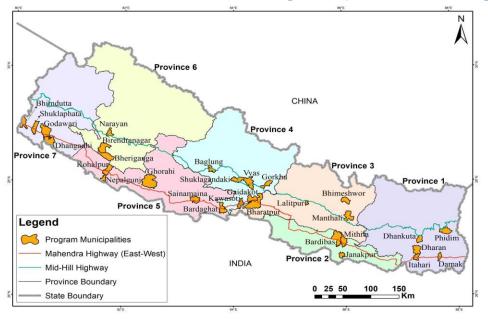


Technical Support for Building Code Implementation in Nepal (TSBCIN)

August 2017 - July 2019

Newsletter

TSBCIN for safer community through compliance to building code



NSET is implementing **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 program is being implemented in order to continue the success and institutionalization of the process of the Building Code Implementation Program in Municipalities in Nepal (BCIPN) implemented by NSET earlier from 2012 to 2016. The BCIPN was largely successful in developing and piloting methodologies for building code compliance in 30 municipalities and urbanizing settlements of Nepal. The program demonstrated the feasibility of ensuring safer building construction through building code implementation. 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.

Goal and Objectives

The overall goal of TSBCIN is to build the disaster resilient community in Nepal through technical support for building code implementation. It aims to support Building Code Implementation (BCI) through awareness, capacity building, institutionalization, and networking.

Focus of the Program

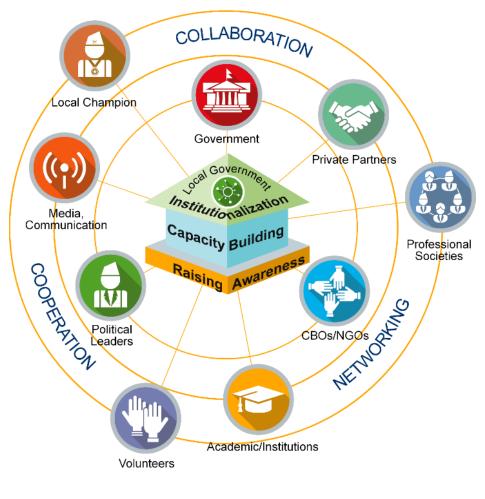
This program focuses on improving building permit system, building code implementation mechanism, and risk based planning and implementation system, enhancing capacities of masons, contractors, engineers, municipal professionals on safer construction and raising awareness of communities for safer construction practices.

TSBCIN Results framework



Implemented by: National Society for Earthquake Technology-Nepal (NSET) Supported by: U.S. Agency for International Development/Office of U.S. Foreign Disaster Assistance (USAID/OFDA)

Implementation strategy



TSBCIN adopted the four main strategic components to implement the program: Raising awareness of local community, related stakeholders and government representatives on the root cause of earthquake risk in Nepal and possible ways of mitigating the risks.

Building the capacities of the construction workforce-local masons and contractors in earthquakeresistant construction technology; and building capacities of engineers and technical professionals to design and supervise construction of the safer building. Build the institutional capacity of municipalities to effectively enforce building code and institutionalize the code compliance system. Expand the concepts, cooperation and networking from ongoing successful municipalities to nearby new municipalities, collaboration with local organizations including other NGOs, CBOs, technical colleges, local media among others as well as the use of existing local capacity, accelerating local community interactions and generating local resources for the BCI efforts.

Geographical coverage of TSBCIN Program

This program is being implemented in 30 municipalities covering 7 provinces of Nepal.

Based on the experiences of the BCIPN program, the municipalities have been grouped into three categories as the target municipalities of the program.

 Municipalities with Building Code Implementation Status Level 3 (BCI-L3): The municipalities which have already started implementation of Building Code and have achieved a higher level of success in building code compliance.

- Municipalities with Building Code Implementation Status Level 2 (BCI-L2): These are the municipalities where Building Code Implementation has just started. They have started enforcement of building code, however the compliance rates in these municipalities are just fair.
- Municipalities with Building Code Implementation Status Level 1 (BCI-L1): These are the municipalities where Building Code Implementation and Building Permit System are not in place Depending upon the BCI Status, level of the municipalities' program activities are planned and the target of the indicators (Impact, Outcome and Output) has been set

Level	Number of municipalities	Municipalities
Level 1	13	Shuklaphanta, Kohalpur, Narayan, Mithila, Godawari, Dhankuta, Bardibas, Bardaghat, Kawasoti, Sainamaina, Bheriganga, Phidim, Shuklagandaki
Level 2	10	Baglung, Nepalgunj, Janakpur, Bhimeshwor, Gorkha, Gaindakot, Manthali, Itahari, Birendranagar, Bheemdatta
Level 3	7	Dharan, Bharatpur, Vyas, Ghorahi, Damak, Lalitpur, Dhangadhi

programs 17 House-owner orientation held 15, House owners benefitted 333

Awareness Programs

Awareness program is one of the major strategic components of NSET/TSBCIN program to help implement the national building code through sensitization to its various stakeholders. Under the program, TSBCIN has been working on raising awareness and sensitization programs for house owners, local community, municipal

Major Accomplishments

During August 2017- March 31, 2018, various tasks have been accomplished

under the NSET/TSBCIN program.

Understanding (MoU) with

Department of Urban Development &

Building Construction (DUDBC) under

the Ministry of Urban Development (MoUD) is the government authority

for development of building code, related guidelines and also to develop

implementation. Municipalities are

policies, and enforce the building code

Hence, the program has to work very

Numerous consultation meetings were

responsible to implement those

through building permit system.

closely with both organizations.

municipalities. NSET team briefed

about detail activities, methodology and expected results of the program

organized with DUDBC and

during all the meetings. They

advocate and support for the

through Memorandum of

expressed their commitments to

implementation of the program

Understanding (MOU). Till date, NSET

has signed MoUs with DUDBC and

twenty-two municipalities for the

implementation of the program.

government agencies

policies for building code

Memorandum of

staff, political/social leaders and other Stakeholders on the cause of earthquake risks and need to enforce the national building code as best way to mitigate the risks through Safety Campaigns, Orientations, Mobile Clinics, Local Radio campaign etc.

1596 political/social leaders sensitized with 33 orientations

In order to make the political and social leaders more aware on the need of earthquake resistant construction so that it could be make sustainable and safer community in terms of seismic risk in Nepal, a total of 33 orientations have been accomplished thus far. From these orientations, altogether 1596 political and social leaders including 367 women have been benefitted and sensitized on the need of earthquake resistance construction and building code compliance.

The orientation programs were organized in Damak, Itahari, Dharan, Biratnagar, Janakpur, Bardibas, Mithila, Bharatpur, Sainamaina, Bardaghat, Gaidakot, Vyas, Kawasoti, Shuklagandaki, Baglung, Ghorahi, Dhangadhi, Kamal and Shuklaphanta municipalities.

Highlights

- Memorandum of Understanding (MoU) signed with government agencies
- Selection of 30 municipalities carried out
- Training Curricula developed
- TSBCIN Communication plan accomplished
- Guideline for TSBCIN Radio program developed
- TSBCIN Online Database System developed
- Installation of Building Permit Software carried out at Bharatpur Metropolitan city
- Political/social leaders' orientation 33, political/social leaders sensitized 1596
- Masons oriented on safer constriction 311, total orientation programs 17

- National level workshops organized 6, total participants 391
- Engineers benefitted from Basic Engineer Trainings40, Engineers benefitted 2
- Engineers benefitted from Building Permit System (BPS) training 7, BPS training held 1
- Meeting with municipality and local leaders for improving institutional system held 16, benefitted numbers 179
- Capacity Enhancement of social advocates and leader for media on DRR and ERM 20



Continue on page no. 5...

311 masons oriented on safer constriction technology with 17 orientation programs

With view to sensitize the masons for the earthquake resistant construction and building code compliance, 17 orientation programs for masons were organized during the period. Altogether 311 masons including seven female masons benefitted from the orientations.

333 house owners benefitted with 15 house-owner orientations



To make the house owners aware on the need of compliance of building code for earthquake resistant construction, altogether 15 house owner orientation have been organized across country where a total of 333 house owners including 84 women benefitted from the orientations.

Implementation process

TSBCIN program is being implemented under the overall guidance and directives of the Department of Urban Development and Building Construction (DUDBC), Ministry of Urban Development (MOUD) and the program municipalities.

Information Collection about the potential municipalities was carried out at the initial phase of program implementation and then a preliminary list of Municipalities was prepared based on the evaluation of collected information and the strategic priorities suggested in National Urban Development Strategy (NUDS) developed by Ministry of Urban Development (MoUD). A selection criterion was developed for the evaluation of the municipalities. As per the criteria, the municipalities from all 7 provinces have been grouped into three categories as the target municipalities of the program. NSET has taken into consideration the municipalities' urbanization status, highway access, the possibility of Provincial Capital as well as building construction rate while selecting the municipalities.

On the basis of the preliminary selection list, various exploratory visits were carried out for selecting and finalizing municipalities. Finally, finalization of program municipalities was done based on the observations, findings, strategic importance and several other criteria. As the program municipalities finalized, a Memorandum of Understanding (MOU) was signed between NSET and government agencies (Department of **Urban Development & Building** Construction (DUDBC) and selected municipalities) to facilitate the effective implementation of the TSBCIN program. The scope of MOU covers the joint works in the areas of raising public awareness of National Building Code (NBC) implementation and capacity building for the effective implementation of NBC.

Municipalities grouping system in every province

	Criteria	Tier 1	Tier 2	Tier 3					
1	Urban Regions	Matured and identified urban	Evolving and identified urban	Evolving and matured urban					
		regions	regions	corridors					
		Scoring	System						
	Criteria		Scoring System						
1	NUDS Strategic	Score 1: Cities with high/ medium	priority strategic investment						
	Investment	Score o: Cities of Low priority strategic investment							
2	Highway access	Score 1: Along East-West highwa	y, Mid-hill highway and Postal road						
		Score o: Not along East-West hig	hway, Mid-hill highway and Postal re	bad					
3	Possibility of Provincial	Score 1: High							
	Capital	Score o: Low/No							

Program Indicators

Depending upon the BCI Status level of the municipalities' program activities are planned and the target of the indicators (Impact, Outcome and Output) has been set accordingly. The following are the minimum level of target the program is expected to achieve.

Impact Indicators

- 50% of constructed buildings will comply to Nepal Building Code (NBC)
- 70% of building drawings and designs submitted for building permits will comply to NBC

Outcome Indicators

- 50% of shelters adopt DRR measures
- 70% settlements adopt DRR measures
- 60% of people who attended awareness and training sessions retain knowledge after two months of training
- 70% of trained construction workforce continues practicing earthquake-resistant construction in subsequent years
- Risk perception-score on the disaster-resilient construction of communities/population will increase by 20%.
- 50% of program municipalities will have improved institutional

systems and process for risk based planning and enforcement of building code

 Mechanism of Collaboration, Cooperation and Networking for building code implementation at the local, national and regional level will be established and strengthened

Output Indicators

Increased awareness on safer construction practices

- Sensitized Political leader, Municipal staff, House-Owners
- House to House campaigns conducted
- Earthquake safety campaigns conducted
- Media campaigns conducted
- IEC materials produced

Enhanced Capacities of Stakeholders

- Construction workforce (Engineers involved in building construction and design, architects, masons, contractors) trained
- Policy decision maker sensitized
- Social advocates and leaders trained

Improved Institutional systems and process

 Consultative meetings and workshops conducted

- Improved building permits system and BCI
- Developed local disaster risk management plan
- Developed system for building code implementation

Mechanism for Collaboration and Networking

- Meetings and workshops conducted
- Collaboration with stakeholders in joint research and efforts
- Participation in national/ international conferences
- Knowledge exchange portal

Intended Beneficiaries

- Direct beneficiaries 65,000 people
- Indirect beneficiaries 300,000
 people
- 1,200 house owners, 320 engineers 950 masons trained
- 1,200 people benefitted through earthquake awareness, Orientation programs and workshops
- 112 municipal staff and 120 municipal officials trained
- 50,000 people benefitted from radio programs; 7,500 people from mobile apps; and 7,500 people benefitted from mobile clinics.
- 168 Social Mobilizers and Social Advocates trained
- 64 Media Professionals trained

Major Accomplishment.....

Capacity Enhancement Programs

Capacity Enhancement is another strategic component of TSBCIN program and it is focusing on enhancing the skills and capacity of local construction workforce (masons, petty contractors) in earthquake resistant construction technology and Building capacities of municipality engineers, private engineers involved in building design, drawing and inspection and municipal stakeholders. Under the program, TSBCIN is conducting training on safer construction practices for masons, contractors, engineers, municipal engineers, municipal staff, officials and elected representatives.

Upon request from the municipalities, TSBCIN provided technical support to conduct training courses for houseowners and masons during the reporting period.

613 existing masons trained with 20 mason trainings

Masons are considered best technical hands available for building construction. Therefore, masons need to be aware of the best technology that they are working with in order to ensure optimum, efficient and effective use of the building materials and the construction processes. Realizing the vital role of masons in earthquake resistant construction, NSET coined the concept of Mason Training in 2003. In order to promoting safer construction practice, NSET initiated training masons with the objective of making them aware of the techniques. As a part of TSBCIN program, the training is being implemented by NSET.

During August 2017 to July, 31, 2018, TSBCIN has accomplished altogether 20 mason trainings. From the trainings held in Rainas Municipality, Sainamaina Municipality, Vyas Municipality, Kamal Rural Municipality, Janakpur Sub-metro, Biratnagar Sub-metro, Kawasoti Municipality, Godawari Municipality, Mithila Municipality, Badraghat Municipality, Shuklaphanta, Birendranagar, Damak Municipality, Bardibas Municipality and Ghorahi Sub-Metro, a total of 613 existing masons including five female have enhanced their knowledge and skills in building earthquake resistant buildings. Four municipalities, namely, Godawari, Sainamaina, Mithila and Kamal Rural Municipality organized two rounds of mason trainings while rest of municipalities organized one training each during the period.

Enhancing the capacity of constructions technicians like masons, engineers, contractors, architects and others is one of the major focus of TSBCIN program. The major objective of the training course is to impart the essentials knowledge, upgrade their skill in quality construction and develop skillful working human resources require in earthquake resistant construction in line with the Nepal National Building Code.



40 Engineers benefitted from two Basic Engineer Trainings

A total of 40 engineers (39 male and 1 female) working in the field of building permit system, house construction, design and preparing drawings were trained on Basic Engineers Training under the NSET/TSBCIN program.

In a training held at NSET head office in April 2018, 7 engineers from NSET deployed in various municipalities as part of TSBCIN program received the five-day training. Likewise, 39 engineers received the same training in July at Sainamaina Municipality. Meanwhile, a training on Building Permit System (BPS) has been accomplished at Vyas Municipality where a total of seven engineers acquired essential skills about the various aspects of Municipal Building Permit process in the five-day training with the view to improve the building permit process. Altogether 7 engineers working in the Vyas Municipality participated in the training.

Engineers Training on Seismic Evaluation of Building Design and Drawings concluded in Lalitpur

To assist municipalities on effective implementation of National Building Code, Technical Support for Building Code Implementation in Nepal (TSBCIN) program of National Society for Earthquake Technology-Nepal (NSET) has successfully accomplished an Engineers' Training on Seismic Evaluation of Building Design and Drawings at Tewa, Dhapkhel, Lalitpur.

The five-day training was organized during 30th July to 3rd August 2018 under USAID/OFDA funded NSET/ TSBCIN program. A total of 25 civil engineers from as many municipalities participated in the training. The participants were comprised of engineers being involved in the building permit section of the various municipalities, namely, Birendranagar, Bhimdutta, Nepalgunj, Dhangadhi, Godawari, Bheriganga, Sainamaina, Suklagandaki, Bardaghat, Kawasoti, Gaindakot, Vyas, Damak, Kamal, Mithila, Bardibas, Janakpur, Manthali, Bharatpur, Dharan, Dhankuta, Baglung, Itahari, Suklaphanta and Narayan. Mr. Dwarika Shrestha, Deputy Director General, Department of Urban Development and Building Construction (DUDBC) distributed certificates to the participants amidst a program organized at the end of training. Mr. Surya Narayan Shrestha, Executive Director, NSET, Dr. Ramesh Guragain, Deputy Executive Director, NSET and Mr. Santosh Gywali, AID Development Program Specialist, USAID were also present at the program. Speaking at the program, Mr. Surya Narayan Shrestha, Executive Director of NSET Nepal, clarified the purpose of the training and highlighted need of promoting uniformity for effective implementation of building code in terms of process and standard.

Mr. Dwarika Shrestha, chief guest of the program, urged all participants to utilize the skills they learned from training at local level. On the occasion, engineers Raju Aryal from Gaindakot Municipality and Hasrat Ali from Dharan Sub-Metropolitan City expressed their remarks about training course.

"I am now fully enlightened with mistakes and ways to be corrected in the house drwings as per building code," said Mr. Aryal. Likewise, Mr. Ali



said, "Pre-test and post-test of training helped us manifest participants' knowledge and skill," adding, "The training has tremendously helped enhance my skill and I am more confident now." American Society of Nepalese Engineers (ASNEngr) along with participating municipalities and USAID/OFDA provided financial assistance to organize the training.

Program for Improving Institutional System

Under the strategic components of **Improving Institutional System**, NSET/TSBCIN is focusing the building the institutional capacity of municipalities to effectively enforce building code and institutionalize the code compliance system. As part of this component, TSBCIN is organizing various consultation Meetings and Thematic Workshops. Likewise, it is also carrying out Development of Local Disaster Risk Management Plans, Earthquake Loss Estimation Plan, Risk-Sensitive Land Use Plan as well as developing Mobile Application.

Collaboration/Cooperation/Networking

NSET/TSBCIN has also adopted the

Collaboration/Cooperation/Networking as another strategic component under which the program intends to develop greater cooperation networking with local stakeholder's like CBOs/NGOs, professional societies, municipalities, colleges/ academic institutions, local media, volunteers for sustainable implementations of National Building Code.

As part of this components, various meetings, sharing workshops, joint research works, collaboration with local private organizations, exchange portal, international sharing visits/conferences are scheduled to be held.

Building Permit Software Installation

Building permit software was developed during BCIPN. That software was updated to the present need and building permit process of municipalities according to changed context of Nepal. This updated software was installed at Bharatpur Metropolitan City Office. The municipal office is now utilizing the software in full-fledge.

This software has been developed with the objectives of:

- Creating and maintaining a full-fledged Building Permit Process Database
- Assisting municipalities for analysis and reporting of Building permit process
- Assisting municipalities in the field monitoring
- Ensuring easy and efficient Building Permit certifications.
- Effective tracking of building information

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5 National level workshops organized

During the period, TSBCIN organized 5 National Workshops on issues related to building code and urban resilience as part of the annual Earthquake Safety Day (ESD) event and Risk 2 Resilience international Conference. Separate sessions were organized during the National Symposium Workshop and discussed three major issues:

- Building Code Implementation and Building Permit
 Systems
- Experiences and lessons of Building Code Implementation; and Launching of Technical Support on Building Code Implementation in Nepal (TSBCIN) Program
- Urban Planning and Resilience in the context of Nepal

Likewise, Risk2Resilaiance Conference discussed two major issues:

- Investing in DRR for Resilience
- Update national building code; factors to consider research to undertake, mechanism level updates

A total of 391 stakeholders including 83 women from different professional and academic backgrounds

Developing Training Curricula

A specific Training Curricula Development Team, comprising of various professionals within NSET, has been working to review and formulate training courses for a political leader and civil engineers. participated in the sessions. Senior government officials, Academicians, relevant professionals from national and international organizations, elected representatives from different municipalities, engineers and the professionals were the major participants. In the background of past experiences on building code implementation and the way forward, TSBCIN program was launched among the stakeholders.



TSBCIN Online Database System

The online database system has been developed to record the program activities and beneficiaries. The major objective of this database system is to capture, store, analysis and share program activities data.

Promoting earthquake resilient construction through compliance to building code via Local Radios

NSET has been working with mass media particularly the radios for raising awareness and various aspect of earthquake risk reduction efforts since past two decades. It is because NSET believes that mass media are very much effective means for propagating such messages. Considering the effectiveness of radio in terms of wider reach, ability to cover large audience, ability to reach specific audiences through specialized programming, affordability, and cost-efficient, NSET /TSBCIN has partnered five local radio stations to produce radio magazine program and messages on promoting safer construction.

Media Training Workshop for facilitating building code implementation

A Media Training Workshop has been concluded in Kathmandu focusing on key issues and dynamics of Building Code implementation in Nepal. NSET organized this event under the USAID/OFDA funded "Technical Support for Building Code Implementation in Nepal (TSBCIN)" program during July 23-24, 2018. Total 16 participants including station managers and radio program producers from five radios under TSBCIN and program field team members participated in the workshop. TSBCIN program is to provide support to selected 30 Municipalities for the effective implementation of National Building Code (NBC). Awareness Raising is one component of the program, under which TSBCIN program is partnering with 5 local FM radios for the regular radio programs and messaging. The partner radios are Saptakoshi FM, Itahari; Vijay FM, Gaindakot; Krishnasar FM, Nepalgunj; Bulbule FM, Surkhet and Dinesh FM, Dhangadhi. This Training Workshop aimed at sharing knowledge, experience and ideas and building capacity of radio teams to produce the program episodes in purposeful ways. During the Training Workshop, the participants actively engaged in various sharing & learning activities and group works on issues for radio magazine and its format. Executive Director Mr. Surya Narayan Shrestha, Senior Technical Advisor Mr. Surya Bhakta Sangachhe and NSET professionals facilitated the sessions.

TSBCIN partnered with 5 radio stations

TSBCIN has established partnership with five radio stations in 5 out of 7 provinces in the country to jointly produce and disseminate regular fortnightly programs focusing on various aspects of building code implementation and earthquake resistant construction. These five radio partners were explored through open sealed bid call in April 4, 2018.

The five radios partners are, namely, Saptakoshi FM Itahari, Sunsari, Vijay FM, Gaindakot, Nawalparasi, Krishnasar FM Nepalgunj, Banke, Bulbule FM Birendranagar, Surkhet and Dinesh FM Dhangadhi, Kailali.



Each of the partnered radios produce and air regular half hour radio magazine "Bhookampiya Surakshya' program fortnightly. These five radio are expected to broadcast the first episode of Bhookampiya Surakshya on first week of August and will continue till July end 2019.



Apart from regular radio magazine, 'Bhookampiya Surakshya' fortnightly, TSBCIN has also partnered radio stations to propagate Public Awareness Announcements(PSAs) on promoting earthquake resistant construction with compliance to building code. According to this, TSBCIN has prepared half a dozen types of PSAs focused on safer construction and each radio is to broadcast the PSAs 10 times each day during the contract period.

Case Study

Vyas Municipality's Building Code Implementation efforts

Vyas Municipality is one of the municipalities out of 30 which is selected for implementation of TSBCIN program. It lies in Midwestern Nepal in Tanahun district in Province number 4 adjoining to Pokhara-a renowned tourist destination of the country. It covers an area of 248 sq. km. Vyas was declared as a municipality in 2048 BS. Of the 14 wards of the municipality, ward number 1,2,4,5 and 6 were reported to be rapidly urbanizing wards. A total of 70,335 population with 31,260 male and 39,075 female was recorded in the municipality during the exploratory visit.

Vyas initiated for implementation of Building Code Implementation(BCI) in 2008. However, the formal announcement of NBC implementation was begun in 2010. NSET provided assistance to the municipality for this cause. Mr. Baikuntha Neupane, Mayor of the municipality, says that the municipality has prioritized Awareness Raising, Capacity Development and Institutionalization of Buiding Permit System for effective and sustainable implementation of building code.



As Nepal is at high risk to earthquakes, he emphasizes on stringent enforcement of Building Code to reduce the impending earthquake risk in country. Earthquakes do not kill people but the collapse of weak houses do. Therefore, implementation of building code in the municipalities is critical in order to reduce the loss of human casualties during earthquakes. While legislation has made compliance to building codes mandatory, many municipalities, however, are yet to strictly implement building codes through building permit system. In stark contrast, Vyas went ahead with the formation of mason groups, preparing list of consultants and allocation of budget for BCI in 2012. In 2014, an advisory committee of technical consultants was formed as follow up action. The same year, licensing system for trained Masons/contractors initiated along with reward and punishment mechanism. In 2016, Vyas initiated field supervision of under construction houses through consultants with

mechanism of reporting of field supervision through photographs. In 2017, implementation of revised building permit form as well as using Building Permit Software started. Further, it increased technical manpower of the municipality and launched field supervision/ inspection through its own team of engineers.

With the implementation of TSBCIN program, Vyas has so far carried out one engineers' training on Building Permit System where a total 7 engineers got trained on training course. Likewise, the municipality has also implemented one mason training course where 29 working masons got trained on earthquake resistant construction technique. Further, three orientations to social/political leaders of the municipality regarding effective building code implementation were also held where altogether 84 people benefitted. Similarly, an interactive discussion on the effective implementation of building code was

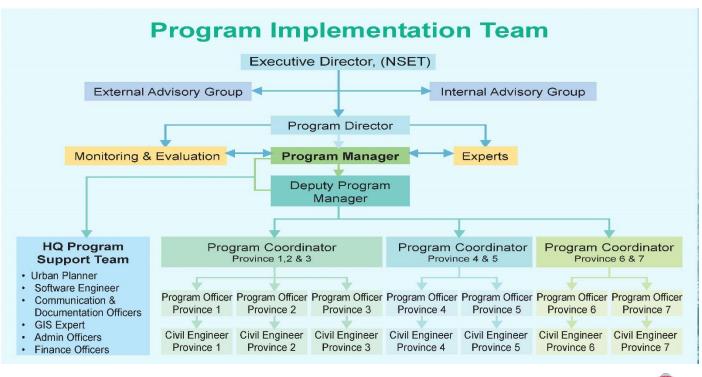
held between NSET/TSBCIN management and Municipality officials and stakeholders.

Despite making big stride in terms of BCI, Mr. Neupane, the mayor of the municipality, however, believes they have experienced some of the challenges such as difficulties in bringing the non-compliant buildings into the building permit system, development of proper regulation for retrofitting of existing building stock, dispelling negative influence of other neighboring municipalities having nonenforcement of building code, discouraging tendency of evading of the building permit process by government buildings and schools despite going through house design approval system and bringing the rural part of municipality into building permit process which were recently merged into the municipality, among others.

The Vyas Municipality has also learned important lessons from its efforts on

BCI so far as well. According to Mayor Neupane, BCI is not only a technical but also a social issue. It can't be implemented without a trust of community. Similarly, it needs to be complemented by at least one percent of municipality's budget per annum. Likewise, it also should be looked at together with the processes pertaining to risk sensitive land use planning, planning by-laws, and overall disaster risk management.

As part of sustainable efforts on BCI in the municipality, Vyas Municipality aims to continue awareness promotion and capacity building programs. It also aspires to accelerate proper site supervision activities and monitoring system. Further, the municipality is planning to incorporate Earthquake Risk Reduction in *Municipality Plans and Policies* and implement building permit software to digitize Building Permit System as well as carry out model project for retrofitting within municipality among others.





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