



NSET
Earthquake Safe Communities in Nepal

Newsletter

Issue 23 | Jan-Mar 2019 | Kathmandu, Nepal

In this Issue

Feature Highlights.....	2
Baliyo Ghar 2018	5
CBDRM.....	7
EERT	11
DPER.....	11
PEER	13
SESP	15
NSSP	16
TSBCIN.....	17

National Society for Earthquake Technology-Nepal (NSET)

House 65, CR-13, Sainbu Awas, Bhainsepati
Lalitpur Metropolitan City-25, Nepal
P.O.Box No.: 13775, Kathmandu, Nepal
Tel: (977-1) 5591000, Fax: (977-1) 5592692
E-mail: nset@nset.org.np
Website: www.nset.org.np



FEATURE HIGHLIGHTS

An Earthquake Memorial Ceremony was held on January 16, 2019 at Patan Durbar Square, Lalitpur as part of 21st ESD to pay tribute to those who lost their lives during the past earthquakes of 1934, 1988, 2015 and many others.

Honorable Minister for Home Affairs Mr. Ram Bahadur Thapa "Badal" along with parliamentarians, elected representatives from Metropolitan Cities, high level officials from the government of Nepal, 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 past earthquake victims.

As part of 21st Earthquake Safety Day (ESD) National Program, various Earthquake Safety Rallies were organized in Lalitpur on January 16, 2019. The Earthquake Safety Rallies started from four different places of Lalitpur; Balkumari, Gaahiti, Pulchowk, and Lagankhel, with the awareness-raising messages, that gathered in Patan Durbar Square to turn into Earthquake Memorial Meeting. Earthquake Safety Rally is one of the major program events of ESD being held every year.



Earthquake Memorial Meeting held in historical Monument of Bhugol Park

Similarly, Commemorating 1934 Devastating Earthquake, Kathmandu Metropolitan City organized Earthquake Memorial Meeting at the historical Earthquake Monument at Bhugol Park, New Road on January 16th, 2019.

Hon. Home Minister Mr. Ram Bahadur Thapa 'Badal' in his brief note mentioned about the irreparable losses of past earthquakes that remains the tragic memory for all of us. Mayor of Kathmandu Metropolitan City Mr. Bidya Sundar Shakya stated that coming to the monument keeps us reminding about those people who lost lives in past earthquakes and gives us strength to work together so that future earthquake would incur less losses. Government Officials, Elected Representatives, Security Officials and participants from various sections gathered on the occasion paid tributes in memory of all those who had lost their lives in past earthquakes.

On the occasion, Hon. Minister Thapa and Mayor Shakya also released "Disaster focused Information Directory" published by Metropolitan City.



21st National Symposium on 'Earthquake Risk Reduction and Management in Nepal' held in Kathmandu

The 21st National Symposium on “Earthquake Risk Reduction and Management in Nepal” was held in Kathmandu on January 22, 2019 on the occasion of 21st Earthquake Safety Day (ESD).

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. National Symposium is a sharing and learning forum for the DRR stakeholders to review the DRR efforts of past year and discourse and explore the way forward in Earthquake Risk Management.

Addressing at the Opening Ceremony of the program, Chief Executive Officer (CEO) of National Reconstruction Authority (NRA) Mr. Sushil Gyewali said that NRA has redesigned its approach and is moving ahead in collaboration with Local Governments in its reconstruction bid in line with Nepal's changed context of governance system.

The Chair of the program, Mr. Maniram Gelal, Director General of Department of Urban Development and Building Construction (DUDBC) highlighted the need for paying efforts to reducing disaster risk by enhancing preparedness as country is prone to high level of multi hazards including earthquakes.

Addressing the ceremony, Ms. Indu Ghimire, Joint Secretary and Head of Disaster Management Division at Ministry of Home Affairs (MoHA) shared that MoHA is all set to promulgate Disaster Risk Reduction and Management Regulation and form the Disaster Risk and Management Authority soon in line with the newly enacted Disaster Risk Reduction and Management Act, 2017. "

Mr. Surya Narayan Shrestha, Executive Director, NSET highlighted the objectives of Earthquake Safety Day and the National Symposium. On the occasion, Mr. Shrestha remarked, “symposium has become an important platform every year to discuss upon burning issues of Nepal's Disaster Risk Reduction efforts and the outcomes and the recommendations are not just for documentation, but we need to go for immediate actions.”

A total of four thematic sessions were organized in the symposium this year. They were:

- ✓ Disaster Risk Reduction and Management in the Context of Localization in Nepal,
- ✓ Role of Mass Media for Resilient Communities in the context of Federalization,
- ✓ Need, Possibilities and Challenges for Seismic Retrofit of Non-Engineered Buildings, and
- ✓ Young Researcher's Session on Disaster Risk Reduction in Nepal.



The DUDBC and NSET in association with various government and non-governmental organizations organized this year's symposium. About 200 people representing different DRR stakeholders, professionals, teachers and students participated the National Symposium, 2019.

RECONSTRUCTION ACTIVITIES

Baliyo Ghar program implemented by NSET with the support from USAID aims to provide support to Nepal Government's owner-driven housing reconstruction campaign which empowers and supports homeowners to reach to build back better/safer objectives. The program imparts technical knowledge, skills, and awareness about earthquake resistant building construction technology to house owners, local masons, local authorities and community people to ensure safer reconstruction. Furthermore, the program assists GON, its related authorities and partner organizations to develop standard guidelines, norms and training curricula. Oct – Dec 2018 is the first quarter of 4th year program implementation.

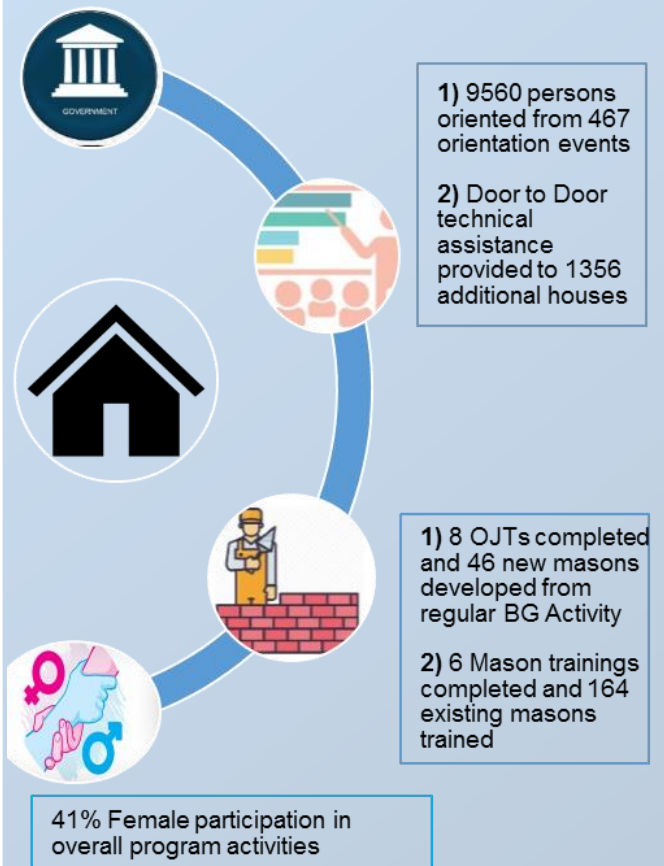
Support in Curricula development

During Oct – Dec 2018, Baliyo Ghar program developed Retrofit On-the Job training curricula to impart theoretical concept as well as practical implications to retrofit rural buildings (both Brick and Stone Masonry). The curricula developed to produce skilled retrofitting masons and make them capable on assessment of retrofitting for partially damaged rural buildings has been submitted in National Reconstruction Authority (NRA) and Central Level Project Implementation Unit (CLPIU) for final approval though CLPIU has approved to run 20 pilot courses following the same curricula. This manual can be another milestone towards earthquake risk reduction measure and skill manpower production. Baliyo Ghar program has supported government ally agencies to develop 12 more such policy documents till date.

Capacity Building Activities

Additional six mason trainings and eight Mason On-the Job Training (OJT) have been conducted during this period as part of local capacity enhancement activity. Through these trainings 256 masons have enhanced their skills and knowledge for earthquake resistant construction. 8 demo houses have been built through OJT which have served as model houses to impart the technology in the community.

- 1) Collaboration with NRA and POs for development of Hollow Concrete Block load bearing housing construction Manual
- 2) Technical Advisory to NRA for Heritage Reconstruction, Urban Regeneration and House pooling in private house reconstruction
- 3) Mason Retrofit OJT curricula developed and Submitted to NRA for approval



Increased Awareness

A total of 467 community orientation events have been added in this period. The small group orientation on earthquake safe reconstruction and disaster resilient community formation is considered the most effective activity for awareness raising. This has provided the opportunity for two way communication between facilitator and beneficiary community. Likewise, 1356 houses have been benefited through door to door campaign, a process where three membered-mobile team of Baliyo Ghar reaches every household to ensure safer construction techniques and provide necessary guidance. As part of massive awareness campaign launched by Baliyo Ghar program, NSET has made contractual agreement with 4 local radio stations and a TV Program production agency to produce and disseminate Baliyo Ghar Radio/TV magazines. During this 3 month period, one episode of TV program has been produced and broadcasted through government-owned Nepal Television and leading private channel Kantipur TV whereas four radio stations have produced 8 unique episodes and get them broadcasted 16 times.



Preparation of slab frame at Nuwakot



COMMUNITY-BASED DISASTER RISK REDUCTION ACTIVITIES

GNDR Consultation Meeting

National Workshop on "Collective Efforts of Civil Society Organizations for DRR and Management" conducted on the occasion of 'International Day for Disaster Reduction 2018' on October 8, 2018 in Kathmandu. The one-day workshop was jointly organized by Global Network of Civil Society Organizations for Disaster Reduction (GNDR), National Society for Earthquake Technology-Nepal (NSET), Practical Action, Disaster Preparedness Network (DPNET) and Disaster Management Network Nepal (DiMaNN).

The main objective of the workshop was to review their DRR and Management initiatives and evolve an effective system with practical methodologies against the backdrop of various national and international non-governmental organization, civil society organizations and networks are assisting government Nepal to make Nepali communities safe from disaster and investing millions of dollars each year for the same.

Presentations were made from GNDR, DPNET, DiMaNN, NGO Federation Nepal and Human Rights Alliance. These presentations were focused on the experiences and lesson learnt of institutions in carrying out disaster risk reduction and management initiatives.

NEAR Consultation Workshop, Itahari, 12 Oct 2018

Network for Empowering Aid Response (NEAR) Consultation Workshop was conducted with the Civil Society Organizations of Sunsari district on October 12, 2018. The main objective of the program was to introduce the network, the need and rational of pooled funding mechanism; to request for providing the detailed data/information of the organization and to discuss the lessons, experiences of humanitarian support during recent disasters.



Currently, nine NGOs of Nepal are in the NEAR network.

Pooled funding mechanism aims to:

- ✓ Reduce the humanitarian financing gap between donors and local organizations
- ✓ Improve directivity and efficiency of aid
- ✓ Move away from centralized response system

Participants were more curious about pooled funding mechanism where they discussed on major challenges faced by NGOs in the Sunsari district.

Mr. Bijaya Krishna Upadhyay, Director NSET and Ms. Om Kala Khanal, NSET Social Development Officer, conducted a session to clarify about the pooled funding mechanism. Altogether 24 (17 male and 7 female) participants attended the workshop.

Similarly, a two-day "**Consultation Workshop on Pooled Funding Mechanism**" was organized to formulate concepts for Pooled Funding Mechanism in Nepal among the relevant organizations and experts in Kathmandu. The workshop was organized jointly by NEAR, NSET and NEAR Partners in Nepal on 29-30 October 2018. 26 professionals representing 10 civil society organizations and networks participated in the workshop.

The objective of the workshop was to share the outcome of CSO Mapping Survey conducted under NEAR program on September, to create a common understanding on pooled funding mechanism and suggest different options of PFM mechanism suitable for Nepal.

All the NEAR partner institutions shared their experience of CSO Mapping Survey after inaugural session of the workshop. The second session of the workshop was the comprehensive analysis of the CSO mapping survey. Following four key issues required to consider in developing the Pooled Funding Mechanism were identified by the plenary.



Regional Training on Views from the Front Line

Views from the Frontline (VFL) 2019 is a forward-looking global monitoring process that supports inclusive people-centered approaches to Disaster Risk Reduction. VFL is being organized by Global Network of Civil Society Organizations on Disaster Reduction (GNDR). It is designed to support the local implementation of the Sendai Framework for DRR and other people-centered aspects of the sustainable development and climate change frameworks. Nepal has been participating this program since 2009. NSET has been the National Coordinating Organization (NCO) since the beginning and was also engaged as Regional Coordination Organization (RCO) for South Asia. NSET will serve as the NCO for Nepal mobilizing four Partner organizations (PO) for VFL 2019.

GNDR organized a regional training program for on VFL 2019 on November 19-21, 2019 at Jakarta. Ms. Nisha Shrestha, Monitoring and Evaluation Manager and Mr. Bijay Krishna Upadhyay the Director of CBDRM participated in the training program. The detailed work plan and budget was also prepared in the training program.

Fire response system installed in Khokana under action research program

A Fire Response System has been Installed at Tajhya Tole of Khokana, Lalitpur Metropolitan City-21 with the view to promote women's engagement and contribution in Disaster Risk Management efforts. The Fire Response System is comprised of hose pipes, control valves, connections and nozzles which can be easily connected or disconnected to the water pumps. The system has been positioned at strategic locations in Tajhya Tole. There is a pond in the locality that has been selected as the source of water. The system is expected to be enough to respond potential fires that can break out any corner of the community and can cover up to a height of five-storey.

The ward office has taken the responsibility of maintaining the system, produce and mobilize the local teams of firefighting volunteers ready with periodic refresher training programs. The installed fire response system will be operated and handled by community volunteers during the emergency once they are trained on the modality of the operation of system. Ward office is scheduled to organize a training program for local volunteers in this connection.





This effort is a part of an action research program called 'Empowering Women through Disaster Risk Reduction (EWDRR)' which was jointly implemented by NSET and Durham University. The program was launched in Bhainse Ward Number 3 of Bagmati Gaupalika and Tajhya Tole of Khokana Ward Number 21 of Lalitpur Metropolitan City in May 2018. NSET initiated organizing and mobilizing the women in both the communities with a Risk Perception Survey and Awareness Programs on Disaster Risk Reduction. Informal training sessions were conducted for the community members and disaster management groups on Vulnerability and Capacity Assessment (VCA) and Community Based Disaster Risk Management. Both the communities identified the potential hazards, assessed the risk and existing capacity within the community and came up with priority actions.

Society for Urban Poor (SOP) in partnership with Shapla Neer has been involved in a project called "**Create Safer Community**" to help the people in core city areas of Kathmandu and Lalitpur district. Five wards have been selected from core city areas of Kathmandu and Lalitpur District by referencing the municipality data and recommendation. They are ward 12, 21 of KMC and ward 7, 8 and 17 of LMC. The project period is for three years and will focus on the recovery and prevention of the damages in these areas and establish DRR programs in these areas to tackle the future disasters risk. The project has started from November 2016. NSET is provide by technical support in the project.



The orientation and distribution program on community SAR tools was held on **January 8, 2019** at LMC on the hall of Nepal *Bhasa Mankaa Chhen* for the Lalitpur target wards and **January 9, 2019** at KMC on the hall of Jaisedewal Youth Club for the Kathmandu target wards. All together there were 40 participants from each municipality of KMC and LMC who came to attend the program. The participants were ward chairman, ward members, CDMC members and active member of each wards of each municipality along with Disaster Department Head Mr. Harish Chandra Lamichanne and Ms. Archana Shrestha Shakya of both LMC and KMC respectively.

MEETING HELD ON IMPLEMENTATION OF SAFER PROGRAM HELD

On February 4, 2019, an online meeting organized by the principal investigator of SAFER, Dr. Anastasios Sextos (University of Bristol), and attended by University of Southampton, University of Bristol and NSET was held at Shree Hall. From NSET, the attendees were Dr. Ramesh Guragain, Dr. Narayan Marasini, Ms. Rajani Prajapati and Mr. Vibek Manandhar. Development in work package 1 regarding site investigation and PSHA were discussed to have been progressed. Under Work Package 4, it was informed by Dr. Sextos that there were some advancements in mechanical model used for fragility assessment/post-quake form preparation, the fragility curves development for different typologies were in progress.

Further, in the meeting, a framework for experimental tests to be conducted in Nepal in April was prepared. Date for the annual workshop/seminar to be held was fixed at April 24, which would be attended by the partners of the SAFER program plus other stakeholders including representatives of the government bodies and DFID. A 5-hour workshop/seminar with 7 to 8 speakers were proposed. Progress on the SAFER App update was also shared and discussed.

28 NEW PEER MASTER INSTRUCTORS FROM BANGLADESH, INDIA, NEPAL & PAKISTAN CERTIFIED

Program for Enhancement of Emergency Response (PEER) is a regional capacity building program supported by USAID/Office of U.S. Foreign Disaster Assistance (OFDA) and being implemented by NSET in Bangladesh, India, Nepal and Pakistan.

The Regional Master Instructors' Workshop (MIW) concluded on November 30, 2018, certified 28 master instructors from Bangladesh, India, Nepal and Pakistan. These master instructors are senior instructors of the PEER courses – Medical First Responder (MFR), Collapsed Structure Search and Rescue (CSSR), Community Action for Disaster Response (CADRE) and Training for Instructors (TFI).

The MIW aims to develop potential Course Coordinators and Course Monitors within the Program for Enhancement of Emergency Response (PEER) system.

The closing program was graced by several dignitaries and senior representatives from the PEER implementing partners.

Representing the funding organization, Mr. Dustin Shiau, USAID/OFDA Regional Office in Bangkok, Thailand, encouraged all the PEER countries to continue the program processes in the local training system, for developing high quality responders. Mr. Shiau also extended USAID/OFDA's appreciation for all of the work that the beneficiary-countries have done to promote PEER in the Asian region and the responders' development in each of the country is incredible. He also added that the effective responses during disasters is the answer to why USAID/OFDA has been supporting PEER for so long. Chief Guest AIG Thule Rai, Chief of Administration and Human Resource Department, Nepal Police, has shared his observation on the huge improvements NSET has undertaken on the PEER MIW curriculum from since he participated in 2006. With this experience from the MIW, he has challenged the graduates, as the new PEER master instructors, with the bigger responsibilities of furthering PEER processes and emergency response principles.

Glimpses from the MIW:



Participants actively engage in group activities.



Teambuilding session promotes strong teamwork in the delivery of PEER courses. Individual lesson presentation acting as Course Coordinator and role play as Course Monitor provide hands-on experience for MIW participants.



AIGP Thule Rai, Nepal Police, Chief Guest in the MIW Closing Ceremony, delivering his message. MIW graduates and facilitators pose for a group photo with the distinguished guests after the closing program.

PEER TFI COURSE REVIEW WORKSHOP ORGANIZED IN NEPAL

Training for Instructors (TFI) Course Review Workshop– Nepal was conducted from October 31 to November 2, 2018 in Nagarkot, Bhaktapur, Nepal under the Program for Enhancement of Emergency Response (PEER) Stage 4 (2014-2019). The program was attended by 24 participants. Training for Instructors (TFI) is a five-day instructor development course for developing qualified instructors for effective learning and capably delivering the training programs. TFI is an essential foundation of PEER instructors' development process for the program's core courses, namely, Medical First Responder (MFR), Collapsed Structure Search and Rescue (CSSR), Hospital Preparedness for Emergencies (HOPE), Community Action for Disaster Response (CADRE), and Swift Water Rescue (SWR) courses. At present, TFI has been institutionalized by various NSET-PEER partner institutions for their internal capacity building.

Experienced and pioneer instructors from MFR, CSSR, HOPE, CADRE and SWR were gathered in the three- day workshop and discussed the overall concept, principles and methodologies of the course, including the critiques, comments and recommendations received from the TFI courses completed.

The workshop generated the following consensus:

- ✔ Maintain the overall concept, principles of the 5-day TFI as a general course for professional training in MFR and CSSR basic and instructors' development courses.
- ✔ Adapt and adopt the standard TFI course curriculum for instructors' development of HOPE, CADRE and SWR courses, as HOPE-TFI and CADRE-TFI.



- ✔ Continue the current practice of conducting TFI with team of instructors consisting of Monitor, Course Coordinator, full instructors and assistant instructors.
- ✔ Continue to organize the standard TFI for formal instructors as a residential course.

- ✔ Exercise flexibility in conducting TFI commensurate with existing facilities and resources of the host/organizing institute, especially in the Province and community levels.
- ✔ NSET is tasked to work on the TFI course materials, update as per the guidance received from this workshop and create a core group for periodic review and updating.
- ✔ In the course of finalization, NSET will seek further suggestions, guidance from the core group.

The consensus from the workshop were presented in the closing program and endorsed by the respective guests.

Some glimpses from the workshop:



Group photo with distinguished guests after the closing program.

SCHOOL EARTHQUAKE SAFETY PROGRAM (SESP) ACTIVITIES

Review and Sharing held in Japan on collaborative efforts of Team Hyogo and NSET on Disaster Education in schools

After the Gorkha earthquake 2015 in Nepal, the education sector had suffered a huge setback. In this context, the necessity of sustainable Disaster Risk Reduction (DRR) education system was felt. To assist the Government in establishing and promoting the disaster risk reduction education, the program 'Disaster Education from Hyogo in Nepal' was started through the formation of a joint consortium between National Society for Earthquake Technology-Nepal (NSET) and Team Hyogo, Japan. Eight schools of Dupcheswor Rural Municipality, Nuwakot were selected for the program's implementation with the recommendation and guidance from the District Education Office, Nuwakot. The project ran from June 2016 to December 2018. The major outcomes of the project were Development of sustainable DRR education, Reconstruction of a remote area school building and Teachers Manual and Student's workbook developed by teachers.

After successfully concluding the program in Nepal, the Closing Ceremony for the program was held at Kobe, Japan on 20th January 2019 where the program approach and components reviewed and also key learnings shared. The program was attended by Mr. Yoshiteru Murosaki, President of Team Hyogo, Graduate School of Disaster Resilience and Governance, University of Hyogo. Various Organizations, University members as well as high school students attended the program. NSET professional made a presentation regarding the project. Maiko High School students made a presentation and talked about their long history with NSET and shared their experiences visiting various schools in Nepal.

Similarly, on 22nd January 2019 a reporting session at Hyogo Prefectural Government was held at Disaster Management Headquarter, Hyogo Prefectural Government.



NEPAL SAFER SCHOOLS PROJECT (NSSP) ACTIVITIES

The NSSP is one of the programs under DFID's **“Strengthening Disaster Resilience in Nepal”** that includes a total of six programs. The major objective of the NSSP is to Support the implementation of the Comprehensive School Safety framework (Safer Learning Facilities, Disaster Management and Resilient Education) in four districts in the Far and Mid-West and Support national-level capacity in the Center for Education and Human Resource Division (CEHRD) to further develop policy and guidance to deliver safer schools. The working area of the program covers four districts- Jumla, Surkhet, Achham and Bardiya from province 5, Karnali and Sudurpaschim.

After the successful completion of the inception period, NSSP is well into its implementation phase. Meetings and consultations with the relevant Province and District officials have been going on continually. Such meetings have been held at all the four program districts.

Major Highlights

- ✔ District level consultation meeting done in all 4 N SSP districts and 17 local units were finalized for implementation of N SSP activities
- ✔ Province level consultation meeting was done in all 3 N SSP program implementation Provinces

- ✔ First round of Municipality Consultation meeting was done in 5 Municipalities
- ✔ Earthquake Safety Promotional Officers (ESPO) are deployed in NSSP districts and they are involved in regular coordination and information collection activities
- ✔ 21st ESD was celebrated in all 4 districts with different set of activities.

Earthquake Safety Day commemorated in NSSP districts, Bardiya, Surkhet, Achham and Jumla

Earthquake Safety Awareness Rally conducted in Achham District had active involvement from Nepal Police, Nepal Army, DRR stake holders, partners, students, Government officials and local community people with the national slogan "Committed governments at all levels to ensure citizen's right to safety from disasters".

Similarly, 21st earthquake day was celebrated to raise the awareness of local level and community people in Jumla with close coordination of DCC. It aims to lobby, develop and follow the policies concerning the different disasters. Various events were organized such as speech competition, Deuda competition, demonstration (Simulation) of earthquake and awareness rally with posters and play cards. The final meeting after celebration was conducted in Tundikhel of Jumla district.



The earthquake safety during the formal meeting program.

In coordination with Earthquake Measurement Center, NSET organized orientation in schools of Surkhet. The topic for the orientation was, 'Presentation about earthquake risk mitigation'. On the main day that is Magh 2, 2075, Shake table Demonstration was also conducted. The program was organized by NSET in coordination with Birendranagar municipality Surkhet and Earthquake safety *mul samaroha samiti* -2075, Surkhet. The shake table was observed by around of 200 participants including community members and government officials

DARO GHAR DIGO BASTI PROGRAM ACTIVITIES

NSET is implementing Daro Ghar Digo Basti-**Technical Support for Building Code Implementation in Nepal (TSBCIN) program** with funding support from the United States Agency for International Development / Office of U.S. Foreign Disaster Assistance (USAID/OFDA) in 30 Municipalities during 2017-2019.

The TSBCIN program focuses on assisting the municipalities in enhancing their capacities to appropriately develop and adequately administer the building permits and control systems to ensure the improved seismic performance of all new building construction.

Around 1300 people sensitized on safer construction through orientations

Awareness program is one of the major strategic components of NSET/ Daro Ghar Digo Basti (TSBCIN) program to help implement the national building code through sensitization to its various stakeholders like house owners, local community, municipal staff, political/social leaders and others. During October 2018 to end of January 2019, total 1295 people

have been oriented on safer construction techniques. Among them, 763 are community people oriented from 16 events with view to make people aware on the need of compliance of building code for earthquake resistant construction. Similarly, a total of 209 social/political leaders have been oriented through 5 orientation programs. Likewise, altogether 8 orientation program were organized to house owners benefiting a total of 194 people. Also, 129 students were benefitted through 3 orientation programs on earthquake resistance construction technology.

Around 150 masons trained through 7 mason trainings

Capacity Enhancement is one of the strategic components of Daro Ghar Digo Basti program and it is focusing on enhancing the skills and capacity of local construction workforce (masons, petty contractors) in earthquake resistant construction technology. Upon request, from the municipalities have been provided technical support to conduct training courses for masons. During the September to January, a total of 149 masons were trained through 5 trainings on safer construction. Out of them 129 were trained on earthquake resistant construction while 20 were training on retrofitting technology.

232 engineers trained on basic earthquake design

A total of 232 engineers, working in the field of building permit system, house construction, design and preparing drawings, have been trained through 9 training events across the various municipalities on Basic Earthquake Design.

189 local media personnel benefitted through 8 trainings on Earthquake Risk Management

With view to promote the engagement of local media on building community resilience and enhance the understanding on the issue, altogether 8 Training Workshops were organized for the working journalists from various media outlets across the country. Total of 189 local journalists benefitted through the trainings conducted in December 2018 and January 2019. Out of 8 events, six events were conducted targeting local radio journalists while two events were targeted to all the media persons including print media, online, TV and Radio.

Training Workshop for the Radio Journalists held in 6 cities

National Society for Earthquake Technology - Nepal (NSET) has completed a series of regional level Training Workshops organized for the working journalists from local radios during Dec 16-29, 2018. The main purpose of the program has been to enhance engagement of local radios to building community resilience. Local radios have been found very effective and influential tools to raise public awareness, educate and build better understanding amongst various stakeholders and advocate for local actions.

Total 6 number of Training Workshop held in different cities across the country where participants were from municipalities nearby. The program series conducted by NSET in guidance of host Municipalities under USAID/OFDA funded program 'Daro Ghar Digo Basti' i.e. Technical Support for Building Code Implementation in Nepal (TSBCIN).

The program was focused to enhance the basic understanding of the local radio workforce on earthquake risk management with major focus on effective implementation of National Building Code. Further, the program aimed at encouraging the local radios on production and dissemination of disaster

issues so that radios could promote disaster risk reduction efforts and the culture of earthquake resilient construction practices.

The event saw the participation of around 100 media persons including station managers, radio program producers and correspondents representing more than four dozen local radios of various urban municipalities in which NSET has been providing technical support for implementation of National Building Code.

The started from east Nepal, the first training workshop was organized at Itahari town of Sunsari district on Dec 16, 2018. There were total 17 participants from 12 radios from Jhapa, Sunsari and Morang districts. Deputy Mayor of Itahari Sub-Metropolitan City Ms. Laxmi Gautam addressed the closing of the event and stressed on the need to engage media on local initiatives. Second event was held at Bardibas of Mahottari district on Dec 18, 2018 where 24 participants from 16 local radios from Dhanusha, Mahottari and Sindhuli district participated.

Training Workshop for the local media person held in Janakpur and Damauli

Meanwhile, two separate training workshops were organized targeting media personnel from all the media outlets in Janakpur and Damauli in January. In a training workshop held at Damauli, 21 people participated while a total of 65 media personnel benefitted through the training workshops on Earthquake Risk Management.



Addressing the closing of the event, Mayor of Bardibas Municipality Mr. Bidur Karki appealed local journalists to join hands for building community resilience. In the programs, NSET professionals Mr. Suman Pradhan, Mr. Mahanand Timalisina, Mr. Hemanta Gain and Mr. Sujit Shah facilitated the sessions.

In the western Nepal, the training workshop was organized at Dhangadhi of Kailali district on Dec 23, 2018. There were 20 participants from 13 local radios from Kanchanpur and Kailali districts. Municipal Engineer from Dhangadji Sub-Metropolitan City Mr. Dij Raj Bhatt addressed the closing of the event and highlighted the efforts of municipality on effective implementation of building code.

The fourth event of the series was organized at Nepalgunj city of Banke district on Dec 25, 2018. There were 19 participants from 11 radios from Banke, Bardiya and Surkhet districts. The fifth event was organized in Gaidakot town of Nawalparasi East on Dec 27, 2018. There were 17 participants from 9 radios from Nawalparasi West & East and Chitwan. In the programs, NSET professionals Mr. Khadga Sen Oli, Mr. Mahanand Timalisina, Mr. Rabindra Bohora and Mr. Darshan Malla facilitated the sessions.

The last event of this series was organised jointly by Vyas Municipality an NSET in Damauli of Tanahun district. There were 11 journalists from 8 local radios participating. Addressing the closing of the event, Municipal Engineer from Vyas Municipality Mr. Ravindra Mul shared the journey of building code implementation in the Municipality and also appealed local journalists to work together for building community resilience. In the program, NSET professionals Mr. Khadga Sen Oli, Mr. Suman Pradhan, Mr. Mahanand Timalisina and Mr. Binod Sapkota facilitated the sessions.

During the series of workshop, participants had discussed various issues including earthquake preparedness, National Building Code, safe construction technology, disaster reporting, building code implementation strategy, and local issues of building code implementation among others.

'Daro Ghar Digo Basti' municipalities mark 21st ESD with various awareness raising activities

Municipalities implementing NSET / Daro Ghar Digi Basti program have commemorated the 21st ESD with various awareness raising activities on Wednesday January 16, 2019.

Janakpurdham Sub-Metropolitan City marked the occasion with Earthquake Safety Rally, Public Meeting, Shake-table Demonstration, Search and Rescue Demonstration and First-Aid Demonstration among others in Janakpur, Dhanusha.

A rally starting from Janaki Mandir with banners and informative placards displaying messages regarding earthquake safety. People from different walks of society participated the rally. The rally then concluded in the formal program at the Janakpurdham Sub-Metropolitan City Office which was chaired by Mr. Lal Kishor Saha, the Mayor of Sub-metropolitan city. Chief guest was Mr. Gyanendra Yadav, Internal affairs and law minister of province no. 2. A shake table demonstration was also organized by NSET on the occasion with view to spread awareness on the safer construction. A demonstration of search and rescue operation was jointly conducted by Nepal Army, Armed Police Force and Nepal Police after the shake table demonstration at municipal office. Similarly, a demonstration of first-aid or primary treatment of injured person was demonstrated by Nepal Red Cross Society, Dhanusha. On the occasion, a separate RCC and Load Bearing Model placed at the municipal office as part of constructed during the Mason Training was also briefed to the participants.

Itahari Sub-Metropolitan City, Sunsari also marked the 21st ESD with an interaction program. The interaction program, which was conducted in three parts, was chaired by Mr. Dhwarika Lal Chaudhary, Mayor of Itahari Sub-Metropolitan City. The first part of interaction program was a session with consultant engineers, the second was session with contractors and masons while the third session was a press meet and discussions with media persons.

Birendra Nagar Municipality of Surkhet marked the 21st ESD with awareness raising programs like Shake Table Demonstration, Interaction program, Earthquake Safety Rally and Street Drama. Chief District Officer (CDO) Mr. Birendra Yadav, Deputy CDO Ms. Binita Bhattarai, Mayor of Birendra Nagar Municipality Mr. Dev Kumar Subedi, Deputy Mayor Mohan Maya Dhakal Bhandari, representatives from Earthquake Measurement Centre, Nepal Red Cross Society, DUDBC Surkhet and NSET were also present on the occasion. All the events were broadcasted live through Deuti HD TV while the local media including Bheri FM, Bulbule FM and Radio Nepal also carried out media coverage of the events.

Ghorahi Sub-Metropolitan City Commemorated the 21st ESD organizing formal program on January 12, 2019. On the occasion, Shake Table

Demonstration, Public Meeting, Observation of Model Retrofitting Building among others were held. Also, Nepalgunj Sub-Metro Municipality marked the day with various awareness raising activities including Earthquake Safety Rally and Interaction program.

Nepalgunj Sub-Metropolitan City marked the day with various awareness raising activities including Earthquake Safety Rally and Interaction program. The Dhangadhi Sub Metropolitan City marked the 21st ESD with Earthquake Safety Rally, Street Drama and an Interaction Program. Mr. Bhairav Bahadur Singh, Member of House of Representative, Mr. Narayan Prasad Bidari, Chief Secretary of Sudur Paschim Province and Nirp Bahadur Odd, Mayor of Dhangadhi Sub-Metropolitan City addressed the meeting. Prior to the meeting, an Earthquake Safety Rally was held where 125 people got participated. Nepal Red Cross Society had also performed a street drama on the occasion.



Similarly, Damak Municipality has commemorated the 21st ESD with a formal public meeting and media interviews. In a meeting held at Damak Municipality auditorium hall, various issues including earthquake risks in Nepal, need of safer construction practices and building code implementation were highlighted by various stakeholders. Likewise, Kamal Rural Municipality of Jhapa also commemorated the ESD with an Earthquake Safety Rally and Interaction program at the municipality with participation of around 200 people.

Vyas Municipality of Tanahu also marked the 21st ESD with events, namely, interaction sessions, Earthquake Safety Rally and distribution of uniforms to local masons. In the interaction session, chaired by Mayor of Vyas Municipality, Mr. Baikuntha Neupane, various issues were discussed including safe construction, building code implementation, safer house designs, promoting awareness on earthquake resistant construction and many more in the presence of masons, journalists, municipal engineers, consultant engineers, contractors, chief district officer, Nepal police and Armed Police Force senior officials and municipal officials. On the occasion, an earthquake safety simulation was performed

coinciding with the 2.24 pm when the 1990 earthquake struck Kathmandu Valley.

The Mithila Municipality, Dhanusha marked the ESD with an awareness rally followed by public meeting and briefing of earthquake model at Dhalkebar. Also, the Dhangadhi Sub Metropolitan City marked the occasion with Earthquake Safety Rally and interaction program. The Kawasoti Municipality of East Nawalparasi district has also marked the ESD with various events including an interaction program at Kawasoti. Various stakeholders participated the program which was facilitated by NSET/Daro Ghar Digo Basti Program and Kawasoti Municipality.

Daro Ghar Digo Basti is a program which provides technical assistance to municipalities in effective implementation of building code. the program is being implement in 30 municipalities across the country.



Kamal Rural Municipality progressing well on implementation of Building Code

Mr. Sunil Thapa is an engineer by profession and he is currently working at Kamal Rural Municipality, Jhapa. Mr. Thapa, who joined the municipality after the declaration of municipality in 2015, is serving as a head of building permit section of the municipality. He is taking command for the effective implementation of Building Code in the municipality with view to make the municipality resilient to future disasters including earthquake.

Kamal Rural Municipality is located in Jhapa District of Province No. 1 of Nepal, adjoining to Damak Municipality, one of the highly developing municipalities in the district. The municipality has covered an area of 104.57 square kilometers and the total population is 44,365 as per the Census of Nepal, 2011. The Rural Municipality is divided into total 7 wards. The new local body was formed after merging the two separate previous Village Development Committees (VDCs), namely, Topgachchi and Lakhanpur. The headquarters of the rural municipality is situated in Topgachchi.

As we arrived at the municipality, Mr. Thapa was busy making a plan to carry out a new mason training so as it could contribute in the effective implementation National Building Code by fulfilling scarcity of skill construction workforce on earthquake resistance construction in the municipality area. The municipality has enforced Building Permit System (BPS) in consistence with the national building code lately. "The erstwhile Topgachhi VDC had enforced the BPS while it was not existing in Lakhanpur VDC. After the formation of new local body, BPS has been made mandatory at the wards of new local body including erstwhile Lakhanpur VDCs too," Mr. Thapa shares.



However, it was not an easy task initially when there were no elected representatives at the municipality. Socially and politically powerful people were often issuing threats to employee-led then administration against the plan. Rather than effective enforcement of BPS and the building code, the municipal staff were also acting on for their personal benefit. The situation has completely changed now, especially after the elections of local bodies. The BPS has been systematized and so has the building code implementation.

Being the head of engineering section of the municipality, Mr. Thapa took major initiative for introduction of BPS in line with national building code in the municipality. "The elected representatives of the municipality have also supported me on the issue," he remarks. He, however, experienced that non-trained workforce hindered that initiative. Acknowledging the fact that skilled masons are the utmost requirement for construction of earthquake resistant building, his municipality organized three mason trainings through which 98 masons got trained on earthquake resistant construction.

"The first batch of such training was conducted on April, 2018, through which 32 masons got trained. Three months after, another training was conducted for 31 masons. We somehow managed financial resources for this by transferring budget from other programs as we did not have allocated budget for mason training. The third training was conducted in February through which 35 masons have been

trained. Masons were extremely interested and excited to have such trainings," Mr. Thapa states.

In carrying out first two trainings, NSET/'Daro Ghar Digo Basti' program provided technical support for the trainings while the third was conducted with the technical and financial assistance of NSET-Daro Ghar Digo Basti program after the Municipality signed a Memorandum of Understanding (MoU) with NSET for the implementation of the building code in the municipality.



With the technical assistance of NSET, Kamal Rural Municipality has accomplished two mason orientation programs comprising 20 each existing masons, two house owner orientations, one ward level orientation comprising of social, political and community leaders. In order to institutionalize the building code, the municipality has now also enforced a licensing system for trained masons. Out of 63 masons trained by the rural municipality, a total of 45 have been issued a license. With this, the potential house owners who want to build their house now must hire these licensed masons for the construction of their new houses. The initiative of the municipality is expected to help new house owners in the construction earthquake resistant houses.

Despite the various positive steps that his municipality has taken, Mr. Thapa, however, points out that there are enormous challenges for the implementation of building code as well. The reluctant house owners are a hurdle in the implementation bid as they are often threatening municipality staffer against the enforcement of building code. Apart from that, around 150 more masons at least needed to be trained citing the rate of construction in the municipality. Besides this, there are only four technical people (1 engineer, 1 sub-engineer and two overseers) at the municipality and these technical human resources are insufficient for the effective implementation of the building code. Likewise, the new technical human resource also needed to have earthquake resistance training. Nonetheless, Mr. Thapa believes that his municipality is firmly moving ahead in this bid.



NSET
Earthquake Safe Communities in Nepal

National Society for Earthquake Technology-Nepal (NSET)

House 65, CR-13, Sainbu Awas, Bhainsepati, Lalitpur Metropolitan City-25, Nepal

P.O.Box No.: 13775, Kathmandu, Nepal

Tel: (977-1) 5591000, Fax: (977-1) 5592692, E-mail: nset@nset.org.np, Website: www.nset.org.np