Addressing Heritage Conservation in Post-Earthquake Planning: Reconstruction Plan of Historic Town "Bungamati" of Nepal

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ABSTRACT

The devastating earthquake of 2015 in Nepal caused serious damage to Kathmandu Valley and the surrounding settlements. It not only destroyed rural settlement, but also Kathmandu Valley’s centuries old cultural heritage and monuments. In this context, historic settlements received widespread attention for reconstruction. To preserve historical and cultural significance, the traditional architecture, cultural identity and urban spaces of historic towns need to be rejuvenated with emphasis on community well-being. Considering the case of historic town "Bungamati", this paper firstly reviews theoretical aspects of heritage conservation in historic towns, and then highlights on cultural heritage resources and their significance in Bungamati. With support of theoretical framework of an Integrated Approach to Conservation, and findings through interview with key informants and discussion with local communities, the paper examines on reconstruction process specifically in addressing heritage conservation. Findings reveal that the reconstruction process in Bungamati has been failed to incorporate Integrated Conservation resulting into the destruction of architectural identity, cultural heritage and local economy.

KEYWORDS: Heritage Conservation, Nepal Earthquake, Reconstruction, Community Participation

1.0 Introduction

Historic cities, towns and sites constitute a major part of the living cultural heritage. They embody the values of traditional urban culture and are central to creating and reflecting national and individual identities, and constituting a physical continuity with the past. As a living memory of the people, cultural heritage reflects their unique culture and is expressed in many forms of tangibles (monuments, landscapes, objects) and intangibles (languages, know-how, the performing arts, music etc.). According to Bizzaro and Nijkamp (1996) heritage allows us to recognize the identity, peculiarity and plurality of a society; identify and satisfy basic ethical needs of a community, local distinctiveness and tradition. It is closely attached with everyday activities of people and helps them sustaining their socio-economic condition by attracting tourism and economic opportunities in the
destinations. Although considered as a key agent to bring prosperity to local communities; conservation of heritage and cultural diversity of any particular region, at a time of increasing globalization, has become an important challenge.

Heritage resources have been degraded and destroyed by the impacts of rapid increase in population, haphazard growth of towns, and impacts of natural disasters such as earthquake. With rapid urbanization, many cities in the developing countries have been transformed from concentrated and identifiable towns into amorphous urban areas, and communities with the centuries old traditions, cultures and lifestyles are facing irreversible cultural, social and even economic losses. The condition would be even very cruel when the natural disasters are occurred in these towns. The impact of disasters such as earthquake is often very hazardous and brutal to local heritage, infrastructures and communities. Reconstruction of heritage resources and infrastructures in disaster-hit towns is essentially very challenging.

Nepal, a small Himalayan nation, faced a devastating earthquake of 7.8 Richter scale in 25th April 2015 causing serious damage to Kathmandu Valley and the surrounding rural settlements. More than 9,000 people died, 22,000 were injured, 750,000 houses were damaged or destroyed, and eight million people were reportedly affected. The earthquake not only destroyed rural settlement, but also Kathmandu Valley’s centuries old urban settlements, heritage and monuments. Traditional temples, Buddhist stupas, towers, gates, and squares have been severely damaged or collapsed. In this context, historic settlements of Kathmandu Valley received widespread attention for reconstruction and revitalization. Considering the case of Bungamati, one of 52 traditional settlements of Kathmandu Valley, this paper firstly reviews the issues and process of heritage conservation in historic towns and then highlights on key urban characteristics, heritage resources, and cultural significance of the town, and the damage caused by the earthquake. With support of theoretical framework and findings through interview with key informants and discussion with local communities, it examines the ongoing reconstruction process and its effectiveness in addressing cultural continuity, heritage conservation and tourism development.

2.0 Literature Review

2.1 Cultural heritage conservation and its significance

Conservation of built heritage gained momentum specifically after the Second World War. Its significance was much heightened with the establishment of international organizations, charters, conventions and many criteria on heritage conservation. Several scholars have pointed the values and meaning of heritage conservation. John Ruskin, a prominent advocator of conservation, highlighted on seven lamps of architecture (i.e. sacrifice, truth, power, beauty, life, memory and obedience) where he identified the values and significance of historic buildings and objects providing foundation for modern conservation philosophies (Jokilehto, 1999).

It is widely acknowledged that places of cultural significance enrich people’s lives, often providing a deep and inspirational sense of connection to community and landscape, to the past and to lived experiences (ICOMOS Australia, 1999). Cultural significance however is the sum of the qualities or values that a historic place represent specifically in terms of aesthetic, historic, scientific, social and
According to UNESCO, urban areas are the "historic cultural landscapes" and defined as "ensembles of any group of buildings, structures and open spaces, in their natural and ecological context, including archaeological and paleontological sites, constituting human settlements in an urban environment over a relevant period of time, the cohesion and value of which are recognized from the archaeological, architectural, prehistoric, historic, scientific, aesthetic, socio-cultural or ecological point of view". This landscape has shaped modern society and has great value for our understanding of how we live today (UNESCO World Heritage Centre, 2005).

According to Cohen (1999, p.11) "historic city centers are made up of a web of buildings and streets from different periods that create various cultural and urban strata. Over the centuries, they have finely honed their urban character and now offer quality urban culture. New cities and suburbs however lack feeling of history and are devoid of any sense of cultural continuity". He highlighted that proper urban conservation transforms historic cities into hubs of cultural activity, making them much more than merely residential. Hence, conservation on an urban scale is concerned with the urban fabric as a whole but not with architecture alone (Cohen, 1999). In a similar tune, Larkham (1996) also pointed the reason for conservation is more complex than mere aesthetics: it involves factors such as psychology, finance and fashion too.

Ultimate aim of conservation is not to conserve material for its own sake but to maintain (and shape) values embodied by the heritage. These values constitute social, economic, aesthetic, cultural and historical aspects, and considered as selection criteria for heritage conservation. Conservation should not only focus on the monuments; everyday activities of people including indigenous skills and knowledge should also be rediscovered. The meaning of conservation therefore has now shifted from protecting the single built form to the wider context such as area-based conservation or district regeneration. Additionally, conservation is a process of managing change in historic urban areas, whereby it not only deals with conservation of physical fabric but also ensures continuity of socio-cultural system and contributes towards sustainable development.

2.2 Process of cultural heritage conservation in the historic towns

The Burra Charter adopted by Australia ICOMOS (1999) states that "conservation may, according to circumstances, include the processes of: retention or reintroduction of a use; retention of associations and meanings; maintenance, preservation, restoration, reconstruction, adaptation and interpretation; and will commonly include a combination of more than one of these". Heritage conservation is therefore a continuous and value based process, and involves a wide range of activities including (i) Prevention of deterioration; (ii) Preservation; (iii) Restoration; (iv) Rehabilitation; (v) Reproduction; and (vi) Reconstruction Lichfield, 1988, p.26).

Conservation activities are usually carried out with regard to existing physical conditions, values of heritage, and needs of the society. In most cases, tangible and intangible heritages together create a symbiotic relationship and the protection of which requires a holistic approach (Bhatta and Chan, 2016). Inclusive participation of local communities in the process of conservation is significant to materialize the objectives of conservation and promote sustainability. The process of protection of
cultural heritage has generally three basic components (i) Understanding heritage significance; (ii) Developing objectives to retain significant values; and (iii) Manage to achieve objectives (Australian Heritage Commission, 2000). In each step, qualitative judgments are most important and inputs from the community are essential.

Understanding Heritage Significance: It is crucial to establish the heritage significance of different monuments and places in historic towns, as not all the heritage has equal significance. Significance can be identified on the basis historic, architectural, aesthetic, cultural, social, educational and economic aspects of heritage. Process of conservation should revive and sustain these values.

Developing Objectives to Retain Significant Values: Natural calamities such as earthquake, and growth and decline of factors like population, economy, housing, and transportation may cause destruction of heritage resources. Different issues such as growth pattern, community needs, legal requirements and physical and financial condition of the town need to be understood to achieve sustainable conservation. The objectives are to be set up to retain unique values and significance of cultural heritage. The land use plan, bylaws, and development control techniques should fit into local context, and prohibit uses that are destructive to historic environment.

Manage to Achieve Objectives: To materialize the objectives of heritage conservation plan; the management approach should include at least three minimum activities: (i) project implementation; (ii) monitoring the effectiveness of conservation; and (iii) reviewing the process (Imon, 2006). It requires participation and cooperation among key stakeholders such as the government, community members, politicians and other professionals working on conservation. Conservation of cultural heritage would be successful if it could retain values and provide socio-economic benefits to local people (Rossi, 1982; Prentice, 1993; Cohen, 1999). Tourism is also closely linked with conservation issues as cultural heritage attracts tourists which enhance local economic activities and thus encourage communities to promote conservation. Community participation and partnership among stakeholders is required in the process of heritage conservation and its management.

2.3 Cultural heritage conservation in post-disaster context

Disasters such as earthquake largely affect historic buildings, monuments and cultural resources in the historic towns. In context of less developed countries, historic towns and heritage get less attention from the institutions towards minimizing risk from disasters. With low economic condition, dwellings of the indigenous people do not get regular maintenance and repair. As most of the heritage structures and buildings in traditional towns were constructed centuries ago with local materials, techniques and knowledge; disaster such as earthquake more likely affects them. Conservation of cultural heritage needs to be given top priority in the post-disaster reconstruction planning. It should not merely rescue the disaster-damaged heritage properties but also sustain conservation and rehabilitate ‘the function of living’. The process of reconstruction first identifies the values embodied by the different places, monuments and communities; and then these values should be revived or regenerated through conservation efforts. Post-disaster reconstruction thus aims to bring the disaster-affected society back on
‘track’ as in pre-disaster stage.

Addressing heritage conservation appropriately in the reconstruction of historic towns is indispensable yet a challenging task specifically in context of less developed countries. It needs to deal with complex and multiple issues together. Scholars widely recognized the need of integrated approach to conservation to revitalize or reconstruct heritage resources. In fact, conservation is an integral part of reconstruction planning whereby it aims to achieve social, cultural and economic development and plays important role within wider context of settlement planning. According to Feilden and Jokilehto (1998, p.80) “integrated conservation implies reconciling conservation requirements and town planning objectives, i.e. considering the values and interests of the existing historic fabric as equal in status to other factors in the general planning process”. It deals with conservation and community development concerns in an integrated way so as to conserve heritage for future generations. Assumed as an alternative approach, integrated conservation revitalizes town and benefits to local people in terms of economic, social, physical, historical, and psychological aspects. It also addresses concerns of social justice, equity and sustainable community development.

In post-disaster context, the notion of integrated conservation essentially highlights on (i) community participation; (ii) conservation of heritage both tangible and intangible; and (iii) promotion of local economic activities and tourism. There is an interrelationship among these key issues. Inclusive involvement of local communities in reconstruction process would help addressing local voices and their genuine needs. Hence, participation is mandatory from early stage of planning such as in identification of disaster-damages; defining heritage values; and making proposals to its implementation. Participation of local people in conservation and use of local skills, knowledge and techniques would help retain original values and significance of the heritage. It also justifies the consideration of social and distributive justice in reconstruction process.

Figure 1: Integrated approach to heritage conservation in the historic towns

Source: Modified from Bhatta and Chan (2016).
RECONSTRUCTION PLAN OF BUNGAMATI OF NEPAL

The reconstruction planning tends to revitalize the towns as they are in the pre-disaster stage. Firstly, it includes preparation of detail records of built heritage, places, and intangible resources of the town. Secondly, it identifies the values and significance of each monuments and heritage along with cultural activities rooted in the society. It then prepares conservation plan to address the historical, cultural, economic and social values and identity of the town. Authenticity of the heritage resources in terms of use of traditional construction materials, arts, crafts, workmanship, and technology need be maintained as far as possible. In addition to build heritage, indigenous arts, crafts, skills and knowledge reflect the local identity and attract tourists supporting the local economy. Tourists prefer to visit historic area to experience authentic heritage, local artefacts, and cultural activities (Zeppel& Hall, 1991; Ram, Bjork, &Weidenfeld, 2016). Appropriate development of tourism would encourage local people to continue and conserve their indigenous heritage through providing socio-economic benefits. It reveals that there exist a symbiotic relationship among heritage conservation, tourism and local communities. Encouraging community participation, integrated planning approach tends to establish this link in post-disaster context to promote community well-being.

3.0 Study methodology

This study adopts a case of Bungamati to explore and analyze the context of post-disaster reconstruction and heritage conservation. It has used multiple methods of data collection such as interview with key informants (7 persons including local political leaders, project managers and local intellectuals); in-depth discussion with local communities (40 persons), and participant observation. The context of cultural heritage, local economy, and built environment in pre-earthquake stage was first explored followed by in-depth study of the town in post-disaster context specifically with regard to condition of heritage conservation; revival of urban spaces; community participation; production of crafts; tourism development; and community well-being. Different group of local people such as Shakya, Vajracharya and Tuladhar (higher caste community living near to public squares); Shrestha (Entrepreneurs living next to Shakyas and Tuladhars in spatial hierarchy) and Maharjans (lower caste community living in peripheral area) were selected to examine perceptions of different communities. In addition, local people involving in wood-caving and handicrafts production were interviewed to explore condition of local arts, crafts and tourism before and after the earthquake. The ongoing reconstruction activities are examined from the perspective of integrated conservation.

4.0 Case study of historic town "Bungamati" of Kathmandu valley

4.1 Geographical and historical context of study area:

Located at 10 km south of Kathmandu, Bungamati is an ancient 7th century Newari settlement enriched by rich cultural heritage, compact built form, Hindu and Buddhist socio-cultural values and local arts and crafts. Established in the Lichhavi period (dated 605 AD), Bungamati was developed extensively during medieval (Malla) period. The town has an area of 4.03 sq.km with total population of 5,720 in
2011 (CBS, 2011). The size, shape and planning principles adopted in the past including architectural vocabulary of Bungamati are unique and possess architectural, aesthetic and historical values (Shrestha, 2008). Before the earthquake, the town was equipped with basic physical infrastructure and social amenities and had agriculture based economy along with wood-carving. The town is of oval shape elongated toward north-south direction with steep slope on the west. The town represents the traditional Newari townscape in the rural context fitting with the local way of life and topography.

Figure 2: Map of Bungamati and MachendraBahal

Source: Danish Group of Architects (1968) cited on UN-Habitat (2016)

4.2 Local community and settlement of Bungamati

While there are different communities of Newar, the distribution pattern of these communities have provided unique urban space in Bungamati. The distinct urban characteristics and urban form are the results of their socio-cultural and religious practices prevailing in the community. The communal, religious, and cultural functions have shaped spatial pattern of the settlement. Unlike the ‘Newari’ settlements in the urban context, which are ‘palace’ concentric with segregation of housing based on their profession (Caste), the built form of Bungamati comprises of Machendranath temple as an ‘anchoring node’ with three communities residing in different directions (Shrestha, 2008). Higher caste community such as ‘Shakyas’ and ‘Vajracharyas’ were located close to the temple. It is believed that people from Kathmandu (Shakyas), Bhaktapur (Shresthas) and Patan (Jyapus) were brought to Bungamati to take care of the major deity of Machhendranath in the 7th century. To perform their socio-cultural activities, ponds were constructed for each community, such as DevPukhu for Shaka; KhaPukhu for Shretha and Na Pukhu for Jyapu community. There are also three large public spaces (Cholekhel, Jawalakhel, and Saraswatikhel) in peripheral area specifically to perform community activities. These public spaces together with ponds in three different directions with central
location of 'Machhendranath' temple indicated the boundary of old town restricting the settlement growth towards agricultural field (Shrestha, 2008).

Figure 3: Local Communities and Spatial Linkage of Bungamati

4.3 Urban characteristics, identity and heritage of Bungamati

Historic towns of Kathmandu valley demonstrate great refinement in the handling of land-use, quality of urban spaces, infrastructure provisions, monumental architecture and arts and crafts coming together to support a culturally advanced urban society (Shah, 1997). The urban fabric is a wise assemblage of streets, squares, entry gates and religious and cultural monuments such as temples and stupas. Bungamati has nearly an oval shaped morphology with curvilinear streets that offer the passerby a continuously changing views and vistas. Open spaces are found in the junction of the streets and around the major religious and cultural monuments. The temple of Machhendranath stands at the center of the town with large open space and religious structures (temple of HayagrivaBhairav and Buddhist Stupas) around it. In a spatial hierarchy, the center of importance is the Machhendranath temple, surrounded by the houses of Shakya, Vajracharya and Tuladhars(merchants); and then the Shresthas(merchants) and Maharjans(farmers). These communities celebrate various festivals demonstrating cultural vibrancy and shared community identity.

There are mainly three types of built forms such as linear (street houses or row houses); courtyard houses; and detached built forms. Residential buildings have decorative doors and windows, beautifully tiled overhanging roofs, and brick facades. The width of streets and lanes, and size of courtyard and building blocks vary considerably with regard to the function and socio-cultural activities to be performed by the local people. Local architecture and historic monuments exhibit...
unique physical and visual qualities of traditional urban form. With these qualities, it is an important tourist destination in the Kathmandu valley.

4.4 Historic objects, arts and crafts

The built heritage, and intangibles such as cultural and religious festivals, local arts and crafts have made Bungamati as the ‘Living Museums of Newari Culture’. There are numerous historic structures in the town including temples, shrines, Buddhist stupas, Monasteries, town gates, ponds, and monuments. These are found at almost every streets, backyards, and crossroads.

Table 1: Built Heritage in Bungamati

<table>
<thead>
<tr>
<th>S.N</th>
<th>Built Heritage</th>
<th>Numbers</th>
<th>S.N.</th>
<th>Built Heritage</th>
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</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Temples</td>
<td>12</td>
<td>5</td>
<td>Baha</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Pati (Rest house)</td>
<td>6</td>
<td>6</td>
<td>Bahil</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Ponds</td>
<td>6</td>
<td>7</td>
<td>Tole</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>Dhungedhara (Stone spouts)</td>
<td>2</td>
<td>8</td>
<td>Nani</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>Public Open Space</td>
<td>8</td>
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Source: UN-Habitat (2016)

Wood-carving and handicraft production has become a common occupation among the Shakyas, and Tuladhars. In recent years, other communities such as Maharjans have also learned the production of crafts and opened up workshops in the town. Women are also equally involved in woodcarving business. Workshops are purely family enterprises and trade of wood-carving is generally handed down from father to son. Significant proportion of population is now involved in the wood-carving profession.

Figure 4: Cultural heritage, arts and crafts in Bungamati

Source: UN-HABITAT (2016)
4.5 Heritage destruction in Bungamati by 2015 earthquake

The devastating earthquake in April 2015 caused loss of human lives and assets. Not only the monuments and buildings were impacted, social and cultural life of local people was largely affected by the earthquake. Bungamati, a compact and traditional Newari town, was also severely affected. The earthquake took the lives of 6 people, seriously injured 50 people and completely destroyed or damaged about 900 houses, 5 school buildings and several of the cultural and religious built heritages including the Machhendranath temple (proposed heritage sites for UNESCO listing) (UN-Habitat, 2016). In addition, it destroyed all of the main historical religious structures, and left over 85 percent of the residential structures severely damaged or uninhabitable. Sewage lines and the electrical grids were also damaged. Not only the built structure, but the production of handicrafts, wood-carving, tourism, agriculture, business activities and community life style were severely affected. It forced local people to live in temporary shelters or back to their damaged houses. It is indispensable to revive built heritage, local economy, tourism and socio-cultural life. Recognizing the significance of cultural heritage and local economy, relevant institutions including the Government of Nepal strongly advocated conservation and reconstruction of Bungamati through involvement of local communities.

5.0 Addressing heritage conservation in Post-earthquake reconstruction of Bungamati

Reconstruction of Bungamati received significant attention from the Government as well as different organisations. It is the first settlement for the campaign of Mega Reconstruction by the National Reconstruction Authority (NRA); the Prime Minister of Nepal inaugurated it by laying the foundation stone at Bungamati in January 16, 2016 (9 months after the earthquake hit the country). It was mentioned that built heritage of the community including the individual dwellings of the people would be reconstructed by the Government of Nepal. The Reconstruction Plan of the town was proposed with support from various institutions including NRA; UN-Habitat, Katholieke University Leuven; and local authorities. The Plan aims to focus on rebuilding of people, local economy, livelihoods and society through community participation. It essentially deals with three aspects such as (i) Physical development: housing, public spaces and infrastructure; (ii) Economic development: tourism development, livelihoods; (iii) Social development: active participation of local community and conservation of heritage (UN Habitat, 2016).

Although several promises were done for the reconstruction of Bungamati; the revitalization of cultural heritage started very late. Local people who lived in temporary shelters or in their damaged houses have neither received housing from the government nor could they build their houses themselves due to new rules and regulations on building design which require need of earthquake resistant techniques to be approved by the government agencies, and more setbacks from the streets as compared to their previous houses. The traditional houses were constructed as row houses sharing a common wall and making the streetscapes pleasant with Newari architectural facades; which are lacked in new construction. Although, the Prime Minister, while addressing a gathering of top officials and local
earthquake victims, had promised to expedite the reconstruction of all private houses, temples and other structures of the town; it has taken more than two years to receive basic incentives from the Government (NRA) to reconstruct their houses. It is ironical that a holistic plan of the town with reconstruction of residences as well as revitalisation of heritage and local economy was initially advocated by the Government; however it started with an individual owner-driven approach, where local people receive some financial and technical assistance to build their houses themselves. It has neglected community-driven approach, thus destroying the community cohesiveness and shared values of urban spaces. During an interview, one of the key informants also commented that:

"The key problem remains within the government policies and regulations. The individual owner-driven approach as promoted by the NRA is, in fact, destroying the historic urban fabric; as residents are building their houses by using non-local materials and techniques without maintaining harmony with traditional buildings. Better alternatives such as community-driven approach could be used where we can build community houses in a row type or courtyard type housing with less investment while maintaining harmony with traditional architecture and streetscapes. He added that sharing of walls and spaces among residents, and their active participation could reduce cost of construction”.

Some international organisations such as UN-Habitat and local NGOs have however proposed community-based approach in revitalisation of public spaces in Bungamati. With support of UN-Habitat, Bungamati Area Reconstruction and Development Council was formed and the Bungamati Charter is now under construction. Similarly, trainings on wood-carving, establishment of technical support office and development of community-based brick manufacturing factory are supposed to be done in the Bungamati. It also assisted to prepare 'Revitalizing Bungamati Action Plan' and Socio-economic Survey. Other efforts by different institutions include (i) Inauguration of NRA’s Reconstruction Mega Campaign in Bungamati by the Prime Minister; (ii) Survey to enrol affected people for grant distribution by NRA; (iii) Training for masons and carpenters by CTEVT with Samuhik Aviyan (UN-Habitat, 2016). The reconstruction of Bungamati was initially conceived as an integrated approach; it has however taken a piece-meal approach in its operation. As evidenced, different institutions are working individually on heritage conservation, such as reconstruction of public spaces like DyoPukhu and patiat the Bungdyoare performed by the UN-Habitat, whereas the restoration of Machhendranath temple is supposed to be completed with support of Embassy of the Democratic Socialist Republic of Shri Lanka in Nepal; and the Jawalakhel Park to be done by the Ministry of Urban Development and NRA. The process of reconstruction is truly too slow and is not yet materialised as expected initially. Discussion with local people reveals that the current reconstruction process is really frustrating to locals whose dwellings are yet to be constructed. The ongoing reconstruction of urban spaces has also taken long time and is

1An interview with the key informant at Bungamati, conducted by the first author on 7th June, 2017
unsatisfactory to locals. One of the households at the Bungamati commented that:

"Local people including me were initially very happy expecting the revitalisation of the town, as the prime minister had come to us and promised to build dwellings and heritages. However, residences are not reconstructed by the government even after two years. Conservation of public spaces and heritage is also not completed. People are forced to live in temporary shelters or back to their damaged houses. In addition, it took long time to receive small amount of financial incentives from the government. On one hand, we cannot build our houses with this small amount; whereas on the other hand the bylaws and rules for constructing new houses are complicated and impractical. The holistic approach to reconstruction was not operated, nor is the ongoing projects essentially able to contribute in terms of local benefits".2

The Government promised to pay the total amount of 300000 NRS (approx. USD 3000) with first instalment of 50000 NRS (USD 500) to all households who can prove that their houses have been lost due to the earthquake. Although the NRA was established to plan, coordinate and manage the reconstruction in earthquake affected districts; the implementation has been very slow and unsatisfactory for the affected population. The new set of regulations for the reconstruction is also so complicated that many beneficiaries face difficulties in understanding the criteria and formalities. It is too demanding and many people are not in a position to apply for support. Interview with local people reveals that the confusing rules and technical specifications including need of earthquake resistant buildings are the financial burden for the families already affected by the earthquake. Additionally, individual dwellings and streetscapes are not prioritized for conservation by the authorities. Without retaining heritage values that the traditional dwellings exhibit, the reconstruction of Bungamati seems to be futile.

Following discussion highlights on need of conservation in the reconstruction of Bungamati specifically with regard to (i) Preserving Heritage and Identity; (ii) Protecting Sense of Place and Cultural Continuity; (iii) Encouraging Community Participation ; and (iv) Improving Quality of Life.

5.1 Preserving heritage and identity
Cultural heritage of Bungamati both tangible and intangible are not only cultural and economic capital but also a social capital. It provides consciousness of our common history and common future and have most direct visual link to our roots, which helps us establish our identity. It provides consciousness of our common history and common future and have most direct visual link to our roots, which helps us establish our identity. As the historic identity and community life style were severely destructed; the reconstruction plan needs to retain these values.

The proposed reconstruction plan though aims to restore communities and heritage; ongoing conservation activities seem to be individualistic. Community participation is seemingly neglected except in the restoration of DyoPukhu (Pond) and Pati (Rest House) by UN-Habitat. The Department of Archaeology did not involve local community in the construction of monuments. One of the key

2 Findings of the in-depth discussion with local households at Bungamati, conducted by the first author on 17-20th June, 2017
informants commented that the proposal for restoration of Machhendranath Temple lacks detail design and drawings in addition to limited budget, which seems more disastrous than earthquake. In absence of traditional details on design, carvings, construction materials, and scale and size; the 7th century old monument would most likely lose its authentic heritage values. To retain its values, he further suggested that improvement in the design, drawings, estimates and its construction techniques are needed along with participation of local people. Similarly, production of local arts and crafts is also severely affected resulting into sharp decrease in number of tourist’s arrival. The reconstruction plan did not focus on revitalization of local arts and crafts comprehensively except trainings to few people.

**Photo 1 & 2: Streetscape towards Machendra Bahal before and after the earthquake**

*Source: Photo 1,3,4: UN-Habitat (2016); Photo 2: First Author*

Additionally, individual houses are constructed with RCC structure neglecting use of local techniques and materials (figure 2, above). New constructions appeared inconsistent with traditional settlement structure, breaking down the traditional harmony and urban characters of the town. The main reasons of denying continuity to traditional architectural style are found as (i) need of large amount of money to
construct and repair traditional buildings; (ii) lack of sufficient incentives; (iii) ineffective building bye laws; and (iv), unavailability of traditional buildings materials in the town.

5.2 Protecting sense of place and cultural continuity

As Rossi (1982, p.130) mentioned that “the urban artefacts are the soul of the city and the city itself is the collective memory of the people”. The public spaces, built heritage, and socio-cultural practices enrich lives of local people and express authenticity, spirit, and sense of place. Urban places and landscapes thus entangle individual and community sentiment, experiences, ownerships, and collective memories. Kevin Lynch (1972, p.124) also emphasized “memory is the basis of self-identity”, and identity of a place is connected with heritage, community lifestyle and social activities.

In the historic town 'Bungamati', public spaces such as Machhendranath Square, Temple Squares, Ponds, Courtyards, Bihar, Rest House, Stone Spout, and Streets have supported socio-cultural activities of local people. These spaces signify cultural values by offering services to the large mass of people especially during chariot festivals and local rituals. Cultural heritage and spaces are expressed through the interaction of people and their ideas, memories, histories, beliefs and values. Thus, public places, monuments and urban fabric accrued sense of place and provide continuity to historical memories and cultural traditions. Essentially, revival of public spaces and cultural heritage seems crucial to enhance sense of place and cultural continuity.

A limited number of public spaces, temples, and ponds are being constructed by the institutions. Significant number of monuments and cultural heritage with considerable values are neglected. This process of reconstruction would not revive sense of place and continuity to socio-cultural activities. In addition, as significant numbers of household are still living in a temporary shelter and public spaces are filled with debris and construction materials; continuity to cultural festivals and rituals of local people has been affected. The historic town, once known as centre of arts and crafts, is about to lose its cultural authenticity and historic identity. The reconstruction process has failed to restore heritage, festivals, crafts, and livelihoods. Making urban spaces and built environment compatible and harmonious with the historic characters has become essential to maintain spirit and sense of place and cultural continuity.

5.3 Encouraging community participation

As heritage conservation and development of local communities is integral to reconstruction; public participation helps to provide best solutions to the problems. It gives the feeling of ownership and provides opportunities to residents and others to actively involved indecision making of heritage conservation. Community participation could be instrumental in establishing the cultural significance of a

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3 Obtained from the discussion with local communities at Bungamati and interview with key informants, conducted by the first author on 7th, 17-20th, and 26th June, 2017.
place and developing conservation objectives to retain its significance.

Representing the various members of the community, Bungamati Reconstruction and Development Council was formulated at the local level to involve communities in the restoration of monuments and spaces. However, local people reveal that community participation in reconstruction process is minimal. While the ICOMOS Charter on the Conservation of Historic Towns and Urban Areas strongly stressed on the need of involvement of local residents in the conservation activities (ICOMOS, 1987); the reconstruction plan of Bungamati has failed to include local people in the development process except in few projects by the UN-Habitat where User’s Committee has been formed to carry out conservation. In the reconstruction of Machendranath Temple, local people were not consulted and involved in its planning, designing and construction process by the Department of Archaeology. Majority of respondents also replied that there is weak cooperation among stakeholders, and local people were not invited to participate in the reconstruction activities4.

It is found that majority of residents are not familiar with the policies and regulations needed to reconstruct their houses after the earthquake. They do not seem enthusiastic about reconstruction as they are not consulted and involved in the reconstruction of important monuments such as Machendranath Temple. It is crucial to provide educational awareness about significance of conservation to the stakeholders, and local people should be involved inclusively in the process. While the genuine participation provides local people opportunities to raise their voices and define their needs; many problems, such as conflicts in the distribution of resources and project prioritization, arising during reconstruction could be easily resolved. Moreover, cooperation among stakeholders is needed to ease the process of conservation and development. It would help fostering mutually beneficial relationship among stakeholders that would be economically profitable and socially acceptable to local inhabitants.

5.4 Improving quality of life

The damaged and dilapidated historic urban fabric needs to be improved to make it suitable for living and working. Quality of life of local community in the historic towns could be improved by revitalizing the local economy along with the social capital. It is widely acknowledged that the sense of belonging is attached with historical and cultural heritage of the place and helps to build up the social capital. Conservation of social values of heritage provides continuity of sense of belongings, satisfaction to local community and lead to the overall improvement of the quality of life. On the contrary, loss of heritage significance causes losses in the psychological bond among generations.

In case of Bungamati, local economy is mainly linked with agriculture, production of art and crafts, and tourism activities. Before the earthquake, there has been a significant number of tourists, both domestic and international, visiting the town specifically to explore local heritage, culture and handicrafts. It has been

4Findings from in-depth discussion with local residents at Bungamati, conducted by the first author on 17-20th June, 2017.
sharply decreased in post-earthquake period and causes adverse impacts on local economy, such as people involved in the craft industry faces financial and psychological problems due to decrease in business activities. In addition, home-stay programme is also affected largely. The reconstruction plan has not addressed concerns of communities involved in tourism and handicraft production. It is therefore important to integrate local economic activities and tourism with heritage conservation and its management for the betterment of local people.

Improvement in the public spaces such as DyoPukhu and Machendranath square would indeed attract tourism activities. Prentice (1993) argued that heritage can be portrayed for promotion in tourism marketing as commercial products to be marketed to customers seeking leisure and tourism experience. It could serve as tourism product for visitors and educational tool for local people, especially for youths who know very little about history and local culture. Development of sustainable tourism would protect local environment, culture, tradition and sense of place for the future generations. Revenue collected from the tourists could be used to enhance better quality of life. Increase in opportunities and benefits from heritage resources would encourage people to continue their traditional occupation such as woodcarving. Similarly, the improved quality of space and built environment at Bungamati along with revival of local arts and crafts and their proper marketing is crucial to improve quality of life of local community and sustain local community for long run.

6.0 Concluding remarks

This study revealed the theoretical and practical challenges of implementing an Integrated Approach to Conservation in context of reconstruction of historic town. It seems complicated to achieve a symbiotic relationship among heritage conservation, tourism and local communities in the historic town without looking into the capacity, interests and power relations among key stakeholders involving in the reconstruction process. The role and policies of government institutions need to be reviewed to include local communities in the process of conservation and development. In context of Bungamati, besides some efforts from UN-Habitat, the reconstruction process did not focus on rejuvenation of historic spaces, local arts, crafts and heritage into its original stage. Findings shows that it has failed to incorporate and materialise the key aspects of Integrated Approach to Heritage Conservation, and so to revitalise the historic identity of the town. Absence of holistic efforts to conservation has threatened its identity to be lost. The production of local arts and crafts such as wood-carving and handicrafts, which once had a supra-regional importance, is also degrading. The current plans, policies and institutions seem ineffective and inefficient to carry out reconstruction works for overall development of the town.

To improve existing condition of Bungamati, this study, based on empirical findings, suggests multiple actions to be immediately implemented to revitalise the town and its communities. They are (i) adopt Integrated Conservation to retain local identity, heritage, urban fabric and economy; (ii) encourage inclusive participation of local people in the reconstruction activities; (iii) provide technical support and financial incentives rationally to local people to reconstruct their dwellings in traditional way and revive their local arts and crafts; (iv) adopt a collaborative
mechanism to promote coordination among key stakeholders (from local level agencies to national level government Institutions); (v) connect heritage and local resources with tourism development to improve quality of life of local people; (vi) promote religious and cultural activities through development of traditional craftsmanship, music, material, customs and rituals; and (vii) revise the existing bylaws and regulations to make buildings earthquake resistant, suitable for local context, and acceptable by the community, and also to educate local people about it. Proper implementation of these actions and strategies could improve overall built environment, sense of place, community cohesiveness and socio-economic life of local people. It would indeed foster revitalisation of town and community well-being.

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