

# International Day for Disaster Reduction

## Hospitals Safe from Disasters:

Reduce Risk, Protect Health Facilities, Save Lives



## Workshop Report

*Organized by:*

**Nepal Geological Society**

*In association with*

**Mitra Kunj and Russian Centre for Science and Culture**

**28 October 2009, Wednesday**

**Kathmandu, Nepal**

## **ABOUT NEPAL GEOLOGICAL SOCIETY (NGS)**

Nepal Geological Society is the professional umbrella of all geologists working in Nepal and has over 600 members among which more than 170 scientists are from foreign countries. The Society was established in 1980 with the aim of developing and promoting the research and application of geological sciences to the national development through fostering high professional standard among members; promoting and protecting the professional interests of earth scientist of the country and to play an active role in the protection and conservation of environment through reducing the natural disaster.

Since its establishment, the Society has been working towards the advancement of geosciences in Nepal and is playing a leading role towards building up consensus among the government and private sectors on the role of geosciences on the national development. The Society is organizing the international as well as national level seminar, workshop and frequent talk programs. The Journal of Nepal Geological Society is the only one scientific journal regularly published from Nepal that incorporates research findings focused to the Himalayan Regions. The bulletin of the Society incorporates the articles that are more focused to the interest of general public.

## **NGS AND DISASTER RISK REDUCTION ACTIVITIES**

The geological disaster (landslide, flood, earthquake) are the major threat to the national development and poverty alleviation in Nepal. Therefore, Nepal Geological Society initiated the advocacy in the area that included awareness campaign through the regular celebration of the International Day for Disaster Reduction (UN/IDNDR) since 1990s, occasional publication of disaster-related booklets etc. Likewise, after the establishment of UN ISDR (United nation International Strategy for Disaster Reduction), the Society has carried its activities in line with the UN/ISDR aims of building disaster resilient communities by promoting increased awareness of the importance of disaster reduction for reducing human, social, economic and environmental losses due to natural hazards and related technological and environmental disasters.

The activities of NGS towards Disaster Prevention was acknowledged by UN Humanitarian and Emergency Relief Co-ordination Office of IDNDR Secretariat in Geneva, by awarding UN-Sasakawa Disaster Prevention Award in 1998 for its efforts in disseminating the scientific knowledge and spreading the awareness of prevention of the natural disaster.

Nepal Geological Society is committed to continue to advocate for disaster risk reduction and mitigation activities in the country. This professional organization is always open to have partnership with other national and international organizations involved in this sector.

## THE ISDR DAY 2009

Nepal Geological Society (NGS) is a professional organization that is committed to reduce hazard, vulnerability, and resulting disaster in the country. It has been working in disaster inventory, preparedness and advocacy since its establishment (last three decades). United Nation (UN) proclaimed the theme to celebrate disaster day 2008-2009 as: *Hospitals safe from Disasters Reduce Risk, Protect Health Facilities, Save Lives*. Giving high priority to this theme NGS organized a half day workshop entitled "*Workshop on International Day for Disaster Reduction Hospitals safe from Disasters Reduce Risk, Protect Health Facilities, Save Lives*" on October 28, 2009 in collaboration with Mitra Kunj and Russian Centre for Science and Culture.

The program was organized in the Russian Culture Center hall, Kamal Pokhari, Kathmandu. There was more than hundred participation of researchers and policy makers; those working in the disaster sectors in different aspects. The program was inaugurated and addressed by Dr Govinda Prasad Kusum, Secretary, Minister of Home Affairs, Government of Nepal. The program was also addressed by Er. Ganesh Shah, former Minister of Science & Technology and Environment, Government of Nepal. There were four thematic presentations, each followed by discussion over the queries of participants. The workshop was divided into two sessions namely Inauguration Session and Technical Session.

## INAUGURAL SESSION

With short background on the Disaster Day, **Dr. Dinesh Pathak**, Master of Ceremony and General Secretary of NGS conducted the session and the Chief Guest – Dr. Govinda Kusum, Secretary, Minister of Home Affairs, Government of Nepal inaugurated the workshop.

**Dr. Jaya Kumar Gurung**, Co-convenor of the NGS-ISDR Committee delivered welcome speech on behalf of the organizing committee. Dr Gurung welcomed all the guests, resource persons and participants in the workshop. In his welcome speech he highlighted the need of Nepal government to deliver leadership authority to NGS for disaster endeavors. Dr Gurung talked about the high relevancy of the theme *Safe Hospital in Nepalese context*.

**Mr. Bishnu Bahadur Singh**, Chairman, Mitra Kunj mentioned that mutual collaboration is indispensable for comprehensive



*Workshop participants.*

analyses of issues. Mr. Singh also stressed that it is the high time for the disaster management in Nepal.

**Former Minister, Er. Ganesh Shah** congratulated and thanked the organizing committee for organizing the workshop. He appreciated the gathering of experts to have interactive discussion in such an important subject matter. He also added that Climate Change is further increasing the vulnerability to mass casualty in the mountainous country like Nepal.

**Dr. Govinda Kusum, Secretary** and Chief Guest of the function explicitly said that geology is the indispensable discipline to be involved in the disaster management sector and thanked NGS for organizing this workshop. Dr. Kusum assured that necessary initiations are being taken in the disaster management sector from the government level. As an example of government's initiations, he mentioned that a team of experts has prepared the National Strategy for Disaster Management (NSDM, 2009). Dr. Kusum highlighted main points of the NSDM. Those include the state of disaster risk of Nepal, evaluation of impact of disaster, policy regulation and their institutional management, strategic vision, sectoral strategies for disaster risk reduction, implementation and evaluation etc. Dr. Kusum asked all the development activists to analyze the interrelationship between disaster and poverty. The Chief Guest wished that the workshop would produce some pragmatic recommendations for the implementation of disaster management plan.



*Dr. Govinda Prasad Kusum, Secretary, MoHA, delivering his speech.*

**Mr. Jagadish Shrestha**, Chairman of the session and President of Nepal Geological Society said that NGS is the pioneer professional society working and advocating the need of disaster management in Nepal. NGS's activities on disaster are extensive and acknowledgeable. He mentioned that NGS was awarded internationally by **Sasakawa Award** for its substantial contribution to scientific work in natural science and disaster management.

Mr. Shrestha expressed hope that this effort of NGS to bring the other concerned experts as doctors and psychologists at a single platform to discuss for the better management of casualty during an event of disaster would produce a substantial outcome both for policy and actions. On behalf of Nepal Geological Society, Mr. Shrestha thanked all the members of ISDR committee, doctors and participants for their participation in the thematic workshop.

Taking permission of Chairman MC Dr. Pathak declared ending of the inauguration session and announced for ten minutes break before the start of technical session.

## TECHNICAL SESSION

The technical session was chaired by Mr. Pratap Singh Tater, Senior Hydrogeologist and the rapporteurs were Mr. Ashok Duwadi (Department of Mines and Geology) and Mr. Upendra Ratna Sthapit (Groundwater Resources Development Board). Four thematic papers were presented in the technical session, which is briefly summarized below:



*Mr. P.S. Tater, Chairman of the Technical session is conducting the session.*

### 1. **Disaster Preparedness Management in Hospital in Nepal: Dr Parash Kumar Sharma, Director, Patan Hospital**

Dr Parash Kumar Sharma began his presentation with brief introduction over the different aspects of disaster management in hospitals such as planning, regular mock drilling, trainings to staff. Stating that Patan Hospital is pioneer institute in hospital disaster management, Dr. Sharma shared the experiences of Patan Hospital mentioning that it started the disaster management since 1984 from the Dasarath Stadium incident in which 70 people died from stamped.

Dr Sharma explained the types of disasters as *Major* and *Minor* and necessary process of treatment for each type. Highlighting the importance of TRIAGE- *the action of immediate examination of patient and decide for appropriate treatment-* Dr. Sharma gave its detail process. Illustrating with a disaster plan map of Patan Hospital, he explained about the different priority zones marked with color: Red Zone-*needs immediate care*; Yellow zone-*not severe*;

Green Zone-*Minor injuries*, and Black Zone- *allotted for dead patients*. Dr Sharma then elucidated the different steps followed to treat the traumatic patients mainly dividing into two: Primary and Secondary survey. He then explained the management aspects as: team works, communication, roles and responsibility of all different section heads such as clinical director, supply director, communication director etc. Dr Sharma stressed that efficient chain of command from the security guard to disaster overseer (the ultimate authority) is essential.

Dr. Sharma illustrated the circumstances during the disaster with excellent pictures of mock drills of Patan Hospital that was carried out in 2008 and 2009. He finally concluded his deliberation appealing all the medical institutions to initiate the disaster management part with well-known saying " *Be prepared for today then you can manage tomorrow, it is never late to begin*".

## 2. Relevancy of ISDR's theme, Nepal's Strategy & Challenges: Dr. Pradeep Vaidya, Professor, Institute of Medicine, Tribhuvan University

Professor Pradeep Vaidya covered two aspects, namely the strategic management of Hospital during disaster and Hospital Preparedness for emergency.

Dr. Vaidya started his presentation saying that the ISDR theme "Hospitals Safe from Disaster" highlights the necessity of disaster management in hospitals. He pointed out the different important aspects in hospital disaster management such as social value, economic impact, public health, medical care. Dr Vaidya explained about the objectives of disaster management in hospitals that are categorized into *Structural and Nonstructural* Disaster



Management Plan. Emphasizing

*Prof. Dr. Pradeep Vaidya, Institute of Medicine, Tribhuvan University is presenting his paper.*

the training needs to policy makers, hospital staffs and government officials, he questioned to the concern authority- Where our National Strategy is?

Dr. Vaidya also discussed about the institutional initiation program on emergency preparedness- the HOPE-*Hospital Preparedness for Emergencies*. Emphasizing the need of integrated approach, he pointed out that HOPE is being carried out in collaboration of National Society for Earthquake (NSET), International Recourses Group (IRG), Johns Hopkins University Center for International Emergency, USAID and Institute of Medicine, Tribhuvan

University. Dr Vaidya mentioned that the course aimed to assist health service providers, both administrative and medical, to enable them to prepare the facility and themselves to function effectively in a coordinated manner to respond to emergencies that involve large numbers of casualties.

Showing some slides of thoughtful pictures illustrating the scenario of hospitals during the structural collapse from disasters; Dr Vaidya informed the audience that the status of 14 major hospitals of the Kathmandu Valley is poor regarding the structural component.

Dr. Vaidya then explained and recommended that even the minor non-structural mismanagement could cause casualties, which otherwise could be avoided with minor efforts. Explaining the national strategy and achievement of HOPE, Dr. Vaidya concluded his presentation appealing “*Let us be prepared before disaster overwhelms us*”.

### 3. **Importance of Trauma Counseling In Disaster: Dr. Ganga Pathak**, Associate Professor, Tribhuvan University and Chief Counselor- National Institute of Psychology

This paper discussed about the important aspect during the disaster- the **Trauma counseling**. Dr Ganga Pathak began her presentation from definition of trauma, general misconception over it with some appealing pictures of children in traumatic condition. Dr. Pathak gave details of symptom of traumatic patients, traumatic response patterns and discussed on how to help the victims. Dr Pathak's discussion on how the traumatic patients behave and how the counselor could help



*Dr. Ganga Pathak, Counselor is presenting the paper.*

them were very informative and drew the attention of all the participants. She emphasized to be careful on what we **Should Say** and **Should Not Say** to traumatic patients by the counselors. Dr. Pathak gave important list of tips. “**Do Say**” are: *these are normal reactions to a disaster, it is understandable that you feel this way, you are not going crazy, it wasn't your fault, you did the best you could, things may never be the same, but they will get better, and you will feel better*. Similarly, “**Don't Say**” includes: *it could have been worse, you can always get another pet/car/house, its best if you just stay busy, I know just how you feel, you need to get on with your life*. Dr. Pathak concluded her talk giving some guidelines for primary care to mentally disturbed people from the disaster chaos.

#### 4. Early Warning System: Dr. Ranjan Dahal, Lecturer, Tribhuvan University

The fourth paper was more on technical aspects. Dr Ranjan Kumar Dahal integrated his point of view under the headings: the landslide vulnerability of Nepal, discussion over casualties dominated by the rainfall triggered landslides, carelessness in the site selection of infrastructures including hospitals. Dr Dahal presented some outstanding examples of overlooking the technical assessment of vulnerability in the construction of health centers and hospitals. He also emphasized that health centers outside Kathmandu are more susceptible to casualties from disasters. Dr Dahal emphasized that landslide hazard mapping and early warning system of rainfall is very urgent and should be given priority.

Dr. Dahal recapped his deliberation as: monsoon rainfall is the main trigger of landslides in Nepal, Nepalese concept of donors should be for low cost, the technologies need to be revised in the context of disaster, very few peoples are aware about disaster especially in the rural areas. He concluded his presentation saying substantial work is more important rather than awareness campaign organizing mass gathering and street rally.

#### WARP UP SESSION

After the presentations, an intensive discussion took place among the presenters and audience about the different aspects of the presentations and disaster and mitigation in general. Various queries from the audiences were answered by the presentations. After the discussions a list of general inferences and recommendations were drawn and passed by the workshop.

Session Chairman Mr. Pratap Singh Tater wrapped up the session summarizing the essences of each four papers categorically. Mr. Tater expressed that he himself learnt many things from the presentations and discussions about the disaster management and hoped that all the participants have the similar feelings.

Mr. Tater said that the initiation of Patan Hospital is highly appreciable and he congratulated Patan Hospital being the pioneer in practicing the disaster management system. He stressed the need of general public awareness about disaster and its preparedness. He said that all the staffs of medical centers and hospitals should undergo the HOPE course.

Mr. Tater realized that in our common practice of counseling to victims, we normally use to say what is not recommended by the expert. He appealed all to follow the expert recommendations while counseling, otherwise it could have adverse consequence. Mr. Chairman agreed that there is lack of proper technical consideration during the site selection and construction of hospital buildings. He said all technicians should be serious on the professional ethics while designing, implementing and monitoring structures.

Finally, Mr Tater concluded that the workshop is a success as it could extract the substantial outcomes over the announced theme "Safe Hospital from Disaster". Thanking to the organizing

committee and the Nepal Geological Society, and all resource persons and participants, he ended the technical session.

With the permission of Chairman, Dr. Pathak, General Secretary of the Society, thanked all the experts, professionals and participants for their presence and announced the closing of the half day workshop.

## **GENERAL INFERENCES AND RECOMMENDATIONS**

- There is high uncertainty in the safe hospitals and disaster preparedness throughout Nepal
- Only few large hospitals in the Kathmandu Valley has acquired disaster management systems though carried out in personal initiatives
- There is high time of national strategy and guidelines to deal with disasters in Nepal
- There is big gap of knowledge and information among the different organizations who are taking initiatives in disaster management
- There is urgent need of standard protocols of development activities including infrastructures and their effective implementations
- Activities for awareness activities for public to professional is indispensable for better management of disaster
- Substantial work is more essential for disaster management rather than awareness campaign organizing mass gathering and street rally

## **OUTCOME**

- National status & strategy concerning the disaster management were known to experts, professionals and policy makers who participated in the workshop
- This workshop helped to strengthen better networking among the different actors functioning in the disaster management such as geologists, urban planners, engineers, medical practitioner etc.
- Pragmatic recommendations to concern entities and individual working in the disaster management have come out from the discussion.

## **CONTACT**

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International Day for Disaster Reduction (UN/ISDR)

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### Workshop Program

**Date** : October 28, 2009, Wednesday

**Venue:** Russian Centre for Science & Culture, Kamalpokhari

<b>Session</b>	<b>Time</b>	<b>Activities</b>
<b>Session 1: Program Inauguration</b>	09:00 - 09:30	Registration of Participants, Tea
	09:30- 09:35	Chairing of Session
	09:35 - 09:40	Welcome Speech by Dr. Jaya Kumar Gurung, Co-Convener, ISDR Organizing Committee
	09:40- 09:45	Workshop Inauguration by <b>Chief Guest Dr. Govinda Kusum, Secretary, Ministry of Home Affairs</b>
	09:45 - 09:50	Speech by Er. Bishnu Bahadur Singh, President Mitra Kunj
	09:50 - 09:55	Speech by Er. Ganesh Saha, Former Minister, Ministry of Science, Technology and Environment
	09:55 - 10:05	Speech by Chief Guest Dr. Govinda Kusum
	10:05 - 10:10	Speech by NGS President, Mr. J.N. Shrestha
	10:10 - 10:15	Vote of Thanks by Mr. Shanmukhesh Chandra Amatya
<b>Session 2: Technical Paper Presentation</b>	<b>Chairman: Mr. Pratap Singh Tater</b> <b>Rapporteurs: Mr. Nir Shakya and Mr. Upendra Ratna Sthapit</b>	
	10:25 - 10:45	<b>Disaster Preparedness Management in Hospital in Nepal</b> <i>Prof. Dr. Parash Acharya (or representative), Patan Hospital, Lalitpur</i>
	10:45 - 11:05	<b>The Role of HOPE in Making Safe Hospitals</b> <i>Prof. Dr. Pradeep Vaidya, Institute of Medicine, Maharajganj</i>
	11:05 - 11:25	<b>Importance of Trauma Counseling during Disaster</b> <i>Dr. Ganga Pathak, National Institute of Psychology, New Baneshwor</i>
	11:25 - 11:45	<b>Landslide Hazard Mapping and Early Warning System for Nepal</b> <i>Dr. Ranjan Kumar Dahal, Tri-Chandra Campus, Tribhuvan University</i>
<b>Closing</b>	11:45 - 11:50	Wrap Up by Chairman
<b>11:50 - 12:30 : Lunch</b>		

**Master of Ceremony:** Dr. Dinesh Pathak, General Secretary, NGS