

## Engaging Private Sector in Disaster Risk Reduction



### Enhancing capacities to build back better

"Almost all the houses I built collapsed in the last earthquake. The house owners still scolds me whenever they meet me. It was really a bad experience," Nawaraj Lamichhane, a mason.

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### Home stays struggling to revive it's lost 'Beauty'

It was the good alternative source of income for the families before earthquake. The project The average yearly income of the homestay was from Rs. 150, 000 to 200,000 The 2015 Earthquake totally damaged all home stays forcing them to shut down for months.

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### Reviving ponds to strengthen fire preparedness

What seems to be a gutter flowing across the city of Shankhu was once most celebrated water canal that flowed along the door step of nearly 1000 household located in 8 Toles (small villages) of the settlement. While few artistic stone spouts are taking their last breath to remind this generation what water management system of Sankhu, the PRAGATI project has joined hands with the elected bodies to restore some of the ponds in the area, for fire preparedness and tourism.

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### Still a long way to go

The base line survey of PRAGATI project concluded that the level of preparedness for disaster risk management at the household, community, local government institutions, and private entities is still weak and that it needed more intervention.

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ISHWAR RAUNIYAR



PRATAP MAHARJAN

## Enhancing capacity to build back better

**The April 2015 earthquake, on a positive side, provided opportunities for women to lead the post-quake reconstruction works and taught more resilient masonry skills to those following traditional methods previously. This will help build better Nepal and prepare for future mega disasters.**

■ **Ishwar Rauniyar**  
Communication Officer

It's a sunny afternoon. On the foothills of Nagarkot in Bhaktapur district, a group of 23 youths are following their instructors on construction of an earthquake resilient building. The instructors ask them to follow every step and techniques taught during the theory session. A number of the participants are preparing a concrete mixture of sand, pebbles and cement, whereas some are fetching water from the tap nearby and the rest are busy reshaping iron rods to fit in the structure.

The construction site looks a bit messy with the deposits of construction materials (sand, pebbles, cement). The scenic beauty of Nagarkot seems to encourage trainees to learn new things despite chilling wind.

A young woman with a helmet is busy helping measure the iron rod as they prepare to build a demo wall. Her enthusiasm to learn building techniques challenges the notion that women should not take a lead.

Tulasha Maya Suwal, who hails from ward number 9 of Changunarayan Municipality lost her house during the earthquake. She told that her brothers advised her to take part in construction activities immediately after the earthquake as there was a human resource crunch.

"Since then I am helping my brothers as a labourer to construct buildings," she says. "Also, it helps me get rid of the monotony caused by staying idle at home."

She was spotted by the local government authority – the ward office – to take part in this training. "I was contacted by a local official and was offered this training," she says. "I was lucky to come here as I got to learn new lessons" Tulashi is now confident that she can supervise the building construction using the techniques learnt from the training.

"I also joined in order to change the

## Masons Trained

The PRAGATI project conducted mason training on Earthquake Resistant Building Construction Techniques for urban masons of Changunarayan and Sankharapur Municipality. The training comprised of 23 local masons among whom 9 were women in Changunarayan and 20 masons (six women) in Sankharapur Municipality. It was based on the Department of Urban Development & Building Construction (DUDBC)'s seven-day curriculum and a day-long interlock block technology as an alternative building technique. The training helped enhance the capacity of these masons to implement earthquake resistant technology in their upcoming construction works.

Specific objective of the training was to create awareness about seismic hazards on structural system among the participants and provide basic knowledge and skills on earthquake safe building construction procedures to masons. The purpose of the training was to enhance the knowledge and skills of existing skilled workforce involved in building construction business like masons, carpenter, steel fixer/ bar benders and local petty contractors who work as head mason and overall in-charge for house construction. There were good participation of female masons as well.

perception that women cannot partake in the works other than their kitchen. We can do everything given the support of our family members to let us go out to work," she added. She urges other women to come forward and participate in rebuilding Nepal.

The earthquake has been an eye-opener for many masons who had followed traditional modes of building houses in the past.

"Almost all the houses I built collapsed in the last earthquake," shares Nawaraj Lamichhane, one of the participants in the training. "The house owners still chide me whenever they meet me. It was a really bad experience," he added.

"I have realised there was something wrong with my building method. We did not care about using bracings while building houses – which, I now realise, is one of the main factors in strongly propping the house up."

He shares that masons like him didn't follow the techniques of building earthquake resilient houses because of ignorance and hurry to complete the construction. Moreover, house owners preferred the existing modes fearing additional expenses. Tulashi and Nawaraj are confident that the new training will enable them to construct earthquake-resilient buildings. "The demand of trained masons

is likely to soar, hence this training will help me get more jobs," says Nawaraj. He shared that some house owners now demand to see training certificates to verify the qualifications of the masons.

The Post Disaster Needs Assessment (PDNA), conducted immediately after the earthquake, estimated that the reconstruction of almost 700,000 houses, destroyed either fully or partially in the 2015 April earthquake, would require at least 50,000 'trained' masons.

The European Commission Humanitarian Aid and Civil Protection Department (ECHO) funded PRAGATI project provided training to 23 masons comprising nine women from Changunarayan Municipality. The project believes that they will play pivotal role in building back their communities. Similar training will also be conducted in Sankharapur Municipality. Participants were assessed and finalised by the municipality and local ward office. The project coordinated with these offices to have the final list of the participants.

Over the time, the trainees will be skilled masons. This will also encourage them to work in their communities and earn better wages. As a result, they will not be compelled to opt for foreign employment. If they plan to do so, the training certificate will help them get better opportunities abroad.





ROJAN SHRESTHA

## Reviving Ponds to Strengthen Fire Preparedness

**What seems to be a gutter flowing across the city of Shankhu was once most accessible water canal that flowed along the doorstep of nearly 1000 household located in 8 Toles (small villages) of the settlement. Few artistic stone spouts are gaping dry to remind this generation of the source of the water in Sankhu in the past. The PRAGATI project has joined hands with the elected bodies to restore some of the ponds in the area, mainly for extinguishing accidental fire and to promote tourism.**

**PRATAP MAHARJAN**  
Project Coordinator, NDRC

In ancient time, ponds and canal were key components of water management system in the cities. There were three major components in the system (i) the rajkulo (the water canals), (ii) the ponds and wells (iii) stone spouts. The system integrated these components to ensure water delivery at doorstep and avoid wastage. The rajkulo was meant to irrigate the agriculture land, recharge the ponds and also for daily chores. "The ponds are meant to recharge ground water and manage micro climate. From a disaster control perspective, people managed to have water in their community to put off fire since they didn't have fire brigade back then," says



Pramod Simkhada, Chief Executive officer of Shankharapur Municipality. The wells and stone spouts were the major source of drinking water. Altogether 18 stone spouts (nine inside the settlement and nine outside) served people for different purposes. At present only five are functional.

With the change in water supply system these wells and stone spouts, ponds and rajkulo are gradually losing their value. Wells are used when there is no alternative to drinking water or when supply falls short. The older generation still values them. Though many of the younger generation are "aware" of its value it is merely part of their daily life. Owing to the unmanaged urbanisation, the route of the rajkulo was disturbed, the "gifts" of modern society (plastic waste particularly) clogged the route while inadequate maintenance resulted in deposit of sediments narrowing down the rajkulo, a major supplier of water for ponds and hence operation of the entire system.

These entities of water system were integrated with the utility and cultural values that ensured their conservation. Some ponds are symbolic

such as kalash pokhari represents "kalash" (good omen) while entering the city through "bhau dhokha" (a gate specified for entry of new brides in the settlement). The lotus from the "pala pukhu" is offered to Bajrayogini temple- one of the main goddess for the city. A pond is an important part of the Gatha Mangal festival. Besides cultural value, these water resources held importance from disaster response perspective- particularly fire. The settlement is compact and dense; possibility of spreading fire is very high. Hence, having the sources of water close was the most practical way to put off accidental fire.

Hazard identification process has reckoned fire as a major hazard after earthquake in the settlement. Although the municipality is in the process of managing fire brigade, it is difficult for them to navigate through the narrow lanes. Hence, not having water resource in the settlement poses higher risk of damage in case fire starts.

"The problem is not only with availability of water in the settlement for other usage but also, for the fire brigade," says Radha Krishna Shrestha, Chairman of Ward Number 6, "Fire brigade has to come from Kathmandu and go back to Mahankal or Salinadi (a holy river near the settlement) to refill water. By the time, the fire is likely damage most part of the settlement.. Recent examples have also shown that having water within the settlement was pivotal in controlling fire and reducing the loss. There is no alternative to managing water in the settlement."

Ponds and wells located in the strategic location of each tole are crucial for the fire preparedness. However, these need renovation and conservation. "Pala Pukhu" (lotus pond), one of the biggest pond in the settlement was gradually being buried before earthquake of 2015 while after earthquake people dumped their rubbles in the pond. The pond could hold nearly 800,000 – 1 million liter of water, which can be used in any fire outbreak in the settlement. The members of ward number 7 has already started its work to bring the pond into life. And, European Commission funded PRAGATI project has already joined hands to

make this a successful project.

Similarly, on the other side of the town, Ward 6 has taken a lead to conserve and renovate the "Kalash Pukhu". "Fire preparedness is definitely in mind. It will hold more than 600,000 liter of water even if it is half filled which is important during fire outbreak," shares Shrestha. There is a hospital, police station and two schools nearby along with a dense settlement which can benefit from it.

### Sustainability

Construction of the ponds has to be complemented by its maintenance and sustainability. For the purpose, its utility has to be defined. "Therefore we have proposed renovation of the pond in a way that it becomes attraction to domestic and international tourist," says Shrestha. In that way the community will be motivated to conserve the pond. Nevertheless, its longevity depends on the maintenance of the rajkulo. The Wards have already taken lead to that effect. The pond is being renovated at a budget of nearly Rs. 1,75,00,000 (175,000 USD) within three years. The ward has already secured Rs. 21,00,000 (21,000 USD) budget from Municipality, District Coordination Committee and a hospital. PRAGATI project is also contributing nearly Rs. 560,000 (5600 USD) for the structural integrity of the pond. The project is also supporting to identify the private sector that can invest in renovating this pond.

They are hopeful that they, will be able to collect the fund needed for the renovation of the pond. Along with this the project will also sensitize on value of conserving resources and heritages like water system from overall disaster perspective not confined to fire preparedness. This is one of the first initiatives of the ward and municipality to conserve the water system of Sankhu that integrates heritage conservation and disaster preparedness at the same time. Community might perceive existence of these heritages in different way. It cannot be claimed that water in pond will strike fire preparedness in everybody's mind but important aspect is they will have water when they want to extinguish it.





SHAKTI GURUNG

## Tapping the untapped – Private Sector on Disaster Risk Management

■ **Cecial Adhikari**  
Consortium Manager

Among others, engagement with the private sector on Disaster Risk Reduction makes PRAGATI Project unique. PRAGATI is an urban Disaster Risk Reduction (DRR) project being implemented in Sankharapur Municipality in Kathmandu and Changunarayan Municipality in Bhaktapur District. Realizing the importance of partnership with private sector, the project is working closely with the private sector, identifying areas of collaboration and investment, building their disaster risk management capacity and preparing them for effective response. The project has facilitated the preparation of Disaster Risk Sensitive Tourism Development Plan (DRSTDP) for Changunarayan municipality. It is working with hotels and homestays together with small and medium enterprises in both the municipalities by providing technical support on preparation of their business continuity plans.

The 2015 earthquake in Nepal incurred massive damage throughout the country

affecting eight million people. The death toll crossed over 8,000, injured 20,000 and a half-million homes were destroyed. Housing was the most affected sector including schools and hospitals. There was also significant impact to the tourism industry. This has highlighted gaps in resilience – particularly in business continuity planning and implementing and enforcing building policies and standards.

The project location, Nagarkot, in Changunarayan, is a hill-side touristic destination for both non-Nepalese and Nepalese as weekend gateways. It is particularly famous for sunrise views of the Himalayan range including the Mount Everest. More than 60 big hotels, around 35 homestays and 150 restaurants were damaged due to the earthquake. Another project location, Sankhu, in Sankharapur, is an ancient historical town. It is one of the oldest settlements in Kathmandu with the abundance of houses built of burnt and unburnt clay bricks. An

assessment showed more than 90 per cent of the buildings, mostly traditional houses, were completely damaged.

The project municipalities are the worst affected areas within Kathmandu Valley. However, there is no authentic records of losses incurred. Therefore, the project is currently documenting the earthquake memories that will archive the damage and losses through the digital stories.

Against this backdrop – PRAGATI Project was designed to work with the private sector along with the municipalities as they are two sides of the same coin. During the project design, various consultations were commenced with the private sector entities in both the municipalities such as hoteliers, Homestay Association, Local Tourism Development Committee, representatives from construction materials suppliers such as interlocking cement bricks and timber, food grain processing factories including rice and lentil mills and a private hospital.

This note has been prepared highlighting the benefits of working with private sector based on the review of number of relevant documents, experience and initial learning gained during the project implementation, consultations with the experts and the local private entrepreneurs.

The project aims to deepen the understanding of the private sector engagement on disaster risk reduction. The project has completed the stakeholder mapping, assessment of potential investment by the private sector, undertake risk assessment of hotels and homestays and formulation of disaster risk sensitive plan for homestays. Through these several activities and consultations, the project has been able to establish more understanding on the potential avenues for the engagement with the private sector on disaster risk reduction contributing to the tourism sector of the country including underlying challenges and opportunities.

It is pleasant to observe that the private sector was very active during the immediate response to the earthquake. They coordinated

relief efforts such as collection of relief (goods and cash) materials amounting to millions of Nepali rupees and contributions to the Prime Ministers Relief Fund. However, despite substantial contribution the role of private sector has been largely undocumented. In every emergency in Nepal, private-sector assistance is crucial and has been making a real difference. One of such examples observed during the earthquake was that buses belonging to private schools and transport companies were provided to evacuate people from Kathmandu and in some other hard-hit areas.



ROJAN SHRESTHA

Tourism Vision – 2020 has envisioned “Tourism is valued as the major contributor to a sustainable Nepal economy, having developed as an attractive, safe, exciting and unique destination through conservation and promotion, leading to equitable distribution of tourism benefits and greater harmony in society”. This vision of making it safe calls to build resilience in Nepal’s travel and tourism industry and provide important inputs in developing national roadmaps for safer businesses.

Nepal remains at risk of earthquakes and many other natural hazards. The experience of the 2015 earthquake underlines the importance of strengthening partnerships between the public and private sectors to prepare for future emergencies by charting stronger business continuity, worker safety, environmental and risk management measures, insurance solutions to manage risk, and simplifying customs processes during emergencies.



Private sector has role at each stages of the disaster risk management: engaging in disaster risk reduction by protecting its own investment and business from potential disaster risks and being resilient it can generate employment and produce and supply goods and services during emergencies. It will result in building resilience of its employee, consumers and service seekers. Similarly, they can also support as a medium to build community resilience. Disasters disrupt daily life including routine business. Therefore, proactive measures are required such as prevention and risk mitigation initiatives rather than reactive approach. It is strongly suggested that the private sector's engagement during disaster response should extend beyond fundraising and providing to temporary relief.



PRATAP MAHARJAN

At present, many businesses in Nepal have integrated CSR and philanthropic activities into their operations. Some business houses, companies and banks are in the forefront of CSR activities in the country such as Nepal Telecom, Chaudhary Group, Standard Chartered bank, Bhat Bhateni Markets etc. The CSR is among other potential opportunities to be tapped for investment on the Disaster Risk Reduction. However, during the discussions, it (not I) that the regulations and compliances towards CSR is not clear amongst the stakeholders.

The government and the private sectors must work together to make the businesses and communities more resilient to future disasters. These two entities are often stereotyped

as in conflict or in lack of understanding with each other. The major challenge is to create a dialogue and to establish a constructive relationship before crises arise. A structured, detailed and well thought out process is needed for these sectors to work together. Both need to learn how to better communicate with each other.

The earthquake's devastating effects demonstrated the need to update, strengthen and enforce Nepal's building code. It allows for the construction of low-strength masonry such as unreinforced masonry with mud mortar. However, according to the PDNA, it was noted that most of the buildings categorized as fully collapsed were built of low-strength masonry. This necessitates that the Building Code should not only be updated but also implemented and enforced more comprehensively.

The project undertook mapping of the potential investment by the private sectors in various phases of disaster risk reduction. Many small to medium private enterprises were found to be active in both municipalities. The enterprises that exist in both the municipalities can be divided into five major sectors i. Production sector ii. Service sector, iii. Social sector, iv. Financial sector and v. other private sectors (small retailers).

The production sector mainly includes brick kilns that is currently operating in both the municipalities. Majority of them are producing fired mud bricks. Few have adopted new technologies such as 'interlocking brick'. This technology has proven to be earthquake resilient, environment friendly and cost effective too. There is growing demand of the interlocking brick in both the municipalities and beyond.

The Service sector includes hotel and restaurants businesses, especially in Changuharayan Municipality. The Social sector includes private hospital and private schools. There are also financial institutions, mainly cooperatives and private banks. There are many small retail shops in both municipalities. These shops include grocery,

hardware shops, clothing store, and general stores. There are many home-based businesses, but unrecorded. However, they could be instrumental during the time of crisis.

Currently, damaged hotels are being (re) constructed. The hoteliers point out their own negligence as the main reason behind the major damages of their infrastructure. After the earthquake, many of the newly constructed hotels have mandatorily followed earthquake resilient techniques. Hoteliers in Changuharayan Municipality have extensively invested on building safeinfrastructure. They are rebuilding houses with column pillars which are known to have greater strength. Hoteliers have been found investing in training their staffs on DRR on regular basis. Hoteliers interviewed shared that customers' preference for safer place to reside during their stay is a driving factor for making additional investment.

Brick kilns factories have switched to innovative technology like interlocking bricks foreseeing potential business opportunity after the earthquake. This technology is gradually accepted by private house owners for building their houses. It was noted that more than 100 houses have followed this technology and only limited people in the municipality are aware of this technology. The brick producers are willing to invest on the promotion of the interlocking technology in collaboration with the local government authorities.

In both the municipalities, the municipal councils have allocated approximately USD 50,000 of the annual budget to execute disaster risk reduction activities. However, it was noted that there is lack of clarity on where and how the allocated amount will be spent on DRR. Despite the allocation of the municipal budget for DRR, plans and priority activities to utilize the budget is lacking in both the municipalities.

The municipalities are charging Rs. 300,000 from a brick kiln as a royalty. The authorities claimed that the money generated will be used to execute environment friendly

activities, including DRR in the municipality. This is a good example of an innovative financing scheme. Such schemes need further promotion and leverage with public finance to scale up.

Disaster Risk Reduction Management Committees are formed in both the municipalities under the leadership of municipality office. But private sector representation is missing in these committees. Similar committees are formed at ward levels too. These committees will have active roles in responding to disaster and also in planning, prioritizing, funding and executing disaster risk reduction activities in the municipalities. Absence of private sector representation in these committees is a 'missed opportunity' to interact and engage private sector with public and development actors to collaboratively work in minimizing disaster risks in the municipalities.

Hotel Standard Guidelines 2014 of Department of Tourism requires first aid box and firefighting equipment, provision of fire resistant furniture, arrangements of elevators, emergency exits, safety signage in different sites in hotels and lodges as the minimum requirements to ensure the safety of the employees and guests. It has been noted that these safety measures are only partially compiled to by the hoteliers.

The project has made strong presence in both the municipalities. Building on the foundations, the priority action for project is to play the role of facilitator and lobby for the representation of private sectors in the disaster management committees, and facilitating for a platform for interaction between municipal authorities and private organizations. This will also enhance a trust between the municipal authorities and the private sector. The project plans to identify "champions" among the private sectors willing to invest on DRR. The outcomes of the VCA will provide road map for the municipality to invest for DRR activities from their municipal budget. The project has also been promoting hotel resilience certification involving municipalities and private sector umbrella organizations.



INTERVIEW

ISHWAR RAUNIYAR

## “The Projects should respect the need of the communities.”

**Subarna Shrestha has been serving as Mayor of Sankharapur Municipality in Kathmandu for the past one year. For the second issue of the PRAGATI newsletter, Mayor Shrestha spoke to Ishwar Rauniyar, the Communication Officer of PRAGATI Project, about his views on the role of development partners in Nepal after the earthquake. Excerpts:**

### **How do you see the reconstruction in Shankharapur?**

Shankharapur Municipality was one of the most affected areas during 2015 earthquake. Nearly 6000 houses were damaged partially or completely. Numerous culturally and traditionally significant monuments were also damaged. To be honest, reconstruction was not gaining any pace at the beginning; it is slightly gaining the pace but still it is not satisfactory.

### **What could be the main hurdles and gaps for slow pace of reconstruction?**

I find inadequate awareness as a major reason for delay. Those whose houses were completely damaged had a misconception that the government will provide all required

support to reconstruct their house. Because of the same they were less motivated to construct their house with their own resource. Neither the local government clarified it nor the affected people realize it earlier. Hence reconstruction was slow. After living in temporary shelters for more than 2 years post earthquake with little support coming from government, they have realized that government has just extended minor support for reconstruction. Ever since number of people reconstructing houses has increased.

### **In the post earthquake scenario, many NGOs, INGOs have come to Shankharapur to work. How do you see their engagement?**

With financial support from Oxfam, Lumanti

Support group for shelter, Homenet, Lutheran World Relief are working in the most affected area. Lumanti has provided technical support to the community facilitating the administrative process and development of house design. This has also helped in increasing motivation of people and pace of reconstruction. Homenet supported in livelihood recovery of the people whose home based enterprise was disrupted by the earthquake by providing those materials and working space to earn their living. WHR also supported single women to recover their livelihood.

Recently PRAGATI project is added to the list which is more focused on urban disaster risk reduction and is carrying activities aligning to need of municipality. I believe, along with recovery and reconstruction from different projects, this project will be helpful to build back better and prepare the community for future disaster.

### **The PRAGATI project is working on developing information management system along with other DRR activities in the municipality. What additional activities are required to achieve the vision of the municipality?**

Information management is most needed in this digital age. Initiative taken from PRAGATI project is appreciable as it will help the municipality to strengthen its communication for better preparedness and response of disaster and support development activities in the municipality.

Shankharapur has very minimum internal resource as most of the municipality areas is rural. It is very much dependent upon the fund from the central government, therefore is not in state to invest massively over different sectors. Disaster management is one of them. Having said that, we also realize that we are at risk from different hazards. For instance, the core settlement of Sankhu is dense and compact, fire hazard has kept all the settlement at risk. With the rugged surface and number of hills and hillocks, and rivers we are also at risk of landslide and flood in different parts of the municipality. In this

regards, PRAGATI is supporting the different search and rescue materials and fire safety materials. We are already in dialogue with PRAGATI team to construct space to store those materials.

Along with this, we have also discussed to modify the training to incorporate personal fire safety and rescue to the public and private entities. Since the project is focused on these ward 6,7 and 9 that are prone to fire hazard, having such training is important.

### **What is the main need of the community in the post earthquake scenario?**

Shelter is the main need of the community. Majority of the disaster affected people have received the first installment of the support from the government. Around 40% of are receiving the second installment. It is understood by now that the amount provided by the government is not enough for people to reconstruct their house. People need to invest their resource as well for construction of house. But as they do not have additional source and are dependent upon agriculture they are bound to work in their field to earn their living and are not able to engage much in reconstruction. Therefore, the pace of reconstruction is slow. In this condition if we can introduce some hardware activities particularly support in reconstruction of house, it will be appreciated more in the community.

### **Do you have any messages to NGOs and INGOs interested in collaborating with the municipality for different activities?**

We have been meeting all NGOs and INGOs to gather information on their progress and plan. We will now check the relevancy of the activities to the municipality and encourage modifying the activities to meet need of the community. Further, I would to say that all projects have to be developed based on the need of community and should match the context of the municipality. We are happy to provide every support required but the project should be developed in consultation with community and municipality to fulfill their need.



# Homestay struggles to retain its lost 'beauty'

■ **SHAKTI GURUNG**  
Project Coordinator, FSCN

Nagarkot Community Homestay is located in Bastola Village of Changunarayan Municipality. This homestay location is 11.3 KM North East from Tribhuvan International airport. This homestay consists of 17 units.

It was a good alternative source of income for the families before the 2015 earthquake. The PRAGATI project's stakeholders mapping action has identified that average yearly income of the homestay was from NRS 150,000 to 200,000.

The 2015 earthquake damaged all homestay units forcing the operators to shut down their services for months.

"All the units were damaged by the quakes and aftershocks and for many days and nights our families stayed under a tent," says Suraj Bastola, President of Nagarkot Community Homestay. "We had to cancel all the advance bookings due to the damage."

He shared that the business thrived well and they were also planning to launch effective promotional activities. Unfortunately, the earthquake destroyed not only the houses but the future prospects the business could bring on.

Each homestay unit was the home of 17 families. All of them have red stickers that



ALL PHOTOS: ISHWAR RAUNIYAR

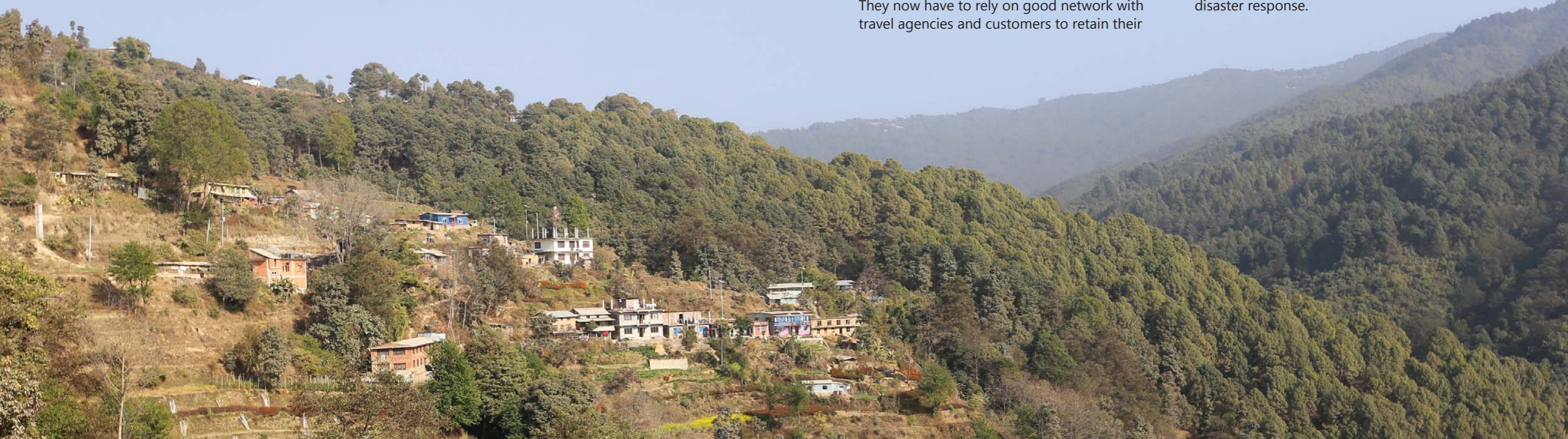


make them eligible to receive the government grant but some policy constraints are discouraging them to go for reconstruction. As per new policies, these homestay families are compelled to allot a part of their land for the road access leaving very limited area of land for reconstruction. They need to follow the policy in order to qualify for money to be received from the municipality. Some of the families are investing their own money to reconstruct the houses on the land where they exactly stood before.

Till now only 3 of the 17 units are reconstructed and are under operation. However, for the three units, it took almost two years to get their first customer. They now have to rely on good network with travel agencies and customers to retain their

business. Overall, it is a tough road ahead for the operators to resume their business as before or to run it better.

Currently they are also planning to construct one community building which can also be used as a safe shelter during future disasters. Project PRAGATI is supporting these homestays for the formulation of household level Disaster Risk Management Plan and to develop risk sensitive business contingency plan so these homestays can enhance their capacity for disaster preparedness and resume their business during and immediately after the disasters. The project also provided First Aid and Search & Rescue training to some of the active members to enhance their preparedness capacity for future disaster response.





# Still a long way to go

**The 2015 earthquake woke up Nepalis to imbibe many lessons, including for those government and non-governmental organizations that had long been talking about earthquake preparedness.**

**Chandra Laxmi Hada**  
Urban DRR Advisor

The base line survey of PRAGATI project concluded that the level of preparedness on disaster risk management at the household, community, local government institutions, and private entities is still weak and that it needed more intervention.

This note is prepared to share the major findings from the baseline of the PRAGATI Project conducted in Shankarapur Municipality in Kathmandu and Changunarayan Municipality in Bhaktapur district. The survey has been able to establish the baseline value for the indicators against the Specific Objective and Expected Results. This will be useful for monitoring the progress and the achievements made by the project. The project has also established a robust M and E systems with appropriate M and E Framework and monitoring tools. The progress is being monitored in quarterly basis through the indicator and activities tracking sheet

The survey consisted of qualitative and quantitative data collection. Primary information was collected through household survey, consultation meetings, key informants' interview (KII) and focus group discussions (FGDs). The sample size of the household survey was 400 proportionately divided into the study districts, municipalities and wards. The sample size was derived from statistical calculation based on the simple random sampling with 5% margin of error. Household information was collected through the use of Magpi – mobile application. Secondary information was collected through various published and unpublished documents.

The survey commenced number of consultations with the government stakeholders at district, municipality and



ISHWAR RAUNIYAR

ward level. Focus Group Discussions (FGDs) were conducted one in each project ward with the beneficiaries including vulnerable people such as women, men, Dalits, minorities and people with disabilities through a structured assessment checklist. A total of 23 KIIs were undertaken including the elected representatives and officials of wards and municipalities, teachers, health post in-charge, managers of hotel and brick industries, Chairperson of Nagarkot Community Homestay, and Director of private hospitals. Similarly, observation of brick factory, homestays, hotels, schools and health post were conducted during the field visit.

## Major Findings

The findings of the study concluded that the major disasters in the project area are earthquake, fire, air pollution, road accident and strong wind. The level of preparedness for disaster management at the household, community, local government institutions, and private entities was weak in the entire study area. The study found that all are in initial stage including underequipped Government organizations and human resources with limited knowledge. Establishment of the information management system is challenging due to the transitional phase of recruitment process of human resources.

There were no Municipal and Ward Disaster Risk Management (DRM) Committees in both municipalities. And, also the Disaster Risk Management Plan and Emergency Preparedness and Response Plan were not developed. There were 29 elected representatives at municipalities and wards in the project area. However, none of them were oriented on DRM. Both municipalities were well endowed with human resources. There were 79 personnel working at 5 private entities. But none of them were trained on DRR information management system.

During FGDs and KIIs, it is pointed out that there was no early warning system in the project area. However, the community people used to circulate the pre-disaster information to the community people in traditional way. Altogether 60.8% respondents replied that they did not have knowledge about the first informant.

**95.2%** had knowledge about earthquake | **83.8%** had knowledge about landslide

**67.8%** fire | **35.8%** storm | **30.2%** thunderbolt

**42.5%** HHs reported severely affected by any types of disaster during last two years

**26.2%** air pollution | **15%** aware about early warning system

**4.5%** had household preparedness plan | **87.5%** said the communities did not have rescue materials

**83%** said no efforts made by the communities to reduce the losses | **60%** said they did not have any supporting institutions to mitigate risk

**24.2%** prepared for timely response during emergency

**1.9%** of people could recall three safer locations in their community and house

**5.9%** people reached through IEC on DRR

**4.5%** people covered by early action/contingency plan

**20%** of private entities implement safety and resilience standards

**4.5%** people participated in interventions that enhance their capacity to face shocks and stresses

Out of 400 households, only 4.5% (18 HHs) had household preparedness plan while 74.2% respondents had knowledge about one or more locations when they were inside houses and 62.5% replied about safer locations in their community.

When asked about rescue measures, 87.5% respondents reported that they did not have rescue materials in their community. 83% of the respondents replied that no efforts were made by the community to reduce the losses and impact of disasters during last 2 years. 60% respondents replied that they did not have any supporting institutions and agencies to mitigate the risks of disasters in their community.

Private entities including chimneys, micro industries, hospitals, and hotels and homestays were interviewed to explore their infrastructural safety and resilience standard, and involvement, participation and contribution for DRM with local authorities and communities. None of them had DRR preparedness plan. They had almost negligible involvement, participation and contribution for DRM with local authorities and communities. Chimneys were emitting smokes extensively causing air pollution.



## Earthquake Safety Day

The PRAGATI project organised several programmes to mark Earthquake Safety Day on Jan 16, in Changunarayan and Sankharapur Municipality.

### Changunarayan

- Awareness Rally was organized on the occasion of 20th Earthquake Safety Day in collaboration with the District Disaster Management Committee and Nepal Red Cross Society, Bhaktapur. It was organized to spread awareness on earthquake safety measures, disaster prevention and mitigation messages, preparedness, importance of following Nepal National Building Code through play cards. In the rally, 47 people participated directly and awareness messages could reach to more than 500 community people of the surrounding area.



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- Disaster Risk Reduction and Management Act orientation program was conducted on 19th of January for the local representatives of 9 wards of Changunarayan Municipality. Mayor, Deputy Mayor of Changunarayan including Deputy Mayor of Suryabinayak Municipality participated in the program. The orientation helped enhance their knowledge and understanding on the provisions of the Act. Local representatives understood their responsibilities and legal mandates to mainstream DRR into development plans.

The program helped sensitize the local representatives to internalize DRR activities along with the development activities. They expressed their commitment to internalize DRR safety measures at ward and municipal level. The Deputy mayor of Suryabinayak Municipality was motivated to conduct the similar events in her municipality. She said that the programme was very effective. She will also organize similar kind of program in her municipality.

- Interaction program on "Role of Private Sectors on DRR" was also organized on 19th of January. The program was focused to orient and sensitize the private sectors of Changunarayan Municipality on the importance of their role to reduce and manage the risk of disaster. There was presence of representatives from private cooperatives, homestay operators and schools. They were sensitized on ways the private sector can support disaster prevention/mitigation and preparedness.

### Sankharapur

- Earthquake Safety Day was observed in Shankharapur by organizing an interaction program on "Engagement of Private Sector in DRR" in collaboration with Local Disaster and Climate Resilient Committee, on January 16, 2018. The general objective of the event was to sensitize on role and potential contribution of private sector to develop a resilient community. The event specifically aimed to, (i) Inform the stakeholders on provisions made in national plans and policies on engagement of private sector for DRR and (ii) Sensitize the stakeholders on potential areas of engagement of private sector in DRR of Shankharapur municipality. The event was attended by Mayor, Deputy Mayor, Chief Executive Officer, municipality staff, local elected representatives (Ward chair, representative), Ward secretaries, representatives from health institutions, education institutions, representatives from civil society, community based organization, media representatives, financial institutions, women group, disaster management committee and area improvement



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committee. In total, 51 persons (16 females, 35 male) participated in the program. The event has supported to bring the private sector and government together to create a conducive environment to discuss and engage private sector in DRR initiatives in the municipality. Also, the platform has helped surface the interest of the private sector particularly brick manufacturers and banks to engage in reconstruction process provided the municipality clarifies the legal provisions for the engagement.

- Street Drama Performed: A street drama on earthquake safety was performed on 25th January in Chalakhutole of Sankharapur Municipality. The drama performed by Dabali Natak Samuha (a locally registered drama company) drew nearly 200 spectators on the day. The principle objective of the drama was to raise awareness on DRR through street drama/community theatre in Shankharapur Municipality. The specific objective of the assignment was to aware community to build back better, construct resilient houses and communities considering multiple hazard. The drama aimed to sensitize people on do's and don'ts during the earthquake, safe building practices, compliance to building codes and use of quality materials to meet safety standards. The drama also conveyed message to hire trained masons and engineers to construct houses. The activity has helped to raise awareness on earthquake safety and reiterated the need of following building codes and getting approval from municipality for safe construction. All in all, the initiative would ultimately encourage the locals of Shankharapur- 6 and 7 to build back better, specially in the earthquake-affected communities therein.

## Exposure Visit to National Emergency Operation Center (NEOC)

The Mayor, deputy Mayor, chief executive officer, security force representative, IT personnel, media professional, computer operators, ward chairpersons of project areas (ward 6, 7 and 9 of Shankharapur and ward 6 and 8 of Changunarayan municipality) were oriented on roles and responsibilities of Emergency Operation Centre. The authorities were taken for a visit to the NEOC on 22nd February, 2018 where the chief of NEOC described about the legislative obligation to establish Emergency Operation Center (EOC) at the municipality level, along with other provisions of Disaster Risk Reduction Management Act. He also explained the functions and minimum requirement of EOC



and its importance for DRR. "Information management and coordination is soul of the EOC, it is non-negotiable for the establishment of EOC," he emphasized. The participants were also taken around the NEOC and informed on procedured of information management and communication. They were sensitized on need and requirement of EOC. The activity will help in motivating the authorities for establishment and functioning of EOC in the respective municipality which will ultimately support in improving emergency response capacity of community through availability of required information and proper coordination.



## Workshop on “Sensitization on Implementation of Nepal National Building Code to the Private Sector”



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On 28th February, a workshop was organized on “Nepal National Building Code (NNBC) and Role of Private Sectors to implement the NNBC. The program was jointly organized by PRAGATI Project and Changunarayan Municipality with the aim of sensitizing the stakeholders directly or indirectly responsible to the implement the NNBC. The private sectors such as bank and financial institutions, insurance companies, construction business, journalists, municipality, tourism entrepreneurs and members of Home Stay Association actively participated in the workshop. The Deputy Mayor and coordinator of the Municipal Disaster Management Committee, BinaBastola, urged the stakeholders to do

their part for the effective implementation of the NNBC. The DUDBC building code section engineer presented on building code and highlighted how private sectors could support to implement it.

He shed light on several provisions in building code that facilitates the earthquake affected people to rebuild the houses in case engineers are not available. Lack of clarity regarding some important information in the building code has hindered local people to put it into practice. Municipality along with the project has been thinking of spreading awareness to the affected community about the simple and easy provisions of constructing earthquake resilient houses to accelerate the reconstruction process.

In the workshop, engineers from DUDBC Bhaktapur division office shared that more than 90% of the building in Bhaktapur have not followed the NNBC which has increased the risk of damage during future disaster, especially earthquake. Representatives from bank and financial institutions highlighted the need of safer investment and use of Corporate Social Responsibility (CSR) budget in Disaster Risk Reduction activities.

## Basic First Aid Training

A three-day long basic first aid training was conducted for 24 members for the Task Force Team, in the technical support of Nepal Red Cross Society, Bhaktapur. The team included representatives from the communities and private sectors. This team will be kept intact as to support during any disaster as well as other emergencies. Objectives of the training were to enhance knowledge and understanding on disaster management, introduce concept, principle and process along with objective of first aid, to discuss and determine do’s and don’ts of first aid during an emergency and to enhance knowledge and skills regarding first aid.



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## Training on Community Search and Rescue

A five-day long training on community search and rescue was conducted for the 24 team members of a task force team of ward 6 and 8 in technical support of Nepal Red Cross Society, Bhaktapur. The objective of the training was to enhance knowledge and understanding among stakeholders on disaster management, develop the concept of first aid and community search and rescue, develop the knowledge and skill of helping disaster affected people, develop the skill and knowledge of identifying the needs of



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disaster affected people, enhance knowledge and understanding on basic first aid and search and rescue, enhance understanding of the importance of basic first aid during search and rescue, enhance the knowledge of coordination, leadership, team mobilization and communication during search and rescue, and prepare the human resources to support search and rescue including first aid during disaster. The team will be an asset of the municipality to support during any kind of disaster.

## Capacity Building of Staff

The communication officer of the PRAGATI project held photo/video/case story writing training, in a bid to build capacity of the project’s partners’ staff. The training was designed to provide basic mobile photography and videography skill to the field staffs – project coordinator and social mobilisers of both organisations – NDRC and FSCN. In the training, the team also explored possible stories of the area.



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## Support to develop risk sensitive contingency/ emergency response plan of private hospital and small and medium scale enterprises:

Training cum workshop on development of contingency plan was organized in coordination with Shankharapur Business Group and Local Disaster and Climate Resilient Committee. Altogether, 22 participants joined in representing Small and Medium Scale Enterprises (SMEs)- Mills (furniture and food processing), Brick manufacturing factories, Schools, Private hospitals, and Shankharapur Business Group. The three-day event merged the theoretical presentation followed by group work and visit of nearby school and hospital to have better comprehension of evacuation routes and risk elements. The participants developed their evacuation maps during the event along with a draft sketch of their contingency plan. The final draft of plans will be shared with the project team and will be placed at their institutions. The activity has helped visualize the risk factors to the participants (representative of private sector), sensitized that a small investment or simply perception change can help them minimize the risk they are prone to. It has motivated them for disaster preparedness to ensure continuity of their post disaster initiatives. This will support in preparing the community for rapid response and continue their services during and after the disaster.



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## सडक नाटकमा भूकम्पको सम्झना

काठमाडौं, माघ १४ - नाटको इन्डिभिडुअल माघ १४ गते, साँखुको आठौं विभिन्न विभाजनको सम्झना हुने गर्दा साँखुको भूकम्पको सम्झना गर्ने कार्यक्रम आयोजना गरिएको छ। कार्यक्रममा साँखुको भूकम्पको सम्झना गर्ने कार्यक्रम आयोजना गरिएको छ।

## चाँगुनारायणमा डकमीको क्षमता अभिवृद्धि तालिम सम्पन्न

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### चाँगुनारायणका २३ डकमीलाई भूकम्प प्रतिरोधी घर बनाउने तालिम

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## भूकम्प सुरक्षा दिवसको अवसरमा "हामी बाँच्ने" नाटक मञ्चन

साप्ताहिक लासिपस सन्देश

भूकम्प सुरक्षा दिवसको अवसरमा "हामी बाँच्ने" नाटक मञ्चन गरिएको छ। नाटकमा भूकम्पको क्षमता अभिवृद्धि गर्ने कार्यक्रमको बारेमा जानकारी दिइएको छ।

## काठमाडौं- भूकम्प सुरक्षा दिवसको सन्दर्भमा साँखुमा सडक नाटक प्रदर्शन गरिएको छ।

दुई वर्षअघिको भूकम्पको कहालीलाग्दो अवस्था सम्झदै साँखुको चलाखुमा देखाइएको नाटक मार्फत भूकम्पले जीवनमा ल्याएको विभिन्न प्रभाव दर्शाइएको थियो। आफ्नो परिवारको सदस्यको मृत्युको वेदना र रात-पसिनाले आर्जेको घर भत्किँदाको पीडा हेर्दै गर्दा उपस्थित करिब २ सय दर्शक भावुक देखिन्थे।

## शंखरपुरका नीति क्षेत्र विजय जेठिम न्युनिकरण गर्न असार दिइ

शंखरपुरमा नीति क्षेत्र विजय जेठिम न्युनिकरण गर्न असार दिइएको छ।



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