Report On

SENSITIZATION PROGRAMME ON
DISASTER AND CLIMATE CHANGE

16th May 2023

Venue: Hansraj College, University of Delhi

SENSITIZATION PROGRAMME ON
DISASTER AND CLIMATE CHANGE

Chief Guest

Prof. VS Chauhan
Padam Shri and Eminent Scientist

Patrons

Prof. Yogesh Singh
Vice-Chancellor, University of Delhi

Shri Rajendra Ratnoo, IAS
Executive Director, NIDM, MHA, GoI

Covenor & Coordinator

Prof. Girish Kumar Sharma
Department of Geology
University of Delhi

Prof. Anupam Chattopadhaya
Head, Department of Geology
University of Delhi

Dr. Preeti Soni
SPC-IUINDRRR
NIDM, MHA, GoI

Guidance

Prof. (Dr.) Rama
Hansraj College
University of Delhi

Prof. Santosh Kumar
Senior Advisor
IUINDRR-NIDM, MHA, GOI

KEY SPEAKERS

Prof. CS Dubey
Vice-Chancellor
K.R. Mangalam University

Prof. Balaram Pani
Dean of Colleges
University of Delhi

Prof. VK Sharma
Sr. Professor, Indian Institute
of Public Administration

Prof. PD Pant
Uttarakhand Open
University

Prof. Ratnabali
Dean, Academic Affairs
University of Delhi

Date and Time :

Tuesday, 16th May 2023
10:00 AM Onwards

Venue :

Hansraj College
University of Delhi

Organized by :

India Universities and Institutions Network for Disaster Risk Reduction
National Institute of Disaster Management
Ministry of Home Affairs, Government of India
in collaboration with
University of Delhi

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ABOUT THE PROGRAMME

In order to act upon the direction led by the Hon'ble Prime Minster of India, NIDM took step forward under the India Universities and Institution Network (IUINDRR-NIDM) and formulated model curriculums on Disaster Risk Reduction and Management. For the first time, experts came up at one platform from across the country and in consultation of academia, model curriculums at UG & PG level have been developed. The objective of these curriculums to train students on the issues related to disaster management. The proposed model curriculums of Foundation Course on Disaster Risk Reduction which has included elements of disaster related issues to build the knowledge, skills and capacity of the young generation to achieve National objective of 10-point agenda 6 of Hon'ble Prime Minister of India. **UGC also has sent notification to every university and college vide D.O No. 2-9/2022 (CPP-II), dated 24th February, 2022 to implement DRR courses in their curriculums.** Hence, to build the capacity of academician of North region on "Foundation Course Curriculum" which will be integrate in every stream of Higher Education, IUINDRR-NIDM proposing "Regional Capacity Development Programme on Disaster Risk Reduction".

In this series, University of Delhi proposed the One day programme on Sensitization on Disaster and Climate Change with IUINDRR-NIDM , Ministry of Home Affairs, Govt. of India. This programme is unique for the young faculties, and scientists who interacts with the specialist of various fields like geologists, environmentalists, engineers etc., to get acquaint with the change in the climate, global warming and natural and man made disasters.

Aim

- To understand and acquaint how the disaster and climate change are related to each other for the benefits of young students (Researchers), teachers, defence forces like army, air and navy; different faculties members of Universities and Colleges; Engineering institutions and Departments, Emergency services (fire and rescue, civilian), policy makers to cover the risk, crisis, disaster and development sectors.

Origin

- Relation between disasters and climate change: It is becoming increasingly clear that many disasters such as floods, storms, landslides and droughts, are no longer purely natural, but are the most dramatic impacts of climate change caused by human activity.
- The world is now 1.2 degrees Celsius warmer than in pre-industrial times. With the UN calculating that current emission-control pledges will lead to a 2.7 degree warmer world by 2100, the frequency and intensity of such disasters is expected to increase.
- Two kinds of 'natural' disasters – fast and slow.
- Fast disasters include storms, floods, landslides and heatwaves, and have sudden and obvious effects.
- Slow disasters such as droughts, increases in water and soil salinity and crop losses, the impacts may take longer to emerge but they can be very severe.
- As far back as 2012, the Intergovernmental Panel on Climate Change (IPCC) established that all these disasters are increasing in frequency and intensity due to climate change.
- The accuracy of that observation has been reconfirmed time and again in the past decade in South Asia and the Himalayas. Disrupted monsoons, increased salinity in coastal regions due to rising sea levels, and flash floods caused by the faster melting of glaciers are just some of the 'natural' disasters that have been made more likely and more severe by human-induced climate change.

Objectives

- Disaster management system and role of higher education in Disaster Risk Reduction (DRR).
- The sharp rise in hydro-meteorological disasters (storms, floods and droughts) around the world in the last century is attributed to climate change caused by human activity by scientists like the South Asian monsoon is more erratic than before.
- Disrupted monsoons, increased salinity in coastal regions due to rising sea levels, and flash floods caused by faster melting of glaciers are just some of the 'natural' disasters that have been made more likely and more severe by human-induced climate change.
- Floods (e.g. Assam and Bihar) lead to regular failure of infrastructure and get worsened not only by climate change, but also by poorly planned flood-control measures such as dams and embankments.
- A glacial lake outburst flood (GLOF) happens when water in a glacial lake formed by water that has melted from a glacier-bursts its banks. Different kinds of GLOFs are occurring in the Himalayas, their frequency increased by climate change.

Participants

- Teachers, Scientists, NGO's of all the fields of Sciences and humanities.

Methodology

- Lecture-cum-Discussions
- Presentation of case Study
- Group Discussion

About The Institute

National Institute of Disaster Management (NIDM)

The National Institute of Disaster Management (NIDM) was constituted under an Act of Parliament with a vision to play the role of a premier institute for capacity development in India and the region.The formation of the National Centre for Disaster Management (NCDM) in 1995 gained impetus with its renamed as the National Institute of Disaster Management (NIDM) for training and capacity development. Under the Disaster Management Act 2005, NIDM has been assigned nodal responsibilities for human resource development, capacity building, training, research, documentation and policy advocacy in the field of disaster management. Both as a national Centre and then as the national Institute, NIDM has performed a crucial role in bringing disaster risk reduction to the forefront of the national agenda. The Institute believes that disaster risk reduction is possible only through promotion of a "Culture of Prevention" involving all stakeholders. The Institute works through strategic partnerships with various ministries and departments of the central, state and local governments, academic, research and technical organizations in India and abroad and other bi-lateral and multi-lateral international agencies. NIDM is proud to have a multi-disciplinary core team of professionals working in various aspects of disaster management. In its endeavor to facilitate training and capacity development, the Institute has state-of-the-art facilities like class rooms, seminar hall and video-conferencing etc. The Institute has a well developed library on disaster management and mitigation. The Institute provides training face-to-face, on-line and satellite-based training to all the governments officials free of charge. NIDM also provides Capacity Building support to various National and State agencies in the field of Disaster Management & Disaster Risk Reduction. The Institute's vision is to create a Disaster Resilient India by building the capacity at all levels for disaster prevention and preparedness.

ABOUT THE UNIVERSITY OF DELHI

The University of Delhi is a premier university of the country with a venerable legacy and international acclaim for highest academic standards, diverse educational programmes, distinguished faculty, illustrious alumni, varied co-curricular activities and modern infrastructure.

Over the many years of its existence, the University has sustained the highest global standards and best practices in higher education. Its long-term commitment to nation building and unflinching adherence to universal human values are reflected in its motto: 'Nishtha Dhriti Satyam' 'निष्ठा धृति सत्यम्' (Dedication, Steadfastness and Truth).

Established in 1922 as a unitary, teaching and residential University by the Act of the then Central Legislative Assembly, a strong commitment to excellence in teaching, research and social outreach has made the University a role-model and trend setter for other universities.

The President of India is the Visitor, the Vice-President is the Chancellor and the Chief Justice of the Supreme Court of India is the Pro-Chancellor of the University. Beginning with three colleges and 750 students, it has grown as one of the largest universities in India with 16 faculties, over 80 academic departments, an equal number of colleges and over seven lakh students.

DEPARTMENT OF GEOLOGY: Prof. A. G. Jhingran started the Department in the year 1966.Under his leadership and the great vision, the Department achieved the great heights in disseminating geoscience through teaching, research and collaboration with the Govt. and private agencies. Department is recognized as Centre of Advance Study and having enormous funding from various Govt. agencies including Department of Science and Technology (DST), Ministry of Earth Sciences (MOES), University Grants Commission (UGC). The Department has been recognized and supported by UGC-SAP (DRS II, III) and DST-FIST (level I and II) programmes

About Hansraj College(NAAC A++)

Hansraj College is one of the largest constituent and highly reputed college of Delhi University. The college was founded by the D.A.V. College Managing Committee on 26th July, 1948 in the sacred memories of Maharshi Dayanand Saraswati and Mahatma Hansraj who spent their magnificent lives emphasizing the importance of knowledge. It is one of the leading lights in the D.A.V. family of over 700 institutions.

Hans Raj College is a premier institution dedicated to teaching and research. Having highly qualified academicians who impart education in Science, Commerce, and Arts at undergraduate and graduate levels. The college excels consistently outstanding performance in every field of sphere like education, sports, and extracurricular activities. Significant and unparalleled contributions are also made in producing scholars, bureaucrats, intellectuals, and sportsperson serving in different domains not only in India but at the international levels.

The college has an impressive infrastructure like Central Library, Departmental Libraries and e- Book Bank for students. Excellent sports facilities of National standard like vast sports fields of football, hockey and basketball. An indoor sports stadium of Electronic Shooting Range which is the unique facility not in the college but in Delhi University.

CHIEF GUESTS

Prof. Yogesh Singh
Vice-Chancellor
University of Delhi

Prof. V.S. Chauhan
Padam Shri and
Eminent Scientist

Shri Rajendra Ratnoo
(IAS), ED, NIDM

Prof. Girish K. Sharma
Convener & Coordinator
Nodal Officer, Dept. of Geology
University of Delhi

Keynote Speakers

Prof. Santosh Kumar
Head, G&IDRR, NIDM

Keynote Speakers

Prof. V.K. Sharma
IIPA, New Delhi

Prof. C.S. Dubey
Vice-Chancellor
K.R. Mangalam University

Prof. Balaram Pani
Dean of Colleges
Delhi University

Prof. P.D. Pant
Uttarakhand Open University

Dr. Preeti Soni
Senior Programme Consultant
IUINDRR-NIDM

PROGRAMME SCHEDULE

	10:00 –10:30	Registration	
	10:30 -10:37	**OPENING CEREMONY (Lamp Lighting, Kul Geet) AND WELCOME**	
	10:37-10:44	Inaugural Address	**Prof. Girish Kumar Sharma Nodal Officer, Department of Geology, University of Delhi**
	10:44-10:50	Agenda-6 of Honourable Prime Minister (IUINDRR)	**Prof. Santosh Kumar, Senior Advisor-IUINDRR-NIDM, MHA**
	10:50-11:10	Presided Address by	**Prof. Yogesh Singh, Vice Chancellor University of Delhi**
	11:10-11:20	Chief Guest	**Prof V.S. Chauhan Padam Shri and Scientist**
	11:20-11:30	Special Address	**Shri. Rajendra Ratnoo (IAS) ED, NIDM**
	11:30-12:00	**High Tea**	

	TECHNICAL SESSIONS	
12:00-12:30	Disaster & Higher Education	**Prof. Santosh Kumar, Senior Advisor-IUINDRR-NIDM, MHA**
12:30-1:00	Climate Change	**Prof. Balram Pani Dean Colleges, Delhi University**
1:00-1:30	Natural Disaster	**Prof. P.D. Pant Uttarakhand Open University**
1:30-02:00	**Lunch**	
2:00-2:30	Disaster Risk Reduction in NE States	**Prof V.K.Sharma IIPA, New Delhi**
2:30-3:00	Laws on disaster	**Prof. Ratnabali (Dean, Academic Affairs) Delhi University**
3.00-4.00	Applications of Open Resources In Assessing &Mitigating Disaster-Case Study	**Prof. C.S.Dubey Vice-Chancellor, KumarMangalam University**
4:00-4:30	Hazards and Disasters	**Dr. Preeti Soni SPC-IUINDRR**
4:30-4:40	Vote of Thanks	

Participants

Graduate/Post graduate/Research students, teachers and scientists of all the fields of Sciences and Social and political science and different faculties of Universities, Environment and Civil Engineering Colleges and Departments, Civil society and NGOs.

Number of participants: 175

Language of Instruction

·The medium of instruction will be either Hindi or English.

Any similar programmes held in the past:
·No

Expected Outcomes:

- To get acquaint and control of Man made and Natural disasters.
- To understand about the climate change in the geological past.
- How to cope with disaster and climate change.

·Use of new technologies, innovations and approaches to help the community based on disaster management.

Financial implications: As per NIDM norms

Programme Team

Chief Patron

Prof. Yogesh Singh
Vice-Chancellor,
University of Delhi,

Patron

Shri Rajendera Ratnoo (IAS)
Executive Director
National Institute of Disaster Management, MHA, GoI

Programme Director

Prof Santosh Kumar,
Director-IUINDRR-NIDM &
Head Governance & Inclusive Disaster Risk Reduction Division
National Institute of Disaster Management, MHA, GoI

Prof. Anupam Chattopadhaya
Head, Department of Geology,
University of Delhi, Delhi

Prof. Rama Sharma
Principal, Hans Raj College
University of Delhi, Delhi

Conveners & Coordinator

Prof. Girish Kumar Sharma
Nodal Officer,
University of Delhi, Delhi

Dr.Preeti Soni
Senior Programme Consultant, IUINDRR-NIDM
National Institute of Disaster Management, MHA, GoI

Organizing Secretaries

1. Prof. Shashank Shekhar
2. Dr. Ashima Saikia
3. Dr. Naresh Rana
   (Department of Geology, University of Delhi, Delhi)
4. Dr. Prabhansu Ojha (Hindi)
5. Dr. Pooja Jha Maity (Botany)
6. Dr. Dhiraj Kumar (Zoology)
   (Hans Raj College, University of Delhi, Delhi)

Members

1. Prof. Pankaj Srivastava, Geology Department, Delhi University, Delhi
2. Prof. Partho Chakarborty, Geology Department, Delhi University, Delhi
3. Prof. Devesh Sinha, Geology Department, Delhi University, Delhi
4. Prof. GVR Prasad, Geology Department, Delhi University, Delhi
5. Prof. Vimal Singh, Geology Department, Delhi University, Delhi
6. Prof. Ashutosh Singh, Geology Department, Delhi University, Delhi
7. Dr. S.K Singh, Geology Department, Delhi University, Delhi
8. Dr. Pramod Kumar, Geology Department, Delhi University, Delhi

Azadi Ka Amrit Mahotsav

Sensitization Programme on

Disaster and Climate Change

Tuesday, 16th May, 2023
Venue: Hansraj College, Delhi

nidm
Resilient India - Disaster Free India

Jointly organized by:
Indian Universities and Institutions Network (IUINDRR-NIDM),
National Institute of Disaster Management
Ministry of Home Affairs, Govt. of India
and
University of Delhi

Inaugural Address By Prof. Girish Kumar Sharma (Nodal Officer & Convenor)

Prof. G.K. Sharma(Convener and Nodal Officer) welcomed the august gathering and extend a warm welcome to chief guests, who graciously accepts the invitation for this programme. Our chief guest Prof. V.S. Chauhan an eminent Scientist, Padam Shri and achieved great success in the field of genetic engineering and biotechnology. Our distinguished guest, Hon'ble Prof. Yogesh Singh (Vice-chancellor) a computer engineer, active, dynamic, quick decision taker and posses vast experience of administration. Our patron, Prof. Santosh Kumar, Senior Advisor, IUINDRR- NIDM having a vast experience at different positions for a policy planner and capacity development in DRR sector and Prof. Anupam Chattopadhyay (Head, Geology Department).

Prof Sharma discussed about the insights of the programme on Disaster and climate change. He pointed out and put up the question in front of august gathering that Why Climate Change is taking place? Are the humans responsible for the Global climate change?. He compared the present climate with the past climate of about 1.5 my ago till today. He took the examples of Mars and Venus and told why these planets come into present state of without water although earlier they had the water. He explained the reasons of waning of magnetic flux, eccentricity etc., These similar changes are observed on the earth which explains that we are moving towards more and more warming time. When we reach the maximum then glacial period starts. In the last, he interpreted that Globally the nature is playing the role and not the humans although the change occurs at regional or local level.

Presided Address by Prof. Yogesh Singh

Prof. Yogesh Singh, Vice-Chancellor, University of Delhi addressed the gathering. He emphasized that not only natural causes but human causes are also responsible for the climate change. He stated that every country should reduce carbon emission. Further, he raised a very important question that Is India a significant contributor in CO2 emission? The rural India contributes very less emission of CO2 whereas, Urban India almost equal to European Countries in CO2 emission. He emphasized that immediate steps should be taken to tackle this problem. According to him, Climate change is the greatest serious problem for today's generation. He also mentioned about the importance of innovation. He explained and stressed the importance of 4 R's - Reduce Reuse, Recycle and Repair. In the last, he stressed that development and climate should go hand in hand.

Address by Prof. V.S. Chauhan

Prof. V.S. Chauhan, the chief guest addressed the large gathering of scientists, teachers and students. He pointed out that we should feel proud of our development in every fields of life but warned not at the cost of climate. He had spoken about the minimalistic approach towards the lifestyle and we should not always use the approach of just use and throw. He told about the conditions of oceans which should be improved and stressed that the further deterioration in the climate change is not good for the human society. Some of the major highlights of his talk are : should use public transport more often, no machine should go below 20-23 degree C. We should change our lifestyle by care and respect our mother earth.

Special Address by Shri Rajendra Ratnoo (ED, IAS)

Shri. Rajendra Ratnoo addressed the gathered guests and attendees of the program through online mode. He started his address by stating the need to understand the climate change. He also stated the importance of innovation that will help us to tackle the climate change.

Prof. Santosh Kumar, Senior Advisor

Prof. Santosh Kumar who is the Senior advisor in IUINDRR, NIDM discussed about the Agenda 6 of Hon'ble Prime Minister Modi Ji. His main focus was on pre disaster management and we should not wait for the post disaster management. Pre disaster management is something which can help us in avoiding loss of life, wealth and severely effecting the economy. He highlighted many ideas to implement and to safeguard from these natural mishaps.

KEY SPEAKERS

Prof. P.D. Pani - Natural Disaster

Session by Prof. P.D. Pant and took the attention by stating that the Amarnath Yatra is being stopped due to landslides in the region. He also taught us about how much sensitive we should be while travelling to hilly areas. He discussed the general causes of landslides, which includes natural as well as anthropogenic actions. To avoid any mis-happening, sstructures should be designed in such a way that the probability of landslides should be minimum.

Prof. Balaram Pani - Climate Change

Prof. Balaram Pani (Dean of Colleges, University of Delhi) discussed about the Hydrosphere, Lithosphere and Atmosphere -three things which the nature has given to us and should be protected by any means. We should not push the nature beyond its carrying capacity. He explained that when critical temperature of gases increases, it increased its potential energy. Trapped gases like nitrogen, helium and hydrogen in the glaciers comes out due to the rise in temperature and resulted in the melting of glaciers. This effects our lives due to the fast change in the climate.

Prof. V.K. Sharma : Disaster Risk Reduction in Himalayan States

Prof. V.K. Sharma throw the light on Disaster Risk Management in India. He thanked our current government for giving the SDG a new building. He highlighted the importance of students and teachers should understand the policies of the government. Prof. Sharma thanked NCC which has played a major role in disaster management. He discussed about the Hazards in the Himalayan region and focussed on GLOF – Glacier Lake Outburst. We should not use development in destroying the natural habitats. The glacial melt and rise in sea level is our biggest threat today according to IPCC and suggested to reduce the floods by doing siphoning of lakes.

Prof. C.S. Dubey - Applications of Open Resources In Assessing & Mitigating Disaster-Case Study

Prof. C.S. Dubey (Vice-Chancellor) started his talk with Kedarnath Incident. His major point was about the Management of landslides and cloud bursts using advanced technology. He also focused on the use of google earth search engine and google collector for our benefit. Prof. Dubey told the august gathering that one of the major factor of natural disaster is diversion of rivers and drainage system due to anthropogenic activities.

Hazards and Disasters- Dr. Preeti Soni

Dr. Preeti Soni interacted with participants and discussed the **Hazards and Disasters**. She discussed several questions raised by the young aspirants and told their remedies. She also focussed on the post disaster impact on human life, faunas and floras.

IMPORTANT GLIMPSES













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Glimpse Of Conference

OUTCOME OF THE PROGRAMME

- Disaster management should be implemented in the higher education and more programme should be organize in the academic institutions to make each and every one to understand and find out the solution.
- Before construction of houses in hill areas, geologists and civil engineers advise should be considered seriously.
- Effectiveness of little extra investment on disaster resilient development can saves thousands of crores of people's hard earned money.
- Disaster preparedness is more appropriately conceived of as a goal, rather than as a specialized stage that immediately precedes disaster response.
- Earthquake monitoring station across India and Bhookump mobile application for timely action by the citizens.
- Arsenic Disaster, a public health emergency in India due to prolong exposure is considered as human-made disaster and its possible solutions.
- Importance of structural audit, NDRF mock drills, DROP-COVER-HOLD and Triangle of life saving tricks concerning Do's and Don't Do's.
- Universities play an important role in the disaster management.