



## FEATURE STORY: NEPAL OBSERVED 22<sup>ND</sup> ESD, STRESS ON BUILDING DISASTER RESILIENT INFRASTRUCTURES

Home Minister Mr. Ram Bahadur Thapa 'Badal' has expressed his belief that construction of buildings and infrastructure that are resilient to earthquakes would be a best way out for reducing the impact of impending earthquake risks as country is at high risk of such disaster. Addressing the National Meeting of 22nd Earthquake Safety Day (ESD) held in Bhaktapur, Minister Thapa urged concerned authorities, stakeholders and public to support campaigns to build resilient communities.



Nepal marked 22nd edition of Earthquake Safety Day (ESD) at central, provincial and local level with the slogan "Resilient Infrastructures for Sustained Happiness and Prosperity". Bhaktapur Municipality hosted the National Meeting of 22nd ESD on Jan 16, 2020.

ESD Chief Guest Minister Thapa remarked, "this year's ESD slogan is best appropriate in the present context of country as most of deaths and damage in the earthquakes have occurred by damage in buildings"; and added, "Government is taking ahead with various efforts in reducing the impending disaster risk in the country. Formation of National Disaster Risk Reduction and Management Authority (NDRRMA) is one milestone of it". Arguing that local and provincial governments have immense roles to minimize and combat the disaster risk in the country in line with practical and legal provisions of country, Minister Thapa went on to say that federal government is committed to assist them in doing so.

The National Meeting was chaired by Mr. Sunil Prajapati, Mayor of Bhaktapur Municipality. Mayor Mr. Prajapati highlighted Municipality's efforts and progress in post-earthquake reconstruction campaign claiming that it has set an exemplary model in the country especially in terms of

reconstructing cultural and historical heritages. Mayor Prajapati also vowed to implement the national building code effectively in the municipality.

Addressing the meeting, Mr. Sushil Gyewali, Chief Executive Officer of National Reconstruction Authority (NRA), claimed that post Gorkha Earthquake reconstruction campaign in Nepal is moving ahead in right direction apart from some initial hiccups.

"I am immensely proud now that Nepal's reconstruction campaign is following the path of Japan's reconstruction approach although there were some fears initially that it would end up as in Haiti," Mr. Gyewali remarked. He further said that distribution of government reconstruction grant in three tranches has not only ensured the practices of safer construction of houses devastated by the Gorkha Earthquake but also promoted the public awareness about safer construction in grassroots.

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Mr. Prem Suwal, a federal parliament member from Bhaktapur, stressed on the need of introducing specific plans, programs and appropriate technology for effective implementation and institutionalization of initiative to combat earthquake risk in Nepal. MP Suwal urged National Reconstruction Authority to handover all the remaining tasks of reconstruction to the local government. He also advised NRA to take forward the reconstruction of cultural heritage through consumer committee instead of contractors.

Ms. Valerie Julliand, Resident Coordinator of UN, addressing the meeting, said that the commemoration of ESD reminds the importance and need of disaster preparedness. She said, "If government along with civil society and private sectors work together in minimizing the disaster risk and enhancing preparedness, Nepal could make significant progress in building disaster resilient society." She also expressed happiness over government's various Disaster Risk Reduction efforts in Nepal.

At the program, Mr. Anil Pokhrel, Executive Chief of National Disaster Risk Reduction and Management Authority (NDRRMA), shared that his institution, although it is newly established, is already in action and working to formulate workplans, budget and working modality and approach in line with the assigned responsibilities. He added that NDRRMA is committed to work all governments (provincial and local) and levels (private sectors, NGO and INGOs) in reducing and combating disaster risk in Nepal.

Mr. Maniram Gelal, Coordinator of ESD Publicity Sub-Committee and Director General of Department of Urban Development and Building Construction (DUDBC) briefed on how National Building Code (NBC) implementation is progressing in Nepal. Stressing the need of effective and stringent enforcement of National Building Code, Mr. Gelal said that significant losses of lives and property can be reduced if safer construction

approach is followed. On the occasion, he added that DUDBC is revising various sections of NBC to make it more appropriate regarding the possible impact of future disasters.

Mr. Surya Narayan Shrestha, Member Secretary of ESD National Organizing Committee and Executive Director of NSET highlighted the significance and importance of marking the ESD. Briefly highlighting the achievements in Disaster Risk Reduction so far in Nepal, Mr. Shrestha also put forth the list of tasks and priorities to be done in the days to come.

Nepal marks ESD every year on 15 or 16 January (Magh 2 according to Nepalese Calendar) commemorating the Great Bihar-Nepal Earthquake of 1934 by organizing various activities nationwide. The main purpose of marking this Day has



been to re-affirm national commitment to enhance Earthquake Resilience of Nepali communities and also share and review past experiences & strategize further.

## Earthquake Safety Rallies held from various locations of Bhaktapur

To elevate the level of public awareness, perception, and attitude towards earthquake risks as well as preparedness and to promote and encourage safer construction practice, Earthquake Safety Rallies were organized in Bhaktapur as part of 22nd Earthquake Safety Day (ESD) on January 16, 2020.

The Earthquake Safety Rallies, started from two different places of Bhaktapur; Lamgal Pukhu and Bhajya Pukhu, with the awareness-raising messages, converted into Earthquake Memorial Meeting organized at Bhaktapur Durbar Square. The rally started from Lamgal Pukhu was led by Sunil Prajapati, Mayor of Bhaktapur Municipality, while the rally started from Bhajya Pukhu was led by Ms. Rajani Shrestha Joshi, Deputy Mayor of Bhaktapur Municipality.

The rallies were attended by various Rank and File Government Officials, Elected Representatives, Officials and Participants from various organizations including Schools, Colleges, Business Community, Non-Government Organizations, Security Personnel, Professionals & Activists of Disaster Risk Reduction and People from the Community. Earthquake Safety Rally is one of the major program events of ESD being held every year and it is held before the National Meeting. National Meeting, a key event of ESD, was organized in Bhaktapur this year.



## Earthquake Memorial Meetings held in Bhugol Park and Mangalbazar

As a key event of 22nd Earthquake Safety Day (ESD), Earthquake Memorial Meeting was held in historical Earthquake Monument at Bhugol Park in memory of 1934 Great Nepal-Bihar Earthquake. On behalf of ESD National Organizing Committee, the Kathmandu Metropolitan City (KMC) hosted the Memorial Meeting on January 16, 2020 to pay tributes to all those who lost lives in the past earthquakes in Nepal and to commit to work for enhancing earthquake safety of Nepali communities.

The program was attended by Home Minister, Mayor of Kathmandu Metropolitan City, NDRRMA Chief, elected Representatives, Senior Government Officials, Chief & Senior Officials of Security Agencies, DRR Professionals, Practitioners, Volunteers, Community representatives and many more.

Addressing memorial meeting, Home Minister Thapa stressed on the need of making our buildings and infrastructures resilient to various types of

disaster referring to the irreparable losses of past earthquakes that remains the tragic memory for all of us.

Mayor of Kathmandu Metropolitan City, Mr. Bidya Sundar Shakya expressed his commitment to work towards making the city resilient to future earthquakes by the effective enforcement of National Building Code.



The meeting was formally opened by Mr. Nilkaji Shakya, Ward Chairperson and Head of Disaster Management Committee of Metropolitan City with key notes of his heartfelt condolences to the people we lost in past earthquakes.

Also, Earthquake Memorial Ceremony was held at Patan Durbar Square, Mangal Bazaar, Lalitpur, on January 16, 2020 to pay tribute to those who lost their lives during the past earthquakes in the country.

Centenarian Expert on Culture Mr. Satya Mohan Joshi along with Parliament Members, Elected Representatives from Lalitpur Metropolitan City, Rank and File Officials and Distinguished Personalities from the Government, Non-Government Organizations, Security Personnel, Professionals & Activists of Disaster Risk Reduction, and People from the Community extended heartfelt tributes to the victims of past earthquake.

Earlier, an Earthquake Safety Rally was organized in Lalitpur. The rally was started from Jawalakhel with the awareness-raising messages had converted into Earthquake Memorial Meeting at Patan Durbar Square. The rally, led by Deputy Mayor of Lalitpur Metropolitan City, Ms. Gita Satyal, was joined by various organizations and people including Security Personnel, Professionals & Activists of Disaster Risk Reduction.

Memorial Meeting is one of the key events of ESD being held every year. National Meeting, a key event of ESD, was organized in Bhaktapur this year.

## Earthquake Safety Exhibition held in Kathmandu

To disseminate information regarding measures related to Earthquake Risk Reduction and Safer Reconstruction to the general public as well as other

stakeholders, a three-day Earthquake Safety Exhibition was organized at City Hall, Bhrikuti Mandap, Kathmandu during January 16-18, 2020.

Minister for Home Affairs, Mr. Ram Bahadur Thapa 'Badal' inaugurated the Exhibition. Along with Executive Chief of National Disaster Risk Reduction and Management Authority (NDRRMA), Mr. Anil Pokhrel, government officials, experts in the fields of Disaster Risk Reduction in Nepal, Minister Thapa observed all the stalls on the occasion.

During the exhibition, more than 300 visitors visited different stalls of exhibition. Altogether 20 stalls including Nepal Army, Armed Police Force, Nepal Police, Red Cross, IOM, NSET, DUDBC were placed in the exhibition where visitors





could get the information and ideas in regard to emergency risk management and disaster risk management efforts.

The Exhibition has remained integral component of Earthquake Safety Day celebration since the very beginning. The Exhibition was run for three days from 16 – 18 January 2020.

Apart from the Exhibition held in City Hall, a separate earthquake exhibition was organized in Bhaktapur Durbar Square in Bhaktapur on January 16, 2020. The one-day Exhibition was organized by Khwopa Engineering College, Bhaktapur.

## National Symposium discourses on enhancing Earthquake Safety and building Community Resilience in Nepal

Under the 22nd Earthquake Safety Day (ESD), National Symposium on Earthquake Risk Reduction and Management in Nepal has been held in Kathmandu on January 27, 2020. The Symposium discoursed on issues of



Building Code implementation, Post-Earthquake Reconstruction and Future Directions of Disaster Risk Reduction and Management in Nepal.

Addressing the brief inaugural session, Chief Executive Officer (CEO) of National Reconstruction Authority (NRA) Mr. Sushil Gyewali wished to handover all the accomplishments achieved and experiences gained in the course of Post-Earthquake Reconstruction to the nation with the view to help build our communities resilient to future disasters. Mr. Gyewali remarked, "NRA is currently developing an exit strategy as its 5 year- tenure

expires at the end of this year. NRA is going to organize a series of Symposiums and also International Conference in November 2020".

Mr. Anil Pokhrel, Chief Executive of National Disaster Risk Reduction and Management Authority (NDRRMA) shared his experience and progress made so far after being appointed him as head of NDRRMA. Mr. Pokhrel also shared the plan, programs and strategic directions of the Authority. "Authority is to lead the Disaster Risk Reduction and Management works at various level, from National to Provincial to Local to Community level; but the fact again is that this is a collective effort and we will collaborate with all the stakeholders", Mr. Pokhrel remarked. Mr. Sunil Prajapati, Mayor of Bhaktapur Municipality, briefed about the efforts and progress of post-earthquake reconstruction with major focus on reconstruction of heritage in the Municipality as the reconstruction of historical and cultural heritage is considered exemplary in Bhaktapur. Mayor Prajapati also sought coordination and financial assistance of National Reconstruction Authority (NRA) in the accomplishment of remaining tasks of the heritage reconstruction in Bhaktapur.



Ms. Valerie Julliand, Resident Coordinator of UN expressed happiness over the ongoing efforts of Government of Nepal (GoN) and Civil Society Organizations in reducing the Disaster Risk Reduction in Nepal. She further added that her organization is working jointly with GoN and other stakeholders in DRR sectors in Nepal and will continue to work in collaboration.

Dr. Soma Nath Sapkota, Director General of Department of Mine and Geology (DMG), highlighted various efforts that DMG has carried out in the past year regarding identifying and communicating earthquake hazards in Nepal.

From the Chair, Mr. Ramchandra Dangal, Deputy Director General of Department of Urban Development and Building Construction (DUDBC) briefed about various efforts that DUDBC is working with in the past one years. Arguing that constructing structures resilient to earthquakes is important aspect of preparedness, Mr. Dangal remarked, "DUDBC is in the process of reviewing various sections of National Building Code with view to enhancing the strength of buildings and infrastructures so that it could withstand the earthquakes in the future.

To begin with, Mr. Surya Narayan Shrestha, Executive Director, NSET briefed about the objectives of the National Symposium which is being organized in Nepal as part of ESD since past 22 years. He also highlighted the significance of the program as it has been a forum for various stakeholders involved in DRR sectors in Nepal for sharing their efforts, activities and experiences, to discourse and develop consensus on burning issues of DRR and to devise common plan for future work plans.

At the program, various experts and professionals form government and civil society sectors highlighted the need of collaborative and integrated efforts of all the stakeholders including all tiers of governments, civil society organizations and private sectors in reducing the disaster risk that country is facing. The symposium intensively discussed on the various issues of earthquake risk reduction and safer reconstruction and reviewed the efforts on reconstruction, risk reduction and preparedness.

The National Symposium is a regular program as a part of the annual ESD which Nepal observes every year on 15 or 16 January and around commemorating the Great Nepal-Bihar Earthquake of 1934. The Symposium is targeted for policy makers, decision makers, central and local government authorities, implementer, academia, practitioners, various social groups and communities.

In this year's Symposium, there were three thematic sessions conducted: Thematic Session TS1: Panel Discussion on Implementation of Building

Code in Nepal: Status, Challenges and Way Forward  
Session Chair: Mr. Mani Ram Gelal, DG, DUDBC

**Panelists:**

- ✓ Ms. Rajani Joshi, Deputy Mayor, Bhaktapur Municipality
- ✓ Mr. Ram Chandra Dangal, Deputy Director General, DUDBC
- ✓ Prof. Dr. Prem Nath Maskey, Institute of Engineering (IOE) / Team Leader for Building Code Revision 2019
- ✓ Mr. Surya Narayan Shrestha, Executive Director, NSET
- ✓ Dr. Soma Nath Sapkota, Director General, Department of Mines and Geology
- ✓ Mr. Pradip Poudel, Engineer, Lalitpur Metropolitan City

Session Facilitator: Prakash Ghimire (Journalist)

Thematic Session TS2: Panel Discussion on Post-earthquake

Reconstruction: Current Status, Challenges and Potentials

Session Chair: Dr. Amod Mani Dixit, General Secretary, NSET

**Panelists:**

- ✓ Dr. Chandra Bahadur Shrestha, Executive Committee Member, NRA





- ✓ Er. Nava Raj Pyakurel, Director, CLPIU (Building), DUDBC/NRA
- ✓ Mr. Jagannath Nepal, Chief, District Coordination Committee, Dhading
- ✓ Dr. Ramesh Guragain, Deputy Executive Director, NSET
- ✓ Ms. Jharna Joshi, Independent Consultant, Heritage Conservation
- ✓ Mr. Prabin Bajracharya, UN Habitat

Facilitator: Laxman Karki (Journalist)

Thematic Session TS3: Panel Discussion on Future Direction of Disaster Risk Reduction & Management in Nepal

Session Chair: Dr. Gangalal Tuladhar, DRR Expert and Former Minister of Education

#### Panelists:

- ✓ Mr. Anil Pokhrel, Chief Executive, NDRRMA
- ✓ Mr. Surya Bahadur Thapa, President, DPNet

- ✓ SP Jay Bahadur Khadka, Armed Police Force (APF)
- ✓ Ms. Lorena Lando, Chief of Mission, IOM

The Symposium was organized jointly by DUDBC, Bhaktapur Municipality and NSET in association with various government and non-government organizations. More than 200 persons representing different DRR stakeholders, professionals, teachers and students participated the program. The Symposium Proceedings will be shared once finalized.

## MAKING RESILIENT CITIES: TECHNICAL SUPPORT TO MUNICIPALITIES FOR BUILDING CODE IMPLEMENTATION

### Mason Training conducted at Biratnagar Metropolitan City

Mason Training on Earthquake Resistant Building Construction has been successfully conducted at Biratnagar Metropolitan City (BMC). The training was held during 8-14th January 2020. This 7-day urban mason training was conducted by Biratnagar Metropolitan City with technical support from National Society for Earthquake Technology-Nepal (NSET) under Technical Support for Building Code Implementation in Nepal (TSBCIN) program.

The program was formally inaugurated by Mayor of the Metropolitan City Mr. Bhim Parajuli. Speaking at the program, he requested participants to take benefit to the fullest from the training and to contribute in the safe construction in BMC areas. A total of 33 participants were participated in the training where were hailed from different wards of BMC.

The training was concluded with a brief closing ceremony where vice-chairperson of BMC, Mrs. Prabina Pokhrel thanked NSET for providing technical assistance in organizing this program. Mr. Bhim Parajuli announced that BMC will bring out Insurance scheme from the masons. Mr. Nirmal Karki, one of participants, shared that this training has contributed to enhance the earthquake resistant construction capacity. On the occasion, all



participants, joining hands together, expressed commitment that they will be committed to construct the earthquake resistant buildings.

Mr. Arjun Thapa and Prabina Pokhrel on behalf of the BMC and Mr. Darshan Malla and Aditya Tamang from NSET/TSBCIN conducted the training.



## Online Training Workshop on Building Code Implementation System conducted

An "Online Training Workshop Program on Building Code Implementation System in Local Government of Nepal" was conducted by NSET during 21 to 26 July, 2020. Professionals from the Housing Recovery and Reconstruction Platform (HRRP-4) participated in the training. The HRRP-4 has been working on at least six municipalities of earthquake affected districts of Nepal in implementation of building code.

The main objective of the training was to provide knowledge and awareness about existing building code implementation system and building permit system at the local level.

A total of 25 staff of the HRRP having very little technical knowledge participated in the training mainly through online lecture methods along with interactions, discussions, and home assignments. The modules of the course included Introduction to the Nepal National Building Code and Municipal By-Laws, Local Governments' Operation System, Building Code Implementation System at Local Level and Way forward for Building Code Implementation among others.

Considering the COVID-19 situation, the 6-day training was conducted through online using the platforms like ZOOM and Google Classroom. The training was conducted in a two-hour long session everyday.

The HRRP is platform which plays vital role as supporting coordination of the post-earthquake housing reconstruction from the Nepal Shelter Cluster. It provides coordination support services for the National Reconstruction Authority (NRA), Building and Grant Management and Local Infrastructure (GMALI) Central Level Program Implementation Units (CLPIUs), other relevant government authorities, and Partner Organizations (POs).

## Mid Term Presentation on Work Progress of Baireni Land Pooling Project

A mid-term progress review meeting of Baireni Land Pooling Project of Vyas Municipality has been conducted Damauli Tanahun on January 23, 2020. Amid a brief ceremony the project progress report was presented to Mayor of Vyas Municipality, Mr. Baikuntha Neupane by the Land Pooling Project Implementation

Unit. Mr. Ravindra Lal Mul, the project head made presentations on the topic "Mid Term Work Progress and Challenges on Feasibility Study of Baireni Land Pooling Project". Mayor Neupane and other stakeholders associated to the Land Pooling Project

were present the program. Following the presentation, a brief interaction session was also held regarding the challenges in past and future during the implementation of the project.

The land pooling project task in the municipality was commenced on September 3, 2019.



## NSET NEA Online Training for Fresh Engineers on Basics of Earthquake Resistant Design and Construction of Buildings.

A 5-Day online training on Basics of Earthquake Resistant Design and Construction of Buildings was conducted for fresh graduates of civil engineering and architecture during 25-29 May 2020.

### नेपाल ईन्जिनियर्स एसोसिएसन

### बागमती प्रदेश कार्यकारिणी समिति

**Online Training for Fresh Engineers**  
on  
**Basics of Earthquake Resistant Design and Construction of Buildings**

Organized by **NEA Bagmati Province** 25-29, May 2020  
Time: 11:30-14:00

Professional Security and Capacity Building Committee  
Er. Arjun Poudel Er. Sharad Pandit  
Chair Member Secretary  
9849041914 9841967485

Scan for registration

<https://www.facebook.com/NEABagmati>
<https://bagmati.neanepal.org.np>
<https://www.nset.org.np>

The training was organized by Nepal Engineers' Association (NEA) Bagmati Province, Professional Security and Capacity Building Committee with technical support from NSET.

The goal of the training was to provide basic knowledge on earthquake risk and mitigation through earthquake resistant construction to fresh graduates of Civil Engineering/Architecture in Nepal.

The training was facilitated by a team of seven instructors from NSET-Nepal, where, a total of 46 participants were certified at the end.



## Online Training on Earthquake Resistant Building Design and Construction to Young Engineers & Architects graduate



One batch of young engineers and architects have completed a 5-Day online training course on **"Basics of Earthquake Resistant Design and Construction of Buildings"** held during 25-29 May 2020. The course was organized by Nepal Engineers' Association (NEA) Bagmati Province, Professional Security and Capacity Building Committee with technical support from NSET.

Total 46 participants; 6 architects & 40 engineers, fresher to experienced less than 2 years, of which 13-female & 33-male participants joined this time. The participants were 17 from Kathmandu valley and 29 from outside the valley. The organizers had received 447 online registrations interested to join the course but only 46 could be accommodated this time. A team of 7 instructors from NSET facilitated the online training course.

At the Closing of the course, NEA President Prof. Dr. Tri Ratna Bajracharya Praised the training activity, focused on the activities of NEA during COVID19 pandemic and also mentioned about concept of NETRA (Nepal Engineering Training and Research Academy).

NSET Executive Director Mr. Surya Narayan Shrestha focused on disaster (specially earthquake) related awareness from every level of stakeholders. He mentioned, "NSET is committed to work further with

all the level of NEA, either central or provincial. Online modality should be enhanced further as it is economical also compared to our usual trainings."

NEA General Secretary Mr. Chhabi Raj Pokhrel highlighted need of coordination among provincial governments, provincial level NEA and such organizations to engage in such activities. He briefed the progress of ENGINEERING STAFF COLLEGE and provision of budget by the government in this fiscal year again.

NEA President for Bagmati Province Mr. Nanda Banjade shared that the demography of participants selected, specially the female/male ratio and participants from outside the valley were given more priority. He shared that NEA Bagmati province has donated 17 COVID19 swap collection booth to different hospitals as well as provision of NEA Bagmati Innovation fund of 1 lakh rupees each for inventions/researches from COVID related 4 special sectors; Bio medical equipment, WASH, IT and Agri-engineering.

From the participants, Ms. Resha Bashyal remarked, "as a fresher learnt a lot and waiting for higher levels of trainings in future. Mr. Saurav Prasai shared that the training met the expectations and would be fruitful in the field as an engineer.

Earlier, Course Coordinator Mr. Rabin Chaulagain briefed the conduction of the training course. The pretest and post test scores are 61% to 81%. He also shared challenges faced during the online training and also made a note that participants should enhance their KNOWLEDGE and SKILL and at least their ATTITUDE, after the training.

The Closing session was chaired by Mr. Arjun Poudel, the Chair of Professional Security and Capacity Building Committee, NEA Bagmati Province. He thanked all the participants and instructors.

Participants must use and practice their learnings in the relevant fields of their works.

The session was facilitated by Mr. Sharad Pandit, Joint Secretary, NEA Bagmati Province.

## MAKING RESILIENT SCHOOLS: EFFORTS ON SCHOOL SAFETY

### KAP Survey conducted to collect Project-contextual information and determine the empirically supported baseline status

A baseline Knowledge, Attitude and Practice (KAP) Survey under the NSSP program has been conducted on February, 2020 in 13 Project Palikas and 3 control Palikas, across 3 of the 4 Project districts - Achham, Bardiya and Surkhet.

The survey was designed by the NSSP management team to collect sufficient data to assess the pre-existing capacities of palikas in relation

to the Project's 3 Outcome Indicators – ability to retrofit buildings, ability to apply DRR management systems, and ability to implement school safety activities.



The key objective of the survey was to collect Project-contextual information and determine the empirically supported baseline status related to each of the Project's target indicators. The planned KAP baseline survey of palikas of the other Project district (Jumla) was postponed until GoN lifts the national COVID-19 lockdown and it is safe to do so.

A Kathmandu-based research and consulting company--Progress Inc.--carried out the survey. Students, teachers, municipality authorities, parents and communities residing or working within each administrative boundary took part in the survey. They collectively respond to 36 questions - 12 questions under each of the categories Knowledge, Attitude and Practices.

A draft report, based on the data collected from the baseline survey of the 16 palikas, has been reviewed by NSSP's senior management team and feedback provided to the consultants on how the draft report is to be improved for use as a Project tool.

The final KAP report, incorporating the principles of GESI and LNOB and incorporating data from all 17 Project palikas (including Jumla) is expected to be finalised within a month of the national COVID-19 lockdown being lifted and it being deemed safe to resume field activities. NSSP will use the analysis contained in the KAP Baseline Survey to decide on appropriate weightings to be used to set the benchmark and composite (%) scores on KAP.

## **VCAs and RVA conducted various schools of 4 Project districts**

Vulnerability Capacity Assessments (VCAs) were completed in 6 schools from the 4 Project districts under the leadership of the Focal Teachers. The Focal Teachers received NSSP Focal Teachers training on School Safety during the.

Likewise, RVAs were carried out at 64 schools: 21 from Surkhet, 21 from Bardiya, 14 from Achham, and 8 from Jumla. Among the schools, 4 of the schools were Pre-Pilot schools, 14 were Pilot schools, and 46 were Phase I Implementation schools.

The RVA process selected 51 schools for detailed assessments, representing 217 blocks and 558 classrooms. The RVA also disqualified 516 classrooms for retrofitting from the Pre-Pilot, Pilot and Phase 1 Implementation phases: 48 classrooms from the Pre-Pilot phase, 179 classrooms from the Pilot phase, and 289 classrooms from Phase 1 implementation, as they did not meet the Project's selection criteria. The RVA process also disqualified 12 complete schools from Phase 1 implementation. The criteria for disqualifying buildings for retrofitting included buildings that are DOE-type designs, buildings with reinforced concrete frames with minimum column size 300 x 300 mm, and buildings that require demolition.

## **Pre-Pilot School Retrofitting Commenced in NSSP districts**

Retrofitting works was commenced in 4 Pre-Pilot schools in Bardiya, Surkhet and Achham in late February and early March 2020. The scope of works under the signed MOUs represented 44 classrooms. Initial retrofit activities consisted mostly of marking out and scabbling and stripping plaster (render), while each SMC established a separate bank

account for NSSP funds, and carried out its procurement processes. Retrofit activities were suspended on 24 March 2020 due to the national lockdown to control the outbreak of COVID-19.

## **Retrofit Designs submitted to CEHRD for Approvals**

The project completed Comprehensive Design Reports for the 4 Pre-Pilot schools, representing 19 blocks and 73 classrooms, in Achham, Bardiya, and Surkhet. In February 2020 CEHRD approved 15 of these blocks, representing 66 classrooms. Submission of designs to CEHRD for retrofitting the remaining 4 blocks (7 classrooms) was delayed until March to allow further technical advice can be sought from ARUP on building typology.

Retrofit designs were completed for a further 17 schools (representing 52 blocks and 166 classrooms) across all 4 Project districts during the reporting period. Of the 52 blocks, 30 have included designs for disability-access ramps. Disability-access toilets have also been planned at two of the pre-pilot schools.

Retrofit designs, drawings and cost estimates for 37 blocks, representing 100 classrooms across 15 schools were also submitted to CEHRD in March 2020. CEHRD's decision on these submissions was due in late March 2020. Though the Project's submissions were considered during the second last week of March, the formal approvals process was unable to be completed during the last week of March due to the national COVID-19 lockdown. A further 63 classrooms from 17 pre pilot and pilot schools were completed in March 2020 but are yet to be submitted for approval. These will be submitted following the lifting or easing of the national COVID-19 lockdown.



## Comprehensive School Safety Minimum Package (CSSMP) orientation held

Preliminary mapping assessments of the Minimum School Safety Package was conducted in 16 schools across the four Project districts - 5 schools in each of Surkhet, Bardiya, and Achham, and 1 school in Jumla.

A total of 86 teachers, SMC representatives, and local government personnel took part in the orientation, aimed at promoting school safety.

## ENHANCING PREPAREDNESS AND EMERGENCY RESPONSE CAPACITY

### TFI course conducted for staff of Kathmandu Metropolitan City



Training for Instructors (TFI) was conducted for the officials of Kathmandu Metropolitan City (KMC) from January 21-24, 2020 at Armed Police Force, Nepal, Disaster Management Training School (DMTS), Kurintar, Chitwan, Nepal. The course was organized by Disaster Management Department, Kathmandu Metropolitan City with technical support from NSET and ESS.

It was a four-day residential training. There were 17 participants among which 14 were male and 3 were female. The participants were from Kathmandu Municipality City, Gokarneshwor Municipality, Nagarjun Municipality, Kirtipur Municipality and Dakshinkali Municipality. Most of the participants were senior officials working in Disaster Management Department. The course was facilitated by 10 instructors. The course was coordinated by Mr. Bishnu Hadkhale and monitored by Mr. Krishna Ghimire.

The accommodation of the participants and instructors were managed in DMTS: twin sharing for instructors and triple sharing for participants. Since it was conducted in four days, the schedule of the course was very hectic. The participants and the instructors were complaining about the time duration of the course comparing with its nature. KMC did not provide any support personnel for the course and due to absence of support personnel, there was some kind of haphazard situation of secretariat and documentation work. Both the participants and instructors worked flat hard to make the TFI course successful. The course was conducted successfully with the PEER standard. 14 participants out of 17 participants were awarded with the certificate of completion while other three were given certificate of attendance. The course was concluded by conducting formal closing program with the presence of Deputy Commandant of DMTS SP Murrari Basnet as chief guest and Mr. Suryabhakta Sangachhe from NSET as special guest.

On behalf of participants, Mr. Ghan Shyam Neupane, Chief Administrative Officer of Dakshinkali Municipality, expressed vote of thanks to KMC for organizing such a fruitful training and ESS and NSET for providing the technical support to conduct the course. Similarly, Special guest, Mr. Suryabhakta Sangachhe congratulated all the new instructors and welcomed them to the instructors club. He highlighted the importance of TFI and the behavioral changes that TFI has brought in his life comparing the life without TFI and after the completion of it. Mr. Sangachhe opined that this type of training should be provided to the officials of every government organizations and even in the educational institutes. In the closing speech, SP Murrari Basnet thanked to KMC for selecting APD DMTS as a venue for the course and congratulated all the participant for the successful completion of the course. Meantime, he added that any kind of training that aims to humanitarian assistance are very important for the community.



## Hospital Preparedness for Emergencies – Training for Instructors (H-TFI) Regional Course in Nepal



NSET organized Hospital Preparedness for Emergencies – Training for Instructors (H-TFI) Regional Course on February 27 – March 2, 2020, in Kathmandu, Nepal. There were a total of 22 participants from Bangladesh [1], India[9], Nepal [2], Pakistan [7] and Sri Lanka [3]; 17 males and 5 females in all. The participants were from different hospitals/organizations, who had successfully completed the basic HOPE course in their respective countries.

The course participants were selected through the collective instructors' recommendations, grade sheets (for overall performance in the course), subject to the potential candidates' availability, interest and commitment to serve as instructor in future HOPE courses. The participants to this H-TFI course were from the graduates of PEER-HOPE (under NSET-led PEER Stage 4), HOPE-South Asia (ADPC-led), which are both OFDA-funded; and also graduates from non-PEER-supported HOPE courses. This approach helps in streamlining HOPE instructors' development and HOPE course delivery in the PEER countries. Further, the H-TFI graduates who are also future HOPE instructors, will have the same PEER standard of delivering the HOPE course in the region.

Sri Lanka; five (5) full instructors and one Course Monitor from Nepal, facilitated delivery of the regional course.

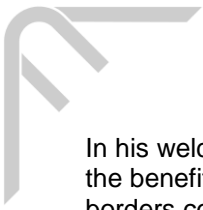
The overall improvement in knowledge of the participants was measured through the course pre- and post-test. H-TFI is a pass-fail course, through evaluation of the participants' delivery of individual and group presentations. Upon meeting all the course requirements, all 22 participants received the Certificate of Completion. Under PEER Stage 4, there are a total of 70 H-TFI graduates, broken down into: Bangladesh [1], India [12], Nepal [45], Pakistan [7], Sri Lanka [5].

The certificate distribution and closing program of the activity was attended by Mr. Anil Pokhrel, Chief Executive of National Disaster Risk Reduction and Management Authority (NDRRMA), as the Chief Guest. Other guests who graced the closing program were: Mr. Surya Narayan Shrestha, Executive Director, NSET; Dr. Amod Mani Dixit, General Secretary of NSET and Chief of Party, PEER Stage 4; Mr. Frederick John Abo, Chief of Party, PEER-South Asia, ADPC; and Mr. Dustin Shiao, Regional Adviser for PEER, USAID/OFDA Regional Office Bangkok.



The course was delivered by six Instructors including Course Coordinator and three Assistant Instructors using the interactive lecture method (ILM) of instruction that is objective based, performance oriented, and highly participatory. One full instructor each from Bangladesh, Pakistan; one (1) Assistant Instructor each from India and





In his welcome message, Dr. Amod Mani Dixit underscored that one of the benefits gained from PEER courses is that the people beyond borders come together and participate in the same mission of making the countries disaster safe. The H-TFI Regional Course also helps in strengthening collaborative efforts in responding to disasters in our neighboring countries by promoting a similar 'emergency response' language across the region that helps in efficient and effective response.

Representatives from each of the participating PEER countries delivered the participants' impressions.

During the concluding ceremony, Mr. Anil Pokhrel, Chief Executive of the National Disaster Risk Reduction and Management Authority (NDRRMA)-Government of Nepal, was the Chief Guest. On the behalf of the Nepal government, he mentioned about strengthening PEER institutionalization in Nepal, as the impact of PEER was realized in the 2015 Gorkha Earthquake. PEER courses are required for Nepal and other countries with similar types of vulnerabilities. Mr. Pokhrel also underscored the importance of regional collaboration for disasters are becoming more transboundary; and in South Asia, regional cooperation is vital in mega disasters.

Mr. Surya Narayan Shrestha, Executive Director, NSET delivered the vote of thanks. He congratulated all the instructors and participants for successfully completing the course. He extended NSET's appreciation to all partner institutions in India Pakistan, Bangladesh, Nepal and Sri Lanka for sending their representatives to the course; and to USAID/OFDA for the continuous support. With NDRRMA recently installed in Nepal, he expressed his positive outlook having a dedicated government agency to lead the disaster risk reduction and management in the country. Directing towards NDRRMA, he has sought and looks forward to receiving NDRRMA's guidance in institutionalizing PEER, including HOPE and H-TFI, in Nepal's national system for effective disaster management. He also extended his best wishes to all new HOPE instructors in bringing their H-TFI experiences back and conduct HOPE/H-TFI courses successfully in their home country.

## **NSET Emergency Medical Response Team (EMRT) activated**

With the global threat of coronavirus disease 2019 (COVID-19) pandemic situation, NSET activated its Emergency Medical Response Team (EMRT) in January 2020. During the last week of January 2020, series of internal consultations on COVID-19 crisis were conducted among NSET divisions, programs and team leads; with NSET Emergency Response Team (ERT) and NSET Wellness Committee. NSET immediately implemented health and precautionary measures for all NSET staff in Kathmandu, field staff assigned in various districts of Nepal and NSET professionals who were at that time on official trips overseas. NSET EMRT has circulated health and other general advisories on COVID-19 in Nepali and English through emails and posters in locations in NSET premises. NSET also started temperature screening of all staff and visitors at entrance, additional access to hand sanitizers and started observing physical distancing in meetings. A technical advisory group formed consisting of NSET partner-senior medical doctors and a representative from NSET-partner hospital.

On March 20, 2020, NSET provided individual health and hygiene kit to all NSET staff, containing essential medicines, mask, disinfection liquid, had sanitizer, gloves, oral rehydration salt, digital thermometer, etc. NSET also prepared Guidelines for Work from Home (WFH) as part of its

business continuity plan (BCP) to manage and minimize the pandemic impact on NSET operations. As part of NSET's precautionary measure, WFH arrangement was activated from March 23, 2020. General Staff Meetings and all other official meetings were held through virtual platforms. NSET WFH guidelines has so far been effective in guiding NSET and its staff for operating office businesses through tele-working.

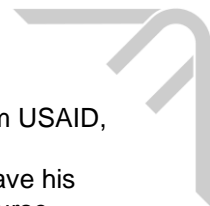
## **PEER Regional Online Course Review Workshop conducted**

National Society for Earthquake Technology - Nepal (NSET-Nepal) under the Program for Enhancement of Emergency Response (PEER) conducted a Regional Online Course Review Workshop on 21st July 2020.

The online course consisted of senior instructors of different PEER courses like Hospital Preparedness for Emergency Response (HOPE), Medical First Responder (MFR), and Community Action for Disaster Response (CADRE) from different countries namely Bangladesh, India, Nepal and Pakistan.

The workshop was also attended by Dr. Amod Mani Dixit, General Secretary of NSET and Chief of party of PEER-NSET along with Mr. Surya Narayan Shrestha, Executive Director, NSET and Mr. Santosh Gyawali from USAID, Bureau for Humanitarian Assistance (BHA). Mr. Falak Nawaz, in country Consultant (ICC) for Pakistan was also present in the program. A team from the newly formed National Disaster Risk Reduction and Management Authority (NDRRMA) from Nepal also attended the workshop.

As the COVID-19 pandemic situation hurting every sector around the world, NSET-PEER decided to conduct the refresher course to its graduates from Medical First Responder (MFR),



Hospital Preparedness for Emergency Response (HOPE) and Community Action for Disaster Response (CADRE) Keeping the pandemic on mind. Currently, NSET-PEER has postponed all the planned programs under the PEER stage 4 due to the pandemic situation.



The workshop started with a message from Dr. Amod Mani Dixit, General Secretary of NSET and Chief of party of PEER-NSET where he stated how COVID-19 has rectified the way of living and achieving our goals. He also addressed that PEER needs to integrate COVID-19 into the courses and since this online workshop adjusting to the new normal.

On the occasion, Mr. Surya Narayan Shrestha, Executive Director, NSET, specified this instant as a moment of history in PEER, to work through online platform to develop the PEER courses.

Mr. Santosh Gyawali from USAID, Bureau for Humanitarian Assistance (BHA) also gave his remarks on the online course review workshop and also stated how PEER had been associated with NSET for almost two decades through disaster preparedness. He also highlighted how PEER instructors has been working in different characters altering according to the situation and this online course is going to be a fresh beginning to lead all the organizations that has been associated with the PEER program.

The different instructors from organizations like, Fire Service and Civil Defense, Bangladesh, Rescue 1122, Pakistan, National Disaster Response Force, India, Nepal Police, Institute of Medicine, Nepal, Nepal Ambulance Service, Red Cross society form Bangladesh, Nepal and Pakistan worked together to come to an consensus that online refreshers course can be conducted to improvise the PEER courses and continue the tasks under the PEER program.

## BUILD BACK BETTER: ASSISTING POST GORKHA EARTHQUAKE RECONSTRUCTION

### Efforts for Safer Reconstruction through Baliyo Ghar Program

With the support from USAID, NSET is implementing Baliyo Ghar Program to ensure safer reconstruction in the aftermath of 2015 Gorkha Earthquake. The overall reconstruction has progressed rapidly during this quarter. Nationally, 87.5% of the enrolled beneficiaries have started the reconstruction and 82% have received the second tranche. Likewise, 70% have received third tranche and 63.2% have completed the physical construction of houses. Many of the beneficiaries who have not started or not enrolled yet fall under the recent grievance redressal list. Though the progress is high, the number of recipients of the "Certificate of Completion" is very low, only 16.8% of the completed households have received it nationally. In overall scenario, Baliyo Ghar Program has 92% progress in second tranche and 84% progress in third tranche disbursement, 10% and 14% higher than the national average respectively.

Baliyo Ghar Program conducted ample trainings on earthquake resistant building construction and retrofitting to masons, engineers, house owners and government officials until Year 4. With the start of Year 5, Baliyo Ghar Program has shifted its focus on supporting the local governments to establish and initiate different activities for the implementation of the National Building Code. As a part of this, during Jan-March 2020 period, a number of trainings were conducted

for representatives and officials, engineers and local contractors of various municipalities to enhance their knowledge on earthquake resistant building construction and implementation of the NBC with emphasis on building regulation and permit process.

### Technical Support and Exposure Visit for Building Code Implementation

With an aim to support local governments to implement and enforce the National Building Code and building regulations, Baliyo Ghar Program initiated various technical support activities in its program areas. These activities were primarily focused on, training local



authorities, engineers and contractors on building code, its implementation and building permit process and supporting for the preparation and review of policy documents related to implementing the building code and permit process. For this coordination meetings, workshops and exposure visits to share knowledge on BCI and BPS among local authorities and stakeholders were organized.



Altogether 131 participants were trained on different aspects of earthquake resistant construction, building code implementation and building permit process. Similarly, a team consisting of 22 representatives from 9 municipalities in Baliyo Ghar Program districts visited Byas, Bandipur and Kawasoti municipalities to learn about the strategies, issues and lessons of building code implementation and building regulations. During the visit a workshop was conducted in Byas Municipality, where 53 participants shared and discussed on various aspects of building code implementation. The consultation meeting at Kawasoti Municipality had a total of 34 participants, including local representatives, officials, house owners and masons from the municipality. As an outcome of these efforts, the Bhimeshwar Municipality, Dolakha has started the process for contractor registration.

### Workshop on BCI and BPS organized at Vyas Municipality

With the objectives to enhance understanding of elected representatives and government officials in local governments regarding BCI and BPS from the learnings of Vyas Municipality With the objectives to enhance understanding of elected representatives and government officials in local governments regarding BCI and BPS from the learnings of Vyas Municipality and to share the approaches, framework, structure, impacts, challenges and learnings of implementation of building code and other DRR measures in municipalities, a one day workshop on "Sharing experiences, enhancing knowledge and capacities on Building Code Implementation" was conducted on 4th March 2020 at Vyas Municipality in Tanahun. The workshop participants were from different rural and urban municipalities in Baliyo Ghar Program areas in Dhading, Dolakha, Nuwakot and Kathmandu, local government representatives and officials of Vyas Municipality and NSET staff of Baliyo Ghar Program and USAID/OFDA funded Technical Support for Building Code Implementation in Nepal (TSBCIN) program.

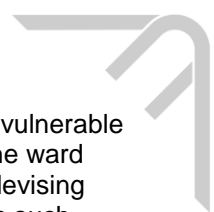
Urban and rural municipalities all over the country are gradually moving towards urbanization. The Gorkha earthquake has spurred the

construction of urban buildings as well. So, municipalities, especially rural have felt the need of having institutional framework in place to ensure safer building construction and to curb haphazard development. Rural municipalities, in particular, lack adequate physical and technical resources to effectively implement the building code. In many urban municipalities, building permit process is in place, but has not been effectively administered.



### Trainings for Local Authorities, Engineers and Contractors

During this period, training for 26 engineers and sub engineers of different municipalities in Dolakha on Building Code and its implementation process was organized. Likewise, training for 51 local contractors in Dhading and Dolakha on safer construction management was conducted. This training activity is proposed for Year 5 to further enhance the construction management capacity of masons working as labor contractors and to institutionalize the informal construction workforce at municipalities. Training for 54 government representatives and officials in Dolakha and Nuwakot on Building Code Implementation and DRM measures was also organized during this period.



## Reconstruction support provided to vulnerable families

In this quarter, Baliyo Ghar Program initiated activities to support the reconstruction of 1254 vulnerable beneficiaries listed by the NRA, in accordance with the yearly work plan and the implementation guideline for vulnerable support. A survey in first quarter had revealed that 59% had completed construction, 20% were under construction and only 21% of the beneficiaries had not been able to start construction, owing to various socio-economic reasons. With aid of the survey results depicting the status of the beneficiaries, major focus was done on initiating dialogue and consultation at the local government levels to better

understand the issues of vulnerable population and support the ward and municipal offices in devising appropriate strategies. As such, Baliyo Ghar Program conducted vulnerable support meetings with 6 wards in program areas, to discuss on the issues and solutions to support reconstruction of vulnerable beneficiaries identified by the NRA.

## AWARENESS RAISING AND ADVOCACY EFFORTS

### Awareness Raising activities held on ESD as part of Earthquake Safety and Preparedness

As part of 22nd ESD 2020, various awareness events, namely, Street Drama, First Aid, Community Search and Rescue, exhibition and awareness dance were held in Bhaktapur district.

#### Street Drama

As an event under 22nd Earthquake Safety Day, a street drama was performed by a group of artists in Lamgal Pukhu and Bhajya Pukhu in Bhaktapur. At a Bhajya Pukhu, a drama called 'Malati ko Bihe' was performed while a drama called 'Bhukampa' was performed at Lamgal Pukhu. The street drama was conducted by Khwopa Engineering College, Bhaktapur. The drama focused on raising public awareness on various aspects of safer construction techniques a building.



enabling people to assess and respond to the emergency. This included providing First Aid to casualties and evacuation using stretchers among others.



#### Fire Fighting Response Simulation

With view to making community people aware on the basics of fire safety and also help teach hands-on skills on responding to fire disasters that could be useful during emergency situation, a fire response simulation was conducted at Bhajya Pukhu on the occasion of 22nd ESD. The simulation basically demonstrated how to extinguish gas cylinder fires and also operating fire extinguishers. Nepal Red Cross had conducted the simulation.



#### First Aid Simulation

First Aid is one of important tools to support in disaster response activities. As part of raising awareness of community people about the basic techniques of First Aid, which could be useful them during emergencies, a simulation exercise was conducted in Balkumari Lalitpur as part of 22nd ESD 2020. Nepal Scout organized the event demonstrating how to respond during emergencies situations with available means. During the simulation, emergency situations with mock casualties was simulated



## National Earthquake Safety Demonstration

National Earthquake Demonstration is one of the regular events of ESD. During the National Meeting, a special siren was aired from Radio Nepal and other FM stations across the country at 2.24 PM as a notification of an earthquake, coinciding with the devastating 1934 earthquake. The safe behavior (Drop, Cover and Hold on) demonstration was conducted by a team of NSET. Then, each of the participants joined into a Human Chain by holding hands as a symbolic gesture of working together in reducing the earthquake risk in days to come.



## Various awareness raising activities organized to mark ESD around the country

### Awareness Raising activities in NSSP program districts

NSSP has conducted various Awareness Raising Campaigns including marking of Earthquake Safety Day, formation of child clubs and dissemination of information regarding the precautionary and preventative measures to be deployed to control the spread of COVID-19. A total of 20 such campaigns were organized across the 4 Project districts.

Earthquake Safety Day was celebrated in Bardiya, Surkhet and Achham on 16 January 2020. The events were organised by NSSP and resources and logistics for each event were made by NSSP, provincial, district and local government bodies and not-for-profit organisations. Activities on the day included school-level speech competitions, rallies, the distribution of Individual Family Safety Plans, earthquake simulation drills, public service announcements via local radio, field-monitoring of buildings, and documentary screening.

NSSP participated in a number of public campaigns to disseminate information regarding precautionary and preventative measures to stop or control the spread of COVID-19. These campaigns were conducted in all four Project districts. The key awareness-raising campaigns included development and dissemination of posters and pamphlets, and public service announcements utilizing local radio. For these activities, each NSSP district team coordinated with the local District Disaster Management

Committee (DDMC) and not-for-profit organizations.

Six child clubs were formed and activated with at least one formed in each of the 4 Project districts. The Project reactivated five existing Child Clubs, across the 4 Project districts, and facilitated establishment of a new Child Club in Achham. Members of each Child Club, including Focal Teachers, were oriented on child rights and child protection issues, and school-based DRR. These clubs will be mobilized to carry out Disaster Risk Reduction (DRR) awareness activities in their schools and communities.



### Awareness Raising activities in Vyas, Tanahun under TSBCIN

The 22nd Earthquake Safety Day was also marked in different parts of the country with various awareness raising activities including rallies, demonstrations and street dramas on January 16, 2020.

To mark the 22nd Earthquake Safety Day, Vyas Municipality organized activities including Earthquake Safety Rally, interaction program and Earthquake Safety



Demonstration among others. A Earthquake safety rally was started from the premises of Vyas Municipality office with banners and placards displaying awareness messages regarding earthquake safety. After taking a round of Damauli bazaar, the rally was converted into a formal interaction program followed by distribution of Certificate to Masons and Instructors who had earlier participated at a 7-day mason training. Likewise, coinciding with the 2:24 pm in which the Great Nepal-Bihar Earthquake had struck country in 1934 leaving more than 8000 people dead in Nepal, one-minute long siren was played giving a notification of occurrence of Earthquake. Similarly, as part of commemorating the ESD, the earthquake resistant RC Building model including slab model and staircase model and Load Bearing Masonry Building Model constructed during the Mason Training were exhibited to the guests and participants on the occasion. The program was jointly organized by Vyas Municipality and NSET.

### **Baliyo Ghar Program, Dolakha conducts awareness activities to mark Earthquake Safety Day**



On the occasion of 22nd Earthquake Safety Day (ESD), various programs like Street Drama, Information Hub, Rally, and Essay Competition were held in Dolakha in coordination with DAO, DCC, NRA, POs, municipality and ward level stakeholders. A Morning Rally was conducted Singati Bazar of Bigu Rural Municipality and Charikot of Bhimeshwor Municipality with the objective of making people aware about earthquake safety, safe reconstruction and sustainable infrastructure development. Around 150 peoples of Charikot and 35 people of Singati comprising government officials, security personnel, representative from various organizations and locals took part in the rally.

Likewise, Baliyo Ghar team Dolakha disseminated IEC materials relating to basic earthquake safety and earthquake resistant elements of housing construction through mini-information hub at different wards of Dolakha district.

Similarly, a street drama with title “Ghanashyam Ko Ghar” was performed in Charikot of Bhimeshwor municipality. Gaurishankar Group of Youth for Accountability (G-GYACA) -Dolakha performed the drama while NSET-Baliyo Ghar team facilitated the drama at the end of Morning Rally.

The CDO and DCC chief of district, NRA head in Dolakha, representatives of security forces and other governmental organizations and local people observed the program. This event was part of awareness campaign to make people aware of earthquake safety reconstruction and retrofitting.

Also, an essay writing competition was also organized on the theme; “Methods of Earthquake risk reduction in Nepal” on the occasion of 22nd ESD at Kutidada Secondary School, Bhimeshwor municipality -7. Altogether 16 students from class 8, 9 and 10 competed the essay writing.

### **Nuwakot**

A week-long campaign was organized in Bidur Municipality and Nine erstwhile VDCs of Nuwakot through different activities promoting awareness about Earthquake Risk and Resilience as part of 22nd ESD to reload national commitment to promote earthquake safety in the district.

Scores of participants along with representatives from GMALI, HRRP, Nepal Red Cross Society, Nepal Police, Armed Police Force, KCDC, students and general public actively participated in the rally. A morning rally organized in Bidur Municipality was converted into an Interaction Program which was organized under the Chairmanship of head of District Disaster Risk Management Committee and Chief District Officer- Mr. Dorna Pokharel

wherein Mr. Sanju Pandit, Mayor of Bidur Municipality as Chief Guest.

One day information desk was placed in Sherabagar, Shivapuri Municipality-5 coinciding with Bull Fighting Program on January 15, 2020. Community people from ward and nearby places visited the information desk. Baliyo Ghar technical team briefed them about Earthquake Safe Reconstruction and Earthquake Risk Reduction among others.



### Online Excel Training conducted to NSET staff

NSET organized an Excel Training to its staff during 6-17 April, 2020. The 11-day training was conducted on an online platform using Microsoft Teams. One drive and Google form were also used as additional tools during the training.

The major objectives of the training were making the staff members comfortable in navigating the excel user interface, entering, manipulating and formatting data; use formulas and functions to perform calculations on data; automate choices and data lookups using functions; analyze data and present the results and create charts and tables that effectively summarize raw data among others.

The course was developed with reference from standard online courses on Microsoft Excel. The training consisted of 12 modules ranging from basic to intermediate level. The first six modules were of basic level and last six were the intermediate level.

A total of 26 NSET staff representing various divisions/projects including Administration, Finance, Community Based Disaster Risk Management (CBDRM), Communication and Technical Support for Building Code Implementation in Nepal (TSBCIN) participated in the training.

Four instructors and five assisting members involved in the training. The course evaluation was done by Monitoring and Evaluation division member of NSET.

## RESEARCH AND DEVELOPMENT: USE OF SCIENCE & TECHNOLOGY IN RESILIENCE BUILDING

### 3D Landslide Demonstrator tested at Tyangathali, Sindhupalchok



A field testing of 3D Landslide Demonstrator has been carried out at the premises of Shree Bhimsen Secondary School Tyangathali at the Bhothe Koshi Rural Municipality of Sindhupalchok on 28 December 2019.

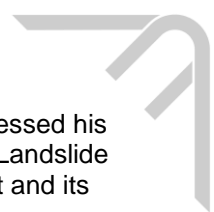
The demonstration was keenly observed by mostly students and teachers of the high school with significant attendance of parents (mostly housewives), youth and other villagers. Landslide is one of the major hazards existing all over the hilly areas of Nepal and making communities at very high risk. The 3D Landslide Demonstrator was conceptualized as an awareness tool to educate the community members about landslide preparedness and mitigation.

The field testing was aimed at making the community to understand that all types of landslides cannot be mitigated, some may be reduced or retarded and only a little of them can be mitigated through various demonstrations and provide some techniques of landslide monitoring at the community level, identify and implement simple small-scale mitigation measures at the community level.

On the occasion, one model each; rotational landslide and landslide induced by rainfall, is prepared for the demonstration. Both the models were demonstrated. Both the models include a reduced scale of a location with potential landslide. People, especially the children found both the models very impressive and continuously tried to identify their village, house, road, and school in the model.

The facilitators' explanation helped get the message through and the demonstration convinced the observers on the need, possibility and techniques of landslide hazard mitigation, and its consideration during such activities as road /infrastructure construction, forest and agricultural management. Likewise, students and teachers asked many important questions - on landslide and on the demonstration.

The 3D Landslide Demonstrator is widely expected to be useful to students in the school,



college and universities in understanding the practical aspects of landslide mechanism and soil stability parameters. It is also considered a useful tool to the local area planners for basic infrastructure and settlements. The 3D Landslide Demonstrator was first tested in NSET premises which was observed by NSET professionals.



Amod Mani Dixit expressed his opinion about the 3D Landslide Demonstrator concept and its work.

Expressing his view about the 3D Landslide Demonstrator, Dr. Amod Mani Dixit, General Secretary of NSET, highlighted the need of bringing the science to the local people from lab. He further said that the demonstrator may not be excellent as in that of science lab but it will still be effective as long as it helps people understand and communicate the landslide risks, its mitigation and preparedness measures.

At the workshop, two Landslide Demonstrations--**Rotational landslide and Rain Induced Landslide**--were carried out among the participants. The landslide demonstration model was designed in such a way that the different stages of landslide could be explained clearly to the people. It helps provide awareness regarding landslide process and suggest possible mitigation measures within an hour program.

Another demonstration, Rain Induced Landslide model was prepared to show the impact of unplanned road in the hilly terrain and construction near the river site.

## Workshop on 3D Landslide Demonstrator held in Lalitpur

A one-day workshop on 3D Landslide Demonstrator has been organized in NSET office in Lalitpur on 24 February 2020. A total of 25 participants from universities, civil society organizations and research institutions were present at the program

The workshop was organized with the view to present the 3D landslide Demonstrator, its concept, the implementation and reflections on the first set of field trials undertaken in 2019. Further, it was also aimed at getting the feedback, suggestions and creative comments of participants based on first-hand experience of landslide risk reduction and preparedness programs from a range of institutions. The specific objectives of the workshop were to share the concept and development of the 3D Landslide Demonstrator, conduct a full landslide demonstration with the delegates and receive feedback on the approach and define future direction.

The workshop was facilitated by Bijay Krishna Upadhyay. Mr. Gopi Krishna

Basyal and Bijay Krishna Upadhyay presented on background of Landslide Demonstrator development and conduction of workshop respectively. Dr.





As rain induced landslides are very common in the developing phase of road, this model was designed to provide awareness regarding the importance of expert advice.

After completion of demonstration part, the big issues are, either this demonstrator should be taken to the public or not. Regarding its improvement and publicity, many suggestions came out from the expert team.

The workshop was wrapped up with the concluding remarks of Mr. Surya Narayan Shrestha, Executive Director of NSET. On the occasion, he said that this is just a starting step towards the journey of Landslide Risk Reduction in Nepal although NSET has two and half decade-long experience in the field of earthquake related hazard and risk.

The 3D Landslide Demonstrator is designed as the awareness tool to show the landslide phenomena with its initial signs in the nature. This tool is to simplify the science and make people understand about the landslide process. From landslide risk perception survey, knowledge gap was found out which encourage to make such tool which can be taken to the communities and make them clear about their misconception.

## Experimental-tests conducted to study behavior of stone masonry in mud mortar wall



A set of pulldown tests were conducted on low strength masonry walls at NSET premises as a part of the SAFER (Seismic Safety and Resilience of Schools in Nepal) Project "On Jan 14, 2020. It was a part of the series of tests designed to better understand the behavior of structures of this typology, during earthquakes.

One of the two walls were retrofitted using the steel welded wire mesh and GI wires. This test gave a very good idea on the improvement in behavior of the walls in terms of both strength and deformability when retrofitted using this low-cost technology.

SAFER (Seismic Safety and Resilience of Schools in Nepal) is a holistic and multi-disciplinary program for improving the earthquake-related safety of school buildings and the resilience of educational communities in Nepal, a consortium of various organizations, led by University of Bristol.

## Virtual Instructor Training conducted to NSET Staff

With a view to make the NSET instructors capable to conduct a virtual training course efficiently using learning management system and assignment tools, a Virtual Instructor Training has been conducted by NSET during June 9-15, 2020.

The 5-day training was conducted on online platforms using MS Team and Google Classroom.

Orientations and trainings are important aspects of NSET's day to day activities. As teaching/ learning activities through digital platforms have become a common phenomenon in post COVID new normal situation, the

training has developed a standard for all NSET's future online trainings in the changed context of COVID-19 pandemic.

The course was developed with reference from standard online courses on virtual class found on the internet and NSET TFI standard. The training consisted of four modules and three sessions in each module. They are as follows:

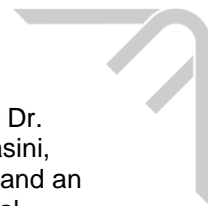
Module 1: Technologies and Tools for Virtual Learning

Module 2: Instructor/ Instructional Strategy

Module 3: Participants and Course Evaluation

Module 4: Final Project

Initiated from NSET management, the training was organized for staff members who are the future online instructors, from different



divisions of NSET including staffs from HRRP and ESS. A total of 24 participants were involved in the training with five instructors.

### **Training on Mobile App based inspection of Structural Vulnerability (Developed under the SAFER project)**

An online training session on use of a mobile application developed under the SAFER project (Seismic Safety and Resilience of Structures in Nepal) was conducted on May 30, 2020. It is an app that can be used to inspect the seismic vulnerability of school buildings. There were a total of 35 registered participants for the session. The event was organized by Nepal Engineers' Association, Bagmati Province and technically supported by NSET-Nepal.

After an overview on the growing importance of mobile/digital inspection and data collection, the participants were given a tutorial on the operations and features of the mobile application while discussing on aspects of different structural typologies. A demonstration using three sample buildings followed the tutorial. The training was instructed by Vibek Manandhar, Structural Engineer, NSET and demonstration of the application on a mobile phone was performed by Rabin Chaulagain, Structural Engineer, NSET. Facilitation regarding the online conduction was done by Ayush Baskota, program coordinator, Baliyo Ghar, NSET. In the beginning of the session,

keynote was made by Dr. Narayan Prasad Marasini, director of the project and an expert on geo-technical engineering regarding the vulnerability of the school buildings in Nepal and how this training facilitates on the assessment of such vulnerabilities.

SAFER (Seismic Safety and Resilience of Schools in Nepal) is a holistic and multi-disciplinary program for improving the earthquake-related safety of school buildings and the resilience of educational communities in Nepal, a consortium led by University of Bristol, UK

## **OTHERS**

### **NSET marked 27 years of its Journey**

National Society for Earthquake Technology–Nepal (NSET) has marked 27 years of its journey with various sharing and learning programs. This year's programs, however, were organized on digital platforms due to ongoing COVID-19 pandemic.

To mark the Day, NSET hosted 'National Webinar on Multi-Hazard Risk Reduction and Preparedness Coupled with Covid-19' on June 18, 2020. Also, an International Webinar on "Addressing Multi hazard Risk in context of Covid-19: A Global Perspective" was hosted on June 22, 2020.

Established in 1993 with its mission to enhance seismic safety of Nepali communities and the beyond, NSET observes the day on June 18 every year as 'A Day to Reaffirm the Commitments to Earthquake Safety'.

In an internal NSET Day event organized on June 19, 2020, NSET Executive Director Mr. Surya Narayan Shrestha welcomed all the staff appreciating for their support and contribution to NSET mission. "NSET has come thus far overcoming all adverse situations. Nonetheless, we have accomplished many activities during the period. The major challenge for the future is the continuation and institutionalization of the past efforts and achievements," Mr. Shrestha remarked.

NSET General Secretary Dr. Amod Mani Dixit in his address highlighted the major achievements and learnings of NSET's 26 years journey. "NSET has

set some important milestones in disaster risk reduction in Nepal," Dr. Dixit mentioned.

As part of internal sharing session, altogether 9 presentations made by NSET professionals on diverse areas of NSET works. And then followed second part NSET Day with entertainment events where NSET staff presented and showcased their talents like singing, literary creations and also shared reflections/experiences how they are tackling and living with COVID-19 situations that everybody has to deal with globally.

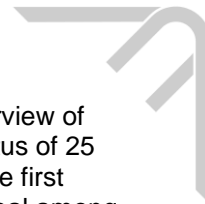
More than 140 participants including NSET Staff, Board Members and guests had joined the ceremony.

### **National Webinar on Multi-Hazard Risk Reduction and Preparedness on context of Covid-19**

'National Webinar on Multi-Hazard Risk Reduction and Preparedness Coupled with Covid-19' has been organized on June 18, 2020. NSET organized the program coinciding with its 27th anniversary (NSET Day). The program was one of the events of this year's NSET Day. NSET observes

June 18 every year as 'A Day to Reaffirm the Commitments to Earthquake Safety. NSET was formally established this day in





1993 with its mission to enhance seismic safety of Nepali communities and the beyond.

The Webinar was organized with objectives to;

- ✓ Share the experience of NSET among all stakeholders and receive feedback on the activities including their expectations from civil society organizations like NSET.
- ✓ Learn from experience of local government about the achievement and challenge in responding and preparing for Covid-19.
- ✓ To discuss the possible consequences and risk reduction measures of complex emergencies coupled with COVID-19 at the national level.

The program discussed the national perspective of Multi Hazard Risk Reduction and Economic Development in the context of COVID-19 in Nepal. It also discoursed the role of Governments and CSOs for the new normal.

This program brought together various experts, practitioners and researchers in the areas of disaster risk reduction and disaster management in Nepal to discuss how the current COVID-19 experience impact the future planning of the DRR sector in Nepal.

All together 176 people including a panel of speakers with different backgrounds related to disaster risk reduction came together to discuss how the current COVID-19 experience impact the future planning of the DRR sector in Nepal.

The program was organized in two sessions. In the first session, various speakers and representatives from National and International partner organizations including Government of Nepal expressed their views and perception about NSET and expectation from NSET in terms of DRR in Nepal. Greeting NSET on the occasion of its 27th anniversary, they acknowledged NSET for contribution in DRR in context of Nepal.

To begin with, Mr. Surya Narayan Shrestha, Executive Director of NSET. Mr. Surya Narayan Shrestha, Executive Director of NSET welcomed all the participants and shade the lights on the purpose of the National Webinar. Further, he briefly highlighted the NSET's 27 years journey on the occasion.

This was followed by a session wherein various participants including representatives from National and International partner organizations including Government of Nepal expressed their views on ongoing global COVID19 pandemic and their perception and expectation from NSET.

Mr. Surya Bahadur Thapa, Chairman of DPNet, Mr. Santosh Dahal, Coordinator of AIAN, Mr. Umesh Dhakal, Executive Director of Nepal Red Cross Society, Mr. Shiv Chandra Basnet, Member Secretary of Social Welfare Council, Mr. Rishi Raj Acharya, Under Secretary at MoFALD, Mr. Ima Narayan Shrestha, Acting Director General of Center for Education and Human Resource Development, Mr. Maniram Gelal, Director General of DUDBC, Mr. Baikuntha Neupane, Mayor of Vyas Municipality and Mr. Kabindra Kumar KC of Simta Rural Municipality shared their views and greetings on the occasion.

In the second session, three papers regarding ways to combat COVID19 pandemic and its preparedness measures in Nepal were presented.

Dr. Basudev Pandey, Director of Epidemiology and Disease Control Division, made presentation on "Experiences, Response and Challenges of COVID19 Response and Preparedness." On the occasion, he shared various basic information about COVID19 pandemic such as What is Corona Virus? How it gets transmitted? Who and which section of populations have higher risk

of transmission? Overview of COVID pandemic status of 25 weeks period since the first case confirmed in Nepal among others. Mr. Pandey also shared various efforts by various tiers of governments in Nepal to combat the ongoing COVID19 pandemic in Nepal.

Likewise, Mr. Anil Pokharel, Chief Executive of National Disaster Risk Reduction and Management Authority (NDRRMA), presented on Policies and Planning regarding Disaster Risk Reduction and Management in context of COVID19. His presentation highlighted "Monsoon Preparedness and Response Work Plan 2020" and What would NDRRMA would do in next 4-5 years along with NDRRMA-led various efforts in Nepal.

Similarly, Mr. Min Bahadur Shahi, Member, National Planning Commission, presented on importance of coordination among stakeholders for Disaster Risk Reduction and Management in Nepal in the context of COVID19 pandemic. Appreciating NSET's past works especially in Earthquake Risk Reduction in Nepal, Mr. Shahi emphasized the need of cooperation, coordination and consultations among the DRR stakeholders in making DRR plans, policies and implementations. On the occasion, he shared contents and preparation process of Disaster Risk Reduction and Management issues in the 15th National Plan..

At the end of presentation, a Q&A session was conducted where many participants put forth their queries on COVID19 pandemic and its measures to combat it.

Dr. Amod Mani Dixit, General Secretary of NSET formally

concluded the program with vote of thanks. In his remark, Dr. Dixit appreciated various stakeholders including Academicians, Representatives from Government of Nepal for cooperation and assistance in NSET's 27 years journey on earthquake risk reduction efforts in Nepal. In our 27 years' journey, NSET basically accomplished five major works; Awareness

Raising, Training, School safety, Building Implementation and Safer Reconstruction," Dr. Dixit said.

## International Webinar on "Addressing Multi-hazard Risks in context of Covid-19: A Global Perspective" held



शुक्रवाँ एनसेट दिवस  
भूकम्पीय सुरक्षा अभिवृद्धि लागि पुनः प्रतिज्ञाको दिन  
27th NSET Day  
A Day to Reaffirm Commitment to Earthquake Safety

**International Webinar:**  
**"Addressing Multi-hazard Risk in context of Covid-19: A Global Perspective"**

Monday 22 June, 2020  
14:30-16:00 hours (Time Zone: GMT+5:45)

Organized by: **NSET**  
Nepal Earthquake Science and Technology

Powered by: **zoom**

'International Webinar: Addressing Multi-hazard Risk in context of Covid-19: A Global Perspective' has been held on June 22, 2020 coinciding with the 27th NSET Day. The Webinar discussed on the emerging issues related to DRR and the possible consequences as well as risk reduction measures of complex emergency in coincidence with COVID-19 that offered recommendations on how to continue working on DRR to address multiple hazards while responding to COVID-19.

The Webinar brought together a panel of prominent speakers from various countries with different backgrounds related to disaster risk reduction to discuss how the current COVID-19 experiences impact the future planning of DRR sector.

As a Keynote speaker, Dr. Manu Gupta, Co-Founder, SEEDS, India and Executive Member ADRRN highlighted the impact on people with ongoing pandemic and the cyclone have several times more, while people were already depending upon external support mainly for food, and as cyclone hit, they lost all supports. 'More empowerment of local leaders, more responding, sensitive actions we will be making' he remarked.

Another Keynote Speaker Mr. Kendra Hirata, Director of Programs, CITYNET Yokohama, Japan shared three success stories of model cities handling COVID-19 pandemic from Seoul, Taipei & Iloilo, Philippines. Korea approach focused on United Actions, and Innovative technology used Science based and Speed response.

On the occasion, speakers from Bangladesh, Pakistan and Nepal also shared experiences of their respective countries.

Deputy Executive Director of COAST Trust, From Bangladesh, Mr. Sanat K. Bhowmik shared field experience of dealing with COVID-19 and super cyclone Amphan. He highlighted that Cyclone Amphan impacted in farmlands, crops and vegetables in 5 districts in coastal areas and PPEs distributed to 1500 families of cyclone impacting areas who were struggling

with social distancing and Mask requirements. He further shared that Dhaka is most impacted, country side less impacted.

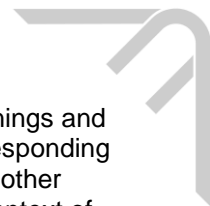
Dr. Farhan Khalid, Registrar/ Team Leader, DRF-PAK Emergency Services Academy, Rescue 1122/ Punjab Emergency Service (PES) of Pakistan shared on 'Responding COVID-19 by Rescue 1122 in Pakistan: Lessons learned and challenges.'

Mr. Surya Narayan Shrestha, Executive Director of NSET shared the 'Experiences from Nepal to respond to COVID-19'. Mr. Shrestha shared that most of quarantines are maintained by Local governments and they are taking charge of tracing and relief as well, while the challenge they are facing is in testing and medical response at local level.



Professor Alexander Densmore from Institute of Hazard, Risk, and Resilience and Department of Geography, Durham University, UK shared about new project 'Risks from the Mountain Hazard Chain: Research in the wake of the Pandemic' with the name 'Sajag Nepal'. Sajag aims to improve decision making and preparedness to mitigate impact with the objective to understand





multi-hazard in full context of risk and development.

Prof. Cui Peng, Academician (Member) of the Chinese Academy of Sciences and Co-Director General of China-Pakistan Joint Research Center on Earth Sciences gave his perspectives based on experience of China to contain COVID-19.

Dr. Amod Mani Dixit, Chairperson of ADRRN and General Secretary of NSET shared that Civil Society Organizations (CSOs) are working across the disaster cycles from policy support & knowledge management to risk reduction/mitigation and preparedness to response, recovery, reconstruction and rehabilitation. Dr. Dixit mentioned that ADRRN is working with the aim to 'Make the Decade Counts'.

Mr. Loy Rego from MARS Practitioners Network, India emphasized need to "embrace other changes globally but not move away from your focused target, help and catalyze their achievements" and said that "NSET needs realignment of its Nepal targets and frameworks, situated in the Great Himalayan Belt, Nepal on all hazards, and in Asia, for the next 23 years till its Golden Jubilee in 2043 and beyond."

The Webinar was moderated by NSET Deputy Executive Director Dr. Ramesh Guragain. He asked speakers to focus on potential roles of Governments and Civil Society Organizations (CSO) for the new normal.

In the beginning, Dr. Guragain had highlighted the objectives of this international webinar:

- ✓ Discuss on the possible consequences and risk reduction measures of complex emergency in coincidence with COVID-19

- ✓ Highlight the learnings and experiences on responding to COVID 19 and other disasters in the context of COVID 19
- ✓ Discuss on the role of Governments and CSOs for the new normal

178 Participants from various parts of the globe joined the talk. Some queries and suggestions as well as ideas shared by participants where speakers had few more additions.

At the end, NSET Executive Director Mr. Surya Narayan Shrestha synthesized the proceedings of webinar and also extended, on behalf of organizer, sincere gratitude and thanks to all the speakers and participants for their contribution and time.

## CityNet Nepal National Chapter hosted a Webinar for sharing experiences and lessons learned from COVID-19 Pandemic

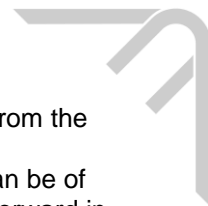


CityNet Nepal Chapter has hosted a Webinar for sharing experiences and lessons learned from COVID-19 Pandemic on August 13, 2020. The webinar aimed to bring all National Chapter members and potential members together on online platform and share ideas and experiences on responding COVID-19 Global pandemic in their respective areas. The Webinar started with welcome remarks from Mr. Hari Bahadur Mahat, Mayor, Hetauda Sub-Metropolitan and Chair of CityNet Nepal National

Chapter. Mayor Mahat briefly shared about how local governments are working locally in dealing with this pandemic.

National Society for Earthquake Technology-Nepal (NSET) as a host organization, with support from Hetauda Sub-metropolitan City, Chair of National Chapter, Lalitpur Metropolitan City, Vice Chair of CityNet Executive Committee and other member cities of CityNet National Chapter, facilitated the webinar. The webinar included brief opening session, technical presentations, closing discussion, and closing session. CityNet Nepal National Chapter's Webinar for Sharing Experiences and Lessons Learned from COVID-19 Pandemic was conducted.

Mr. Chiribabu Maharjan, Mayor, Lalitpur Metropolitan City (LMC) and Vice Chair of CityNet



Executive Committee highlighted the importance of such webinars in the current situation and briefly talked on the efforts made by LMC for preparedness and responding COVID-19. Emphasizing on the need of coordination and seriousness from all sectors, Mayor Maharjan wished the webinar to come with some innovative ideas for COVID 19 risk reduction.

From Bheemdatta Municipality, Ms. Gomati Awasthi shared the experience and learnings from the locality while preparing and responding COVID-19. As Bheemdatt Municipality shares the boundary with India, tracing COVID-19 and proper management of commuters from India is one of the major challenges. However, the municipality has put its all efforts including the mobilization municipal resources, of community volunteers, non-government organizations and private sectors for preparedness and risk reduction.

Mr. Suraj Shrestha, Senior Engineer from Dharan Sub-Metropolitan City made a brief presentation on an analysis of existing plan, policies and directives at different levels and their practicality in responding COVID-19 at the municipalities. Mr. Shrestha critically pointed out the DRRMA -2017, LSGA 1999 and other central and local level policy and acts in which coordination and support mechanism among the neighboring districts and local governments has not been clearly explained. He further stressed that the COVID-19 response activities and strategies should be based on the evidences and information collected from the affected areas.

Mr. Kendra Hirata, Director of Programs, CityNet Yokohama Project Office sharing examples of international and regional measures to flatten the curve of the COVID-19 cases, as a good reference to be followed to minimize the increasing cases of COVID-19 cases in Nepal. The steps taken in Japan, Taiwan, Thailand, and New Zealand were simple to follow, innovative and effective. To summarize, stage wise lockdown, applying principles of DRR, and the concept of Self-help, Mutual help and public support for COVID-19 preparedness and response were some exemplary effort, which can be replicated in Nepal. Mr. Hirata recommended some of the actions to be taken in Nepal are patrolling in community to ensure everyone is wearing mask, record keeping of data related to COVID-19 cases, provision of reward and penalty base on the rules followed to boost the motivation towards discipline among citizens.

Total 35 participants including mayors, deputy mayors, executive officers, organization heads and senior professionals attended the webinar representing from different member and potential member cities/ organizations.

The technical presentations were followed by question answerer and discussions. All participants appreciated the presentations and expressed

that they could learn from the international national experiences, which can be of guidance for moving forward in the respective areas. In the context of spreading multi-sectoral and spatial impact of COVID-19, the efforts and strategies should be made considering the multidimensional approach and practical and sustainable solutions.

The webinar was closed with the concluding remarks by Mr. Surya Narayan Shrestha, Executive Director of NSET, the host organization of the Nepal National Chapter. Mr. Shrestha stressed about the detailing and procedural description in the guidelines is still needed in Nepal. There are limited resources, however, limited resources is not the major problem for COVID-19 risk reduction, but proper management and mobilization of resources is the main. He further stressed for the requirement of research and innovation in the field of DRRM.

The webinar was moderated by Mr. Ganesh Kumar Jimée, Director of Disaster Preparedness and Emergency Response Division of NSET. Mr. Jimée announced that a similar webinar is going to be conducted by CityNet Nepal National Chapter on 3 September 2020.

For more information, please contact us:



**NSET**  
Earthquake Safe Communities in Nepal

### National Society for Earthquake Technology-Nepal (NSET)

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