

*Initiating Dialogue on Post Disaster
Reconstruction,*

Building Safer Urban Spaces for Post - disaster Nepal



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Impact of Earthquake on Urban Areas

- The earthquake of April 25, 2015 severely affected urban settlements of Kathmandu Valley, Dolakha, Nuwakot and Gorkha, Sindhupalchowk.
- Kathmandu, Lalitpur, Bhaktapur, Bungamati, Sankhu, Khokana, Harisiddhi, Chautara, Charikot, Nuwakot are the worst affected settlements.
- Housing, public buildings and heritage sites are mostly affected.

Impact of Earthquake on Urban Areas

- Poor people have become homeless and are staying at temporary shelters.
- Due to the destruction of temples and shrines Gods are being kept in temporary shelters.
- Partially damaged buildings are resting on supports.
- Tourism activities are seriously affected.

Response of the Government

- Temporary shelters were erected at different locations for displaced people.
- Government declared the heritage sites as safe and allowed tourists in those sites.
- Government approached other countries to support the rehabilitation and reconstruction of heritage sites.
- The basic building construction and urban development byelaws was enacted.
- Model design of rural and urban houses was approved.

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- National Reconstruction Authority was established under a separate act.
- Necessary policies and guidelines were also approved.
- NRA hired more than 2000 technical personnel and deployed them in towns and villages.

Response from International community

- More concerned with the destruction of the World Heritage sites and settlements.
- Offered technical and financial support for the reconstruction and rehabilitation.
- Supported in Damage Assessment, provision of temporary shelters, technical support etc.

Response from Professional Organizations

- Nepal Engineers' Association(NEA) mobilized more than 3000 engineers and conducted rapid visual assessment of more than 60 thousand houses in Kathmandu Valley.
- NEA organized design competition for rural house design.
- SONA conducted studies in Sankhu, Bungamati, Sindhupalchowk and Nuwakot.

Response from NGOs

- NGOs- both Nepali and foreign, are working with community in reconstruction of schools, hospitals, rehabilitation of houses.
- NGOs are more active in rural areas of the earthquake affected districts.

Basic Building byelaws

- Six months after the earthquake, the Government approved “ Settlement Development, Urban Development and Building Construction Basic Byelaws 2072”.
- Its objective is to assist all local governments in urban planning and building construction

Special features of the Byelaws

- Central level technical committee.
- Restriction on building design by municipal engineers.
- Third party verification of newly constructed public buildings.
- Restriction on the use of public land.
- Restriction on updating cadastral maps.
- Restriction on the use of public buildings without completion certificate.

Special....

- Land use control by municipality.
- Following Soil Investigation Guidelines for all public and A class buildings.
- New provisions for Right of Way (ROW) of roads
- Maintaining aesthetic beauty of roadside buildings.
- Emergency response plan for apartment buildings.
- Institutional arrangement at municipal level.

Issues in implementation of Basic Byelaws

- Perception of the citizens.
- Perception of newly elected representatives.
- Capacity of local governments for implementation.
- Overlapping roles and responsibilities of different agencies in Kathmandu Valley.

Public Open Spaces

- Traditional open spaces: Chowk, Bahal, Bahi, Nanil, Chaur, Tundikhel,
- Modern open spaces: Playground, parks, parking lots.
- Marginal open spaces: leftover spaces during housing development, spaces along river banks.

Public space at Bungamati



Perception of Public Open Spaces

- Local people
- Local clubs
- Government agencies
- Use and abuse of public open spaces
- Use of open spaces during disaster.

Relief Camp at Nandikeshar Garden



Rehabilitation of Cultural Heritage Sites

- Cultural and tourism value of heritage sites.
- Responsible agencies.
- Legal requirement.
- Technological requirement.
- Ownership of stakeholders.

Bungamati after earthquake



Rehabilitation of Traditional Settlements

- Rehabilitation of housing and heritage sites.
- Conservation of traditional art and architecture (Building back better).
- Creation of job opportunities to local craftsmen during construction.
- Recovery of livelihood.

Rehabilitation of Traditional Settlements

- Promotion of tourism as an alternative source of employment and income.
- Preserving the unique identity of the place and boosting the self pride of the community.

Rehabilitation of Heritage Settlements



Pillachhen Reconstruction Project

- The neighbourhood consists of 7 chowks and 82 houses and is located at Ward no. 7 of Lalitpur Metropolitan City.
- The community has decided to reconstruct the private houses with vernacular architecture but with modern facilities.
- Individual buildings will have shops at the ground floor, guest rooms at the first floor and residence in the second and third floor.

Institutional arrangement

- Pillachhen Reconstruction and Tourism Project has been launched for reconstruction of individual houses and public structures.
- Maya foundation, a local philanthropic organization has supported it.
- The Project is implemented by a committee headed by a local resident.
- The project needs Rs. 12 crore but till now donors have pledged 4 crores only.

Financing Scheme

- The funds for reconstruction shall be arranged as follows:

Maya Foundation: 25 percent as grant

Local Community: 25 percent as labour contribution.

Household's : 25 percent

Bank loan : 25 percent

External support

- Lalitpur Metropolitan City has agreed to waive the building permit fee.
- CE Construction, a well known construction group has contributed free technical service for design and construction supervision.

View of a Typical Courtyard after Reconstruction



Issues in Reconstruction and Rehabilitation of heritage sites

- Conflicting Roles and Responsibility
- Funding gap
- Ownership of the place
- Choice of Technology
- Shortage of skilled human resource
- Right of way of roads(Harisiddhi, Chautara)

Framework for Urban Planning for Disaster Preparedness

- Improved road network
- Accessible open spaces
- Earthquake resistant buildings
- Emergency shelters with water and sanitation
- Security and Firefighting system
- Health facilities
- Disaster preparedness plan.

Way forward

- Identification of open space at the community level.
- Creation of new open spaces as a part of reconstruction.
- Demonstration model of rehabilitation of heritage settlements.
- Demonstration model of reconstruction of heritage sites.

Way forward

- ‘House pooling’ for readjusting dwelling units and reconstructing traditional houses on the same footprint.
- Adequate and reliable water supply and sanitation.
- Relocation of vulnerable settlements.
- Revitalizing the core area of Kathmandu and Lalitpur

Message from Gorkha Earthquake

- Building safer houses is not enough. The entire community should be disaster resilient.
- Follow appropriate technology and traditional building practices.
- It is an opportunity to learn from mistakes in the earthquake affected areas, develop corrective measures and apply to the entire country.

Slogan

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(Build Back Better)

Thank You for Your Attention

