>
		12:00Noon	Welcome and Introduction of Speaker	Ms. Rahma Rafat , <i>Moderator</i>
		12:05PM	Concept Note on Geo-hazard	Prof. Suneet Dwivedi <i>Center of Atmospheric and Oceanic Studies, UoA</i>
		12:25PM	Discussion and Queries	Yogita Garbyal , <i>Coordinator</i>
	5 minutes Break			
	Evening	12:35Noon	Welcome and Introduction of Speaker	Ms. Rahma Rafat <i>Moderator</i>
		12:40PM	Geological Understanding for Hazards	Dr. Dericks Praise Shukla <i>School of Engineering, IIT-Mandi</i>
		1:20PM	Discussion and Queries	Yogita Garbyal , <i>Coordinator</i>
27 th July 2021	Morning	11:30AM	Welcome and recap of Day-1	Dr. Priyamvada Singh <i>DEPS, UoA</i>
		11:40AM	Welcome and Introduction of Speaker	Mr. Digvijay Singh <i>Moderator</i>
		11:45AM	Approach to Geo-hazard Analysis	Dr. Naresh Rana <i>Department of Geology, University of Delhi</i>
		12:20PM	Discussion and Queries	Yogita Garbyal , <i>Coordinator</i>
	5 minutes Break			
	Evening	12:30AM	Welcome and Introduction of Speaker	Mr. Nilesh Kumar Rai <i>Moderator</i>
		12:35PM	Process for Flood Hazard Analysis	Dr. Pramod Kumar <i>DST-Center for Policy Research, IIT-Delhi</i>
		1:20PM	Discussion and Queries	Yogita Garbyal , <i>Coordinator</i>
28 th July	Morning	11:30AM	Welcome and recap of Day-1 and 2	Dr. Prakash Kumar Singh , <i>Co-convenor</i>

2021		11:40AM	Welcome and Introduction of Speaker	Mr. Shailendra Choudhary <i>Moderator</i>
		11:45AM	Management plan for Geo-hazards	Dr. Sovan Chatteraj <i>Scientist F, Geosciences Department, IIRS Dehradun</i>
		12:20PM	Discussion and Queries	Yogita Garbyal , <i>Coordinator</i>
	5 minutes Break			
	Evening	12:30AM	Welcome and Introduction of Speaker	Mr. Shailendra Choudhary <i>Moderator</i>
		12:35PM	Flood hazard management and mitigation	Dr. Kushagra Rajendra <i>Head, ASEES Haryana</i>
		1:00PM	Discussion and Queries	Yogita Garbyal , <i>Coordinator</i>
		1:05PM	Concluding Session	Prof. Shidhartha Sankar Das <i>DEPS, UoA</i>
		1:15PM	Vote of Thanks	Prof. J.N. Tripathi <i>DEPS, UoA</i>
		1:20PM	Closing Remarks	Dr. Amir Ali Khan , <i>Convenor</i>
				Dr. Ravindra Pratap Singh , <i>Convenor</i>

SUMMARY OF SESSIONS:

The online training program was initiated by **Ms. Yogita Garbyal**, Young Professional, NIDM and coordinator of this online training program, by explaining the process of interaction and code of conduct during the technical sessions. She has mentioned that 80% attendance is mandatory for getting a certificate but the audience from the Youtube link will not get any certificate.



SUMMARY OF LECTURES DAY-1: 26TH JULY 2021

INAUGURAL SESSION: The keynote speaker **Prof. Jayant Kumar Pati**, Director NCEMP and Head DEPS, UoA have been introduced by Ms. Garbyal. Prof. Pati briefed about the stance of UoA on disaster-related curriculum with examples of local issues. He pointed out the importance and relevance of disaster awareness and the role of geoscientists in it by addressing recent events.



Dr. J.K. Pati, Director NCEMP

The welcome address progressed by **Dr. Amir Ali Khan**, Assistant Professor, NIDM and Convenor of this program, with a brief introduction on the role and functioning of NIDM in tailored disaster awareness program for the common mass. Dr. Khan also discussed the aims and objectives of this training program and the role of the Team NIDM during all the technical sessions to be held. He also focused on the common approaches to be utilised for the disaster and related studies.



Dr. Amir Ali Khan, NIDM

The inaugural session was summed up by **Dr. Ravindra Pratap Singh**, Assistant Professor, DEPS, UoA and Convenor of the program. Dr. Singh discussed the curriculum and nature of this online training program. He mentioned that the program will be conducted with the elementary approach towards the disaster and will be covered in three segments, where each day covers a segment. The first segment would explain basic concepts of disaster and basic tools to locate such events. The second segment would make the audience familiar with basic analytical techniques and the tools for the same. The third and most important segment would discuss the management tools and mitigation practices for the disasters.

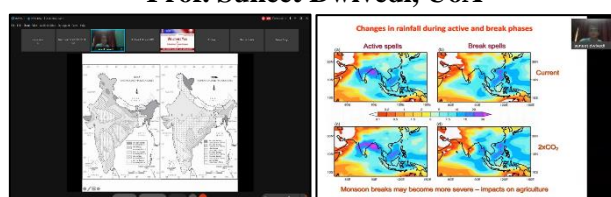


Dr. Ravindra Pratap Singh, DEPS, UoA

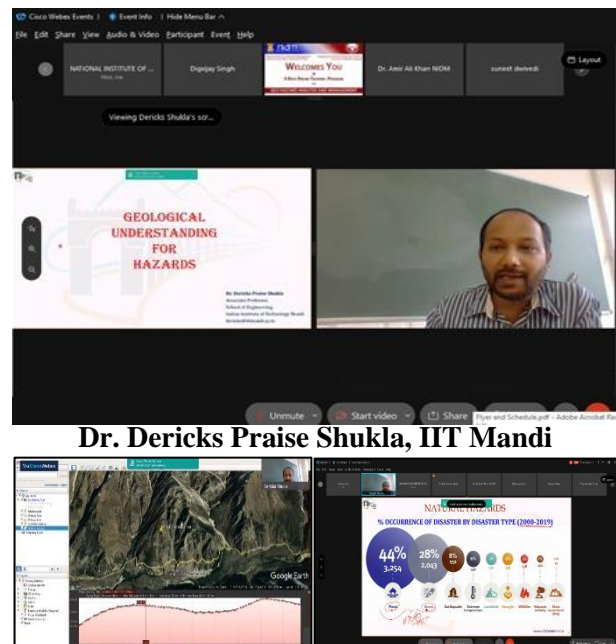
FIRST TECHNICAL SESSION (11:30AM): The first technical session started with the welcome of **Prof. Suneet Dwivedi**, Coordinator, Centre for Atmospheric and Oceanic Studies, UoA by **Ms. Rahma Rafat**, Research Scholar, DEPS, UoA. Prof. Dwivedi made comfortable the audience with the term geo-hazards by brief discussion over earthquakes, cyclones and drought hazards. His keen area of interest are atmospheric modelling and prediction, so he well correlated the topics with basic hazard understanding. Generally, the audience was from India, so, Prof. Dwivedi focused on annual rainfall patterns with monsoonal dispersals or changing patterns in the region with its long/short term impacts on the climate and the Indian in common.



Prof. Suneet Dwivedi, UoA



Second Session (12:30PM): The speaker of the day **Dr. Dericks Praise Shukla**, Associate Professor, School of Engineering, Indian Institute of Technology Mandi was welcomed by Ms. Rahma. Dr. Shukla continued the discussion of Prof. Dwivedi with workable tools in the field of hazard studies. Though, his discussion mostly encompasses the examples of slope failures but with the approach of atmospheric and geological controls. He well pointed out that most of the Himalayan landslides have been reported in the monsoon period. Dr. Shukla also made familiar with freely available tools to locate and represent such landslides with minimal technical skills. He urged all the participants to contribute to any local hazard/risk situation with the help of tools and technics. He also exhibited the process with the example of the recent Chamoli Landslide.



Dr. Dericks Praise Shukla, IIT Mandi

The first day of this online training summed up, with the discussion over the process and mechanism of a hazard, followed by the vote of thanks by convenors Dr. Amir Ali Khan and Dr. Ravindra Pratap Singh.

KEY POINTS OF THE DAY:

- The hazard events are the (de-)function of natural processes.
- The variation in the atmospheric circulations would be an indicator of geohazards.
- The tropical climatic zone has a specific trend of weather extremes, and these can be monitored with available datasets.
- Such processes can be calculated with advanced tools in the GIS environment.

&
JOINTLY ORGANISING
3 DAYS ONLINE TRAINING PROGRAM
ON

GEO-HAZARD ANALYSIS AND MANAGEMENT

DAY 1: 26TH JULY 2021 (11:30AM TO 1:30PM)

PATRONS



MAJ GEN M.K. BINDAL
EXECUTIVE DIRECTOR
NIDM



PROF SANGITA SRIVASTAVA
VICE CHANCELLOR
UNIVERSITY OF ALLAHABAD

KEY NOTE ADDRESS



PROF JAYANT KUMAR PATI
DIRECTOR, NCEMP
UNIVERSITY OF ALLAHABAD

WELCOME ADDRESS



DR. AMIR ALI KHAN
ASSISTANT PROFESSOR
NIDM



DR. RAVINDRA PRATAP SINGH
ASSISTANT PROFESSOR
DEPS, UNIVERSITY OF ALLAHABAD

INVITED SPEAKERS



SESSION – 1
11:30 AM

CONCEPT OF GEO-HAZARDS

DR. SUNEET DWIVEDI
PROFESSOR, CENTER OF ATMOSPHERIC AND OCEANIC STUDIES, UNIVERSITY OF ALLAHABAD

GEOLOGICAL UNDERSTANDING FOR HAZARDS

SESSION – 2
12:30 AM

DR. DERICKS P. SHUKLA
ASSOCIATE PROFESSOR, SCHOOL OF ENGINEERING, IIT MANDI



WEBEX JOINING LINK: <https://bit.ly/3i2YYCz> OR **EVENT ID:** 156 409 5301 **PASSWORD:** 2021

COORDINATOR



YOGITA GARBYAL
YOUNG PROFESSIONAL, NIDM

MODERATOR



RAHMA RAFAT
RESEARCH SCHOLAR, DEPS, UoA

SUMMARY OF LECTURES DAY-2: 27TH JULY 2021

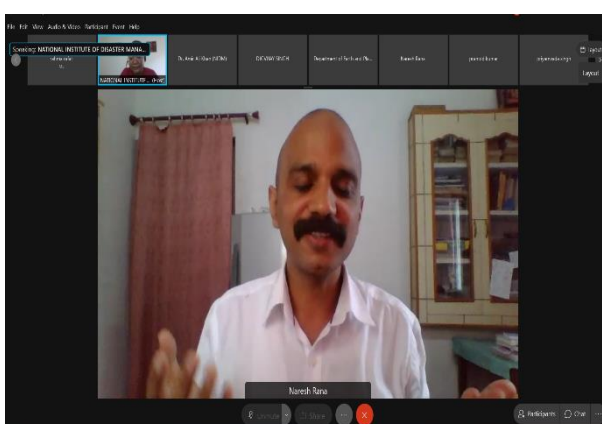
The second day of the online training program was initiated with the briefing of technical sessions of day one by **Dr. Priyamvada Singh**, Assistant Professor, DEPS. She concluded the technical notes from the sessions of day one and their utilisation in forthcoming sessions. She has also initiated the linkage of previous sessions with forthcoming technical lectures of the day.

The first technical session of the day started with the welcome of the first presenter **Dr. Naresh Rana**, Assistant Professor, Department of Geology, the University of Delhi by **Mr. Digvijay Singh**, Research Scholar, DEPS, UoA. Dr. Rana used a pictorial representation of geo-hazard and geoenvironmental hazards which mostly happens in the last decades and he explained the technicalities of hazard oriented studies in the Himalayas like terrain, with examples of Alaknanda valley and connects the same very well to the global scenario. He very well presented the Rambara landslide during the Mandakini flood and the role of geological aspects in the same. He concluded the lecture by highlighting the effects of unplanned developments over the Himalayan slopes, which ultimately leads to damage to the river systems. He also briefed about the process one can opt for the research in riverine eco-systems and hazard studies like landslide induced flooding.

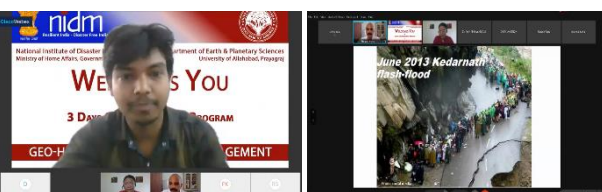
The second session of the day was delivered by **Dr. Pramod Kumar**, Research Scientist, IIT Delhi. He was invited by **Mr. Nilesh Kumar Rai**, Research Scholar, DEPS, UoA. Dr. Kumar utilizes his resources in the form of satellite images and computational modelling to explain the geo-hazard problems in the Alaknanda valley. He also discussed various tools and websites which are open sources to collect such data and showed the model CORDEX and climate data operator that can be used to predict the near future as well as for future like flooding and heatwave. He emphasized the role of



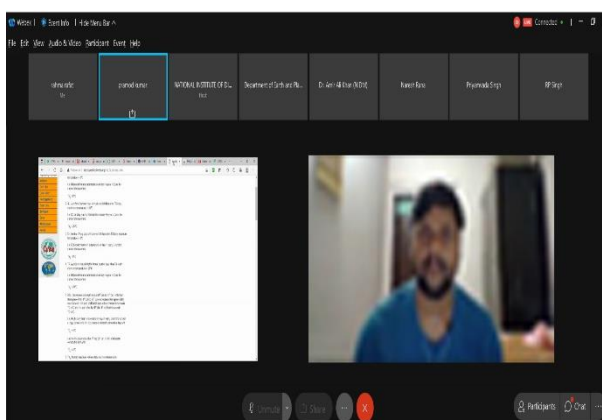
Dr. Priyamvada Singh, UoA



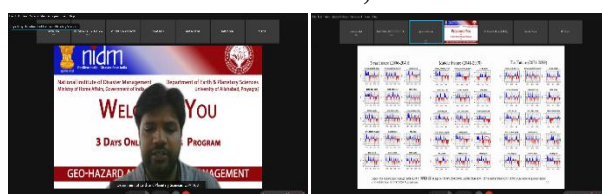
Dr. Naresh Rana, Delhi University



He also briefed about the process one can opt for the research in riverine eco-systems and hazard studies like landslide induced flooding.



Dr. Pramod Kumar, IIT Delhi



numerical simulation and physical-based models in different landslide hazard analyses mainly stressing on debris flow model.

KEY POINTS OF THE DAY:

- Unplanned development is the major culprit for the exaggerating of the risk of hazard, especially in the Indian Sub-continent.
- The ecosystem can coexist with the development but require devotion.
- There are tools and techniques to measure and predict a regional hazard.
- The research groups can utilize such tools and techniques to come up with valid regional analyses as per their area of interest.
- Any motivated environmentalist can utilize online resources as per the procedures discussed during the technical sessions for proper regional development studies.



NATIONAL INSTITUTE OF DISASTER MANAGEMENT
MINISTRY OF HOME AFFAIRS, GOVERNMENT OF INDIA

DEPARTMENT OF EARTH & PLANETARY SCIENCES
UNIVERSITY OF ALLAHABAD, PRAYAGRAJ

&
JOINTLY ORGANISING
3 DAYS ONLINE TRAINING PROGRAM
ON

GEO-HAZARD ANALYSIS AND MANAGEMENT

DAY 2: 27TH JULY 2021 (11:30AM TO 1:30PM)

PATRONS



MAJ GEN M.K. BINDAL
EXECUTIVE DIRECTOR
NIDM



PROF SANGITA SRIVASTAVA
VICE CHANCELLOR
UNIVERSITY OF ALLAHABAD

WELCOME & RECAP SESSION



DR. PRIYAMVADA SINGH
ASSISTANT PROFESSOR, DEPS
UNIVERSITY OF ALLAHABAD

CONVENORS



DR. AMIR ALI KHAN
ASSISTANT PROFESSOR
NIDM



DR. RAVINDRA PRATAP SINGH
ASSISTANT PROFESSOR
DEPS, UNIVERSITY OF ALLAHABAD

INVITED SPEAKERS



**SESSION – 1
11:30 AM**

ANALYSIS OF GEO-HAZARDS

DR. NARESH RANA
ASSISTANT PROFESSOR, DEPARTMENT OF GEOLOGY, UNIVERSITY OF DELHI

ANALYTICAL MODELLING FOR GEO-HAZARDS

**SESSION – 2
12:30 AM**



DR. PRAMOD KUMAR
RESEARCH SCIENTIST, DST-CENTRE FOR POLICY RESEARCH, IIT DELHI

WEBEX JOINING LINK: <https://bit.ly/3i2YYCz> OR EVENT ID: 156 409 5301 PASSWORD: 2021

COORDINATOR



YOGITA GARBYAL
YOUNG PROFESSIONAL, NIDM

MODERATORS



NILESH KUMAR RAI
RESEARCH SCHOLAR, DEPS, UoA



DIGVIJAY SINGH
RESEARCH SCHOLAR, DEPS, UoA



SUMMARY OF LECTURES DAY-3: 28TH JULY 2021

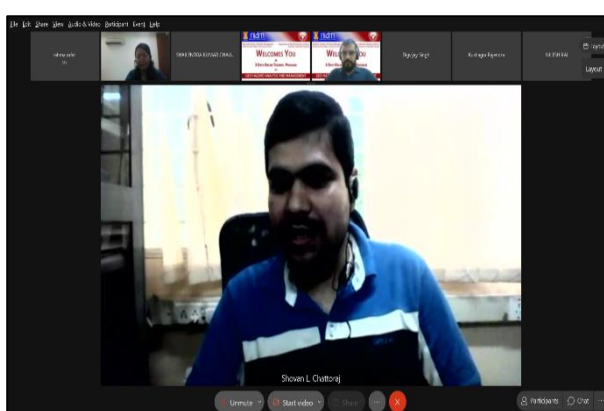
Dr. Prakash Kumar Singh, Co-convenor and Assistant Professor, DEPS, UoA concluded technical sessions of the first two days of the online training program and focuses on the importance of such training program in everyone's research. He highlighted the processes discussed during previous technical sessions and relate them with upcoming lectures.

Third and the last day of the training session was started by our first presenter **Dr. Shovan L. Chatteraj** who is currently working as a scientist in IIRS Dehradun. He was invited **Mr. Shailendra Kumar Choudhary**, Research Scholar, UoA. The lecture of Dr. Chatteraj majorly focused on the mitigation and management of geo-hazard, especially landslides. He very well explained the landslide inventory, susceptibility mapping and risk analysis with the process of thematic mapping. He explained the process of acquiring satellite images and their classification to extract the information for hazard prediction and their management. The process was explained with a recent example of the Malin landslide, Maharashtra with comparison to the debris flow of the Kedarnath disaster. He showed how different thematic layers can be constructed using GIS platforms and open online repositories for the preparation of LHZ maps. The importance of these maps is immense as they help in mitigation, recovery, emergency response and rehabilitation during a disaster.

The last and concluding technical session of the training program was from **Dr. Kushagra Rajendra**, Head, Amity School of Earth and Environmental Sciences, Haryana. In the lecture, he well established the importance of hazard studies and the process to deal with post-disaster scenarios. He initiated the talk with high hazards related to high energy conditions and concluded with hazards in the low energy environment. The management and



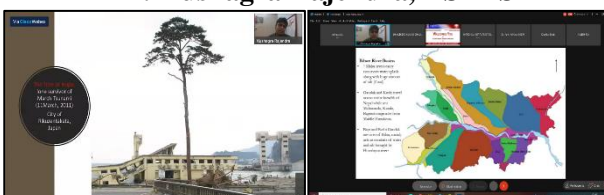
Dr. Prakash Kumar Singh, DEPS, UoA



Dr. Shovan L. Chatteraj, IIRS Dehradun



Dr. Kushagra Rajendra, ASEES



mitigation of flood in different conditions was discussed with different flood inundation maps of Bihar and the drainage pattern of Champaran. With the examples of Indian Flood experiences, Dr. Kushagra emphasized the traditional flood management methods. The idea promised in Dr. Kushagra's talk is that we can also use hazards as a boon, like Flood Water Harvesting.

The training program was concluded by **Prof. Siddhartha Sankar Das**, DEPS, UoA highlighting the importance of such programs in the awareness of common mass towards a society with minimal risk of natural extremes. In the valedictory speech, he emphasized the addition of hazard studies in the curriculum.

The vote of thanks to all the panellists and participants along with patrons and organisers of the training program was given by **Prof. Jayant Nath Tripathi**, Incharge, Center of Disaster Management, UoA. Prof. Tripathi motivated all the participants to utilise the learnings of the training program in their area of interest.



Prof. Siddhartha Sankar Das, UoA



Prof. Jayant Nath Tripathi, In-Charge, CDM



NATIONAL INSTITUTE OF DISASTER MANAGEMENT
MINISTRY OF HOME AFFAIRS, GOVERNMENT OF INDIA



DEPARTMENT OF EARTH & PLANETARY SCIENCES
UNIVERSITY OF ALLAHABAD, PRAYAGRAJ

&

JOINTLY ORGANISING
3 DAYS ONLINE TRAINING PROGRAM
ON

GEO-HAZARD ANALYSIS AND MANAGEMENT

DAY 3: 28TH JULY 2021 (11:30AM TO 1:30PM)

PATRONS



MAJ GEN M.K. BINDAL
EXECUTIVE DIRECTOR
NIDM



PROF SANGITA SRIVASTAVA
VICE CHANCELLOR
UNIVERSITY OF ALLAHABAD

WELCOME & RECAP SESSION



DR. PRAKASH KUMAR SINGH
ASSISTANT PROFESSOR, DEPS
UNIVERSITY OF ALLAHABAD

CONVENORS



DR. AMIR ALI KHAN
ASSISTANT PROFESSOR
NIDM



DR. RAVINDRA PRATAP SINGH
ASSISTANT PROFESSOR
DEPS, UNIVERSITY OF ALLAHABAD

INVITED SPEAKERS



SESSION – 1
11:30 AM

MANAGEMENT PLANS OF GEO-HAZARDS

DR. SHOVAN LAL CHATTORAJ
SCIENTIST F, GEOSCIENCES DEPARTMENT, INDIAN INSTITUTE OF REMOTE SENSING, DEHRADUN

MITIGATION TECHNIQUES FOR GEO-HAZARDS

SESSION – 2
12:30 AM

DR. KUSHAGRA RAJENDRA
HEAD, AMITY SCHOOL OF EARTH AND ENVIRONMENTAL SCIENCES AND LEED LAB, HARYANA



WEBEX JOINING LINK: <https://bit.ly/3i2YYCz> OR EVENT ID: 156 409 5301 PASSWORD: 2021

VALEDICTORY SESSION



DR. SIDDHARTHA SANKAR DAS
PROFESSOR, DEPS
UNIVERSITY OF ALLAHABAD

VOTE OF THANKS



PROF. JAYANT NATH TRIPATHI
IN-CHARGE
CENTER OF DISASTER MANAGEMENT
UNIVERSITY OF ALLAHABAD

COORDINATOR



YOGITA GARBYAL
YOUNG PROFESSIONAL, NIDM

MODERATOR




SHAILENDRA KUMAR CHAUDHARY
RESEARCH SCHOLAR, DEPS, UOA




SUMMARY OF SESSIONS:

The training program aims to let aware an individual of the hazard and contribute his/her part in the analysis and mitigation, which is the topic of international attention and need of the hour. The technical sessions started with a basic concept of geo-hazards and concluded with the utilisation of modern and classical methods of hazard mitigation and management from a viewpoint of a researcher. Meanwhile, several tools and techniques for hazard analysis have been experienced by the participants, including geospatial and climate modelling tools. Hazard and risk prediction methods were also discussed during the technical sessions. Though most of the examples were taken from Himalayan terrain Eastern UP-Bihar was not left out. During this training program, the term “computational modelling” was simplified and explained how one can do the same with very basic knowledge of computer handling to interpret the climatic variabilities. The enthusiasm of participants ensured that such programs can make a difference in society towards a safe and sustainable India.



University of Allahabad
29 जुलाई

An online training program “Geo-Hazard Analysis and Management” was conducted jointly by Department of Earth & Planetary Sciences, UoA and National Institute of Disaster Management, Ministry of Home Affairs, Government of INDIA, New Delhi from 26 – 28 July 2021 in the Department of Earth & Planetary Sciences, UoA. The purpose of the training program was to create an awareness among masses related to general forms of geohazards, its analysis and management. The training program was well received by a large audience in the form of young researchers, professionals, students and faculty members from across India. More than 600 registrations were received with over 300 active participations throughout. The sessions were conducted by highly distinguished speakers from IIT Mandi, IIT Delhi, University of Delhi, University of Allahabad, LEED Labs Haryana. Many institutions have predicted that extreme climatic changes will make the monsoons very extreme and India is one of the countries to take the wrath of this. As stated by convenor Dr. R. P. Singh and Co-convenor Dr. P.K. Singh from University of Allahabad, “we have already witnessed several flood related hazards in the past decade, be it Kerala, Tamil Nadu, hills and many places in India. So, the message from the training program was made loud and clear that it is the right time to invest the energy in analysis, prediction and mitigation of geohazards more importantly on prediction of extreme events which causes mass destruction.



ACTIVE PARTICIPATION:

NIDM Training Portal (B) - Microsoft Excel						
A	B	C	D	E	F	G
699	vineet kumar gautam	vineetkmgautam@gmail.com	8851640790	26-07-2021	11:30am - 1:30pm	Geo-Hazard Analysis and Management
700	698 VINOD KUMAR	vinodkumar04031993@gmail.com	8307115145	26-07-2021	11:30am - 1:30pm	Geo-Hazard Analysis and Management
701	699 Vipul Singh Rathaur	Vipulsinghrathaur09@gmail.com	7080055668	26-07-2021	11:30am - 1:30pm	Geo-Hazard Analysis and Management
702	700 Eswari P	virateswar@gmail.com	7032035648	26-07-2021	11:30am - 1:30pm	Geo-Hazard Analysis and Management
703	701 VIRENDRAKUMAR THAKKAR	virendrakumarthakkar@gmail.com	9412113628	26-07-2021	11:30am - 1:30pm	Geo-Hazard Analysis and Management
704	702 Vishal Kumar	Vishalkumar29508@gmail.com	9260993984	26-07-2021	11:30am - 1:30pm	Geo-Hazard Analysis and Management
705	703 Vishnu Himanshu Ratnam Pandey	vishnubhu001@gmail.com	8922094329	26-07-2021	11:30am - 1:30pm	Geo-Hazard Analysis and Management
706	704 VISHNU S UNNITHAN	vishnulekshmi2016@gmail.com	9495732785	26-07-2021	11:30am - 1:30pm	Geo-Hazard Analysis and Management
707	705 vishnu kumar singh	vishnugh911@gmail.com	8919273461	26-07-2021	11:30am - 1:30pm	Geo-Hazard Analysis and Management
708	706 Vivek Shivhare	vivekshivhare123@gmail.com	9074889955	26-07-2021	11:30am - 1:30pm	Geo-Hazard Analysis and Management
709	707 Vivek Kumar Singh	vivekshingerman@gmail.com	9911748808	26-07-2021	11:30am - 1:30pm	Geo-Hazard Analysis and Management
710	708 Vivek Tripathi	vivektripathi202@gmail.com	9665866773	26-07-2021	11:30am - 1:30pm	Geo-Hazard Analysis and Management
711	709 VIVEK PATEL	vkp9109707877@gmail.com	9109707877	26-07-2021	11:30am - 1:30pm	Geo-Hazard Analysis and Management
712	710 Anitha V m	vm.anitha97@gmail.com	7902317498	26-07-2021	11:30am - 1:30pm	Geo-Hazard Analysis and Management
713	711 SUDDAPALLI Vignesh Nikhil	vnkhil101@gmail.com	9502923112	26-07-2021	11:30am - 1:30pm	Geo-Hazard Analysis and Management
714	712 Virendra Tiwari	vtvirendra@gmail.com	9411131511	26-07-2021	11:30am - 1:30pm	Geo-Hazard Analysis and Management
715	713 Vaishali Pawar	Vp076593@gmail.com	9022770130	26-07-2021	11:30am - 1:30pm	Geo-Hazard Analysis and Management
716	714 Vivek Kumar	Vs127163@gmail.com	9801960456	26-07-2021	11:30am - 1:30pm	Geo-Hazard Analysis and Management
717	715 Joy Chandran	vu3joy@gmail.com	9029594954	26-07-2021	11:30am - 1:30pm	Geo-Hazard Analysis and Management
718	716 VIKASH YADAV	vyadav8741@gmail.com	8302534428	26-07-2021	11:30am - 1:30pm	Geo-Hazard Analysis and Management
719	717 RAHUL SHARMA	webinar1981@gmail.com	9773437127	26-07-2021	11:30am - 1:30pm	Geo-Hazard Analysis and Management
720	718 Gaurav Yadav	yadavgaurav0002@gmail.com	8090883975	26-07-2021	11:30am - 1:30pm	Geo-Hazard Analysis and Management
721	719 PRAKASH YADAV	yadavikas8741@gmail.com	8764170881	26-07-2021	11:30am - 1:30pm	Geo-Hazard Analysis and Management
722	720 Mrs HEMALATA KONDAMUDI	yaddanapudihemarao@yahoo.co.in	9440636242	26-07-2021	11:30am - 1:30pm	Geo-Hazard Analysis and Management
723	721 Yashwardhan Pande	yashwpoficial@gmail.com	9205537770	26-07-2021	11:30am - 1:30pm	Geo-Hazard Analysis and Management
724	722 Yash Gupta	vg3545@gmail.com	7037988773	26-07-2021	11:30am - 1:30pm	Geo-Hazard Analysis and Management
725	723 A Yoga Nayaki	yoganayaka29@gmail.com	8098873615	26-07-2021	11:30am - 1:30pm	Geo-Hazard Analysis and Management
726	724 Yogesh Kumar	yogeshku07@gmail.com	9452334759	26-07-2021	11:30am - 1:30pm	Geo-Hazard Analysis and Management
727	725 Yogesh Thaker	yogloveable@gmail.com	9891910386	26-07-2021	11:30am - 1:30pm	Geo-Hazard Analysis and Management
728	726 Zahoor Ul Islam	zahoor.amu@gmail.com	9018924007	26-07-2021	11:30am - 1:30pm	Geo-Hazard Analysis and Management
729	727 Zeel Mangakiya	zeelmangakiya1391@gmail.com	9909199781	26-07-2021	11:30am - 1:30pm	Geo-Hazard Analysis and Management