

KATMANDU RECOMMENDATIONS

**International Symposium on Protecting World Cultural Heritage Sites and
their Historic Urban Environment from Earthquakes**

Kathmandu Valley, 16-19 February, 2009

ACKNOWLEDGEMENTS

World Heritage properties in Historic Urban Areas located in Earthquake Zones are increasingly vulnerable to earthquakes due to factors such as the rapid pace of urbanization and population growth and the transformation of the traditional management systems that have ensured their conservation and maintenance over generations. The cases of the World Heritage Monument Zones in the Kathmandu Valley, Nepal and of the World Heritage properties in Kyoto, Japan illustrate the issues at hand. The situation is indeed alarming since a serious earthquake is expected in the near future in both Kathmandu and Kyoto,.

In that context, the Research Center for Disaster Mitigation of Urban Cultural Heritage, Ritsumeikan University in Kyoto, Japan, in cooperation with the UNESCO office in Kathmandu and the Institute of Engineering, Tribhuvan University, in Kathmandu, and with the support of the Japanese Embassy in Nepal, organized the international workshop, the Kathmandu Symposium on the "*Protection of World Cultural Heritage Sites and their Historic Urban Environment*" held in Lalitpur in the Kathmandu Valley, 16-19 February, 2009.

The Kathmandu Valley was chosen as the venue for this symposium given the great deal of international attention directed to it during the period of time it was on the World Heritage List in Danger, the notably successful and continuing efforts of the responsible authorities to address the development challenges which led to its inscription on the World Heritage List in Danger, and the continuing and ever-present risk of major seismic events which could bring catastrophic damage to life, property and heritage property. It is hoped that the recommendations of this symposium can inspire and support the efforts of others to improve risk management for cultural heritage in comparable historic urban environments, world round.

Participants from Nepal, Bhutan, India, China, Japan, the Republic of Korea, Peru, Canada and Australia, and the representatives of UNESCO, ICCROM and ICOMOS wish to express their gratitude to the organizers of the meeting and the Nepalese people and institutions for sharing their experience and allowing a very fruitful exchange among professionals addressing pressing issues related to the conservation of World Heritage properties, in particular that of the Kathmandu Valley.

For the benefit of the Nepalese institutions and professionals in charge of the management and conservation of the World Heritage property of the Kathmandu Valley, and other comparable sites, they formulated the following recommendations.

Given the inter-related nature of efforts to improve risk management for cultural heritage, and to reduce risk of earthquakes to property and public safety, these recommendations are addressed to Nepalese authorities at local, regional and state level concerned with improving risk preparedness for earthquakes, international organizations concerned with improving risk management for properties of cultural heritage value (including UNESCO, the World Heritage Committee, ICCROM, ICOMOS and the ICBS), and international agencies concerned with risk reduction at all levels (including the UN Agencies like UNDP and UNISDR, and regional bodies like SAARC.)

For the benefit of World Heritage in Kathmandu Valley, Kyoto and many other earthquake prone regions on the planet, the participants stress the need to further research but also to ensure proper implementation and maintenance of preventive measures and strategies to reduce the risk of catastrophic loss in case of earthquake and related disasters such as fire. It is with such consideration that they formulate the following recommendations.

*The Kathmandu Symposium Recommendations on
Protecting World Heritage properties and their Historic Urban Environment
from Earthquakes*

Recalling the valuable reference provided by the World Heritage Convention, an instrument ratified by 186 States Parties, and more specifically the reference in its Article 5 to the importance of integrating the protection of heritage as part of comprehensive planning programmes, including those providing national and local disaster reduction schemes,

Recognizing the recent initiatives such as the Hyogo Framework of Action adopted during the UN World Conference on Disaster Reduction in Kobe in 2005, the Strategy for Reducing Risks from Disasters at World Heritage Properties adopted by the World Heritage Committee during its 31st session in 2007 and the recommendations of the International Workshop on Disaster Risk Management at World Heritage Properties held in Olympia from 6 to 7 November 2008.

Given the rapid urbanisation and population growth of the Kathmandu Valley over the last 30 years, resulting in the dramatic transformation of Nepalese society within the Kathmandu Valley characterized by:

- The ongoing loss of religious and secular traditions, beliefs and practices which maintained respect for the long evolved hierarchical character, features and quality of the built environment
- The loss of the agricultural lands which have sustained the activities of the Guthi (Nepalese land holding trusts fostering community objectives) and which provided open space important for public amenity and for earthquake and disaster marshalling
- The replacement of a sustainable and self supporting human eco-system which cared for social and economic needs at all levels in an equitable manner, by institutional and government programmes, development frameworks and planning tools whose effectiveness and attention to contemporary community needs and potentials have been challenged
- The transformation of traditional community-oriented society, long imbued with respect for traditional knowledge and practices, by new diverse and migrant populations given little opportunity to integrate their capacities, values and interests in the emerging urban entity

Given the contribution of traditional knowledge developed over generations and through experience to a sense of belonging in community and to resilience in terms of earthquake preparedness and response, including for example:

- The particular features of traditional construction and the art of building present in civic or religious monuments as well as in more private and vernacular buildings;
- The maintenance of ponds, and other water features and systems which support the ability of communities to respond to disasters
- The maintenance of public and private open spaces which can provide sanctuary spaces in the event of disasters
- The maintenance of intangible cultural heritage such as religious and festival processions whose routes link significant heritage structures and spaces, also providing emergency response access pathways.

Given the expressed will of the local, national and international community to cooperate to enhance the seismic-resistance capacity of the heritage in the Kathmandu Valley and other heritage areas in Nepal and in the region as part of a renewed commitment in the context of its inscription on the World Heritage List and the efforts invested by the responsible authorities, academic institutions and individuals in research, in education and in improving the management system of the property,

Therefore, the participants of the Kathmandu Symposium recommend

- 1. That research be pursued and expanded in conjunction with training, institutional coordination, public awareness, site maintenance and adaptation of planning tools and building regulations so as to provide an appropriate and adapted response to the conservation and disaster reduction needs of this World Heritage property and others.**
- 2. That the following areas of research be pursued either within the current research framework or through an expanded one :**
 - a. On traditional knowledge and community practices in support of conservation:**
 - analysis of means by which the scope and impacts of the traditional Guthi system can be reinvigorated, accommodated and integrated within appropriate mechanisms in contemporary society (e.g., building on recent UNESCO study)

- dealing with the nature of multicultural urbanism in the Kathmandu Valley and means to maintain, integrate and re-shape former traditions in the emerging society (e.g., Ph. D. study being carried out at I.O.E., Tribhuvan University)
- comparative analysis of the three Kathmandu Valley urban communities to understand those urban planning and management mechanisms which have optimized retention of traditional structures, practices and relations in the face of rapid modernization
- acquisition of knowledge on traditional means of earthquake (and other hazard) disaster mitigation strategies
- analysis of prototype urban units (at the level of the block, the chowk, the neighbourhood) and their ability to respond to earthquakes in physical, social and economic terms
- Impact of traditional management methods and maintenance on the resistance and capacity of heritage structures and buildings subject to earthquakes,
- physical research on the status and possible contribution of traditional forms of open space, water features and ponds, and festival procession routes to risk preparedness
- interdisciplinary analysis and structural assessment of heritage buildings including use of traditional materials and technologies, specific architectural elements and construction details through analytical or physical modeling, and through the installation of permanent sensors on existing structures to document their actual behaviour under seismic activity
- documenting the earthquake history, and assessing current seismicity of sites, and the impact of recent earthquakes on traditional and non-traditional structures

b. On the application of this traditional knowledge to the management systems and tools for heritage properties:

- Inclusion of concern for effective use of traditional knowledge systems in the curricula of engineering and architectural schools, and training

programmes for municipal technicians also used for capacity building of authorities and site managers

- analysis of the means by which building codes in other jurisdictions have sensibly accommodated the need to flexibly respond to upgrading needs, without compromising heritage values or public safety
- analysis of how best to use understanding of traditional materials and technologies in developing heritage sensitive retrofitting strategies for historic buildings and structures
- analysis of possible retrofitting strategies for historic buildings and structures which take into account the appropriate principles of conservation, including for example, reversibility
- exploration of alternative means of assessment of earthquake resistance of traditional masonry structures than those developed conventionally for modern structures
- study the required tools for conservation and their applicability for seismic risk analysis, and the efficiency and impact of existing bylaws with regard to protection of heritage structures in the light of conservation objectives to maintain and transmit the cultural values of the heritage property
- Develop standards for documentation, including accessibility and safekeeping of this information, which take into account the requirements for graded inventories, identification of heritage values, and the use of this information for conservation

The participants also recommend the development and implementation of a communication and training strategy including a coordinating clearing-house for research and information, and dissemination to the various stakeholders including the owners, crafts-persons and professionals and personnel of the authorities engaged in the management of the World Heritage Sites and other heritage assets of the Kathmandu Valley,

Conclusion

The participants also agreed on the importance of efforts to follow up on and report the recommendations of this meeting to all those involved locally, nationally and internationally in efforts to strengthen care of cultural heritage threatened by seismic risk, including but not limited to the responsible heritage authorities in Nepal, and the Kathmandu Valley, .

They wished the Recommendations be communicated to the Kathmandu Office of UNESCO, to the World Heritage Center and Committee and to ICOMOS and ICCROM and to other relevant international and regional organisations, in particular ISDR, UNDP and SAARC.

The participants also urged the Symposium organisers to make information concerning the symposium and follow up actions available on a suitable web site, to aid in widespread and effective dissemination of results so that the valuable exchange within the Symposium can be furthered and, through them, the quality of care and long term conservation of World Heritage properties located in earthquake-prone areas such as the Kathmandu Valley or Kyoto, can be improved.