



National Society for Earthquake
Technology-Nepal (NSET)

3rd Huangshan Dialogue on UNESCO Designated Sites and Sustainable Development

Disaster Risk Assessment and Mitigation for WHS & Heritage Settlements in Nepal

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World Heritage Sites in Nepal

- The Kathmandu Valley World Heritage site (KVWH) was included on the prestigious World Heritage List in 1979.
- Besides Kathmandu Valley, there are three other Nepalese sites Inscribed on the list;
- Lumbini, the Birthplace of Lord Buddha, and two natural parks: Sagarmatha and Royal Chitwan.

World Heritage Sites in Nepal

The Kathmandu Valley World Heritage site (KVWH) consists of

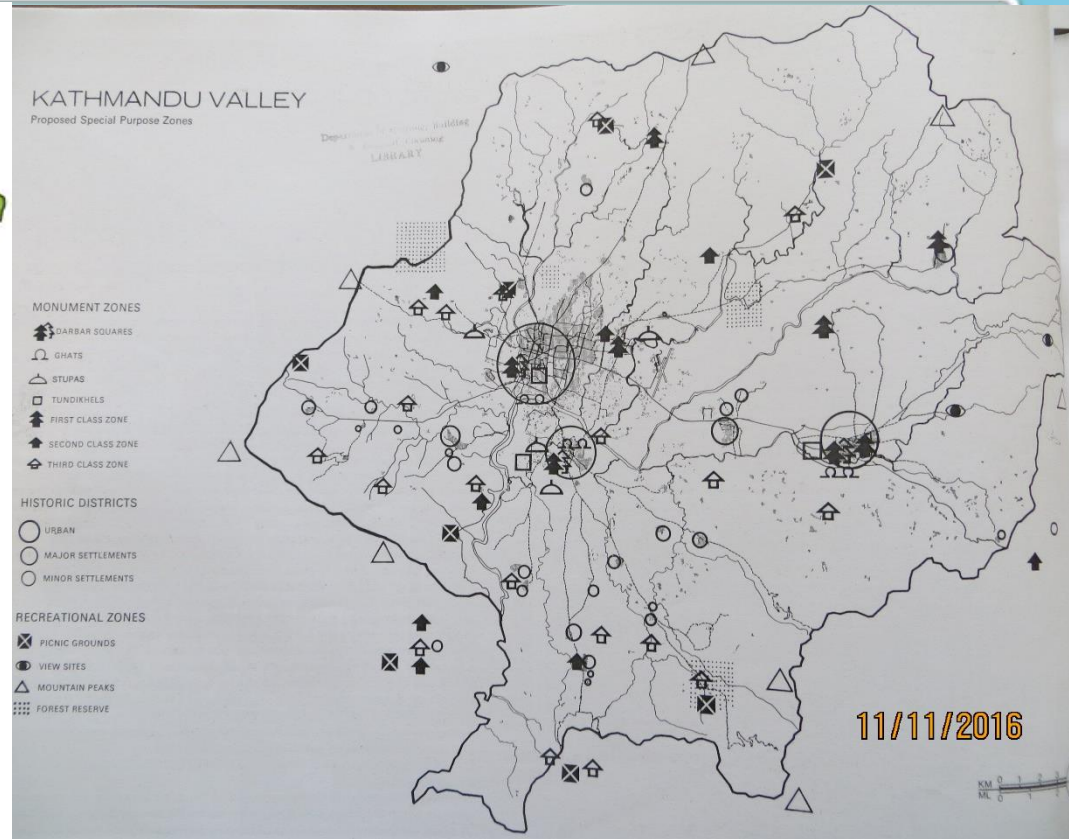
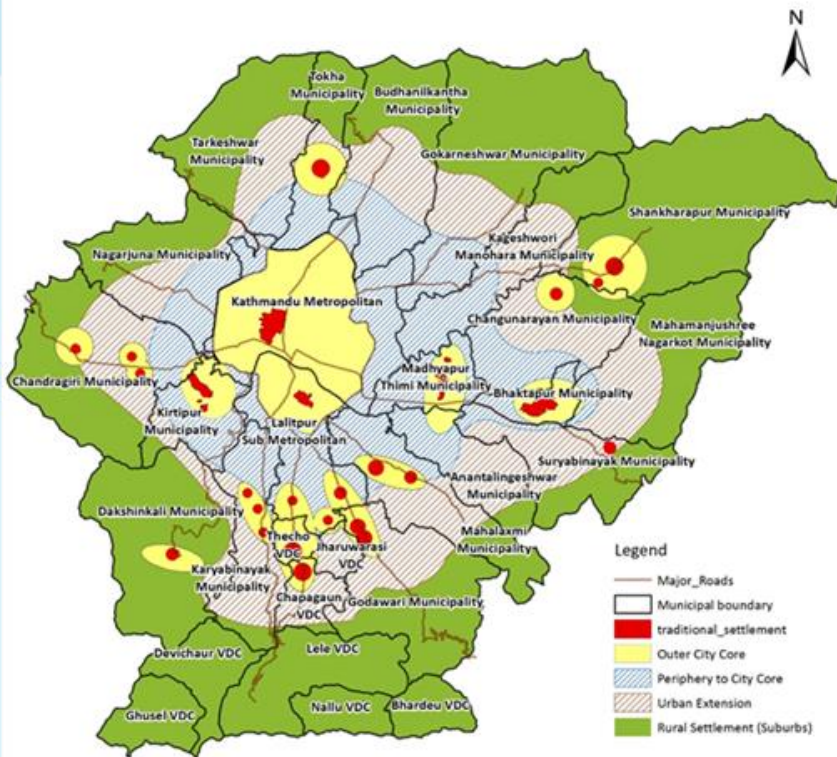
- the three town centres of the erstwhile royal cities of Kathmandu, Patan and Bhaktapur;
- Buddhist monument sites of Swoyambhu, Boudha,
- and two major Hindu sites of Pashupatinath and Changu



Heritage Settlements and Cultural sites

- There are approximately 1052 heritage settlements and cultural sites in Nepal that are classified as being of national, regional and local importance. (source : DoA, GoN)
- In Nepal, tangible cultural heritage is inextricably associated with a living culture of daily worship and ancient festivals.
- Cultural sites are where people come to pray daily, interact socially, celebrate, and find solace.

Heritage Settlements (Districts) in Kathmandu Valley



11/2/2018



Nepal is considered to be

- one of the most disaster-prone countries in the South Asian region.
- 11th most at Earthquake risk country in the world. (Source: UNDP/BCPR)
- One of the global hotspots for natural disasters. (Source:WB Report 2005)
- Approximately every 75 years, Kathmandu has been hit by an earthquake of magnitude 8.0. (Source:WB Report 2005)



In the aftermath of the 2015 earthquake,

- Nepal was hit by M7.8 Gorkha Earthquake on 25th April 2015.
- Centuries-old buildings listed in UNESCO World heritage sites and many more archeologically important sites were destroyed.
- The earthquake affected about 2,900 structures with a cultural and religious heritage value.(source:PDNA 2015)



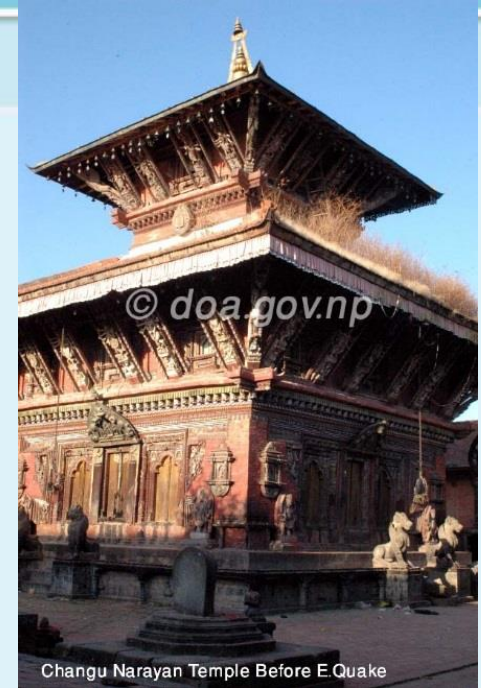
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In the aftermath of the 2015 earthquake,

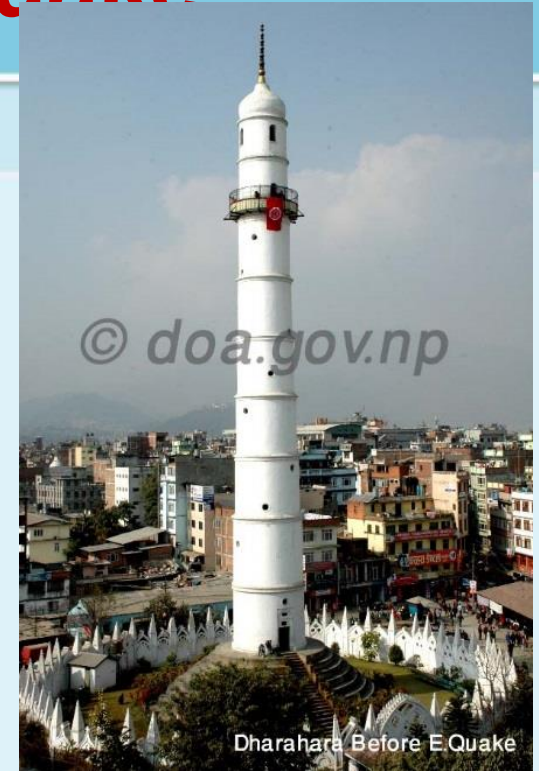
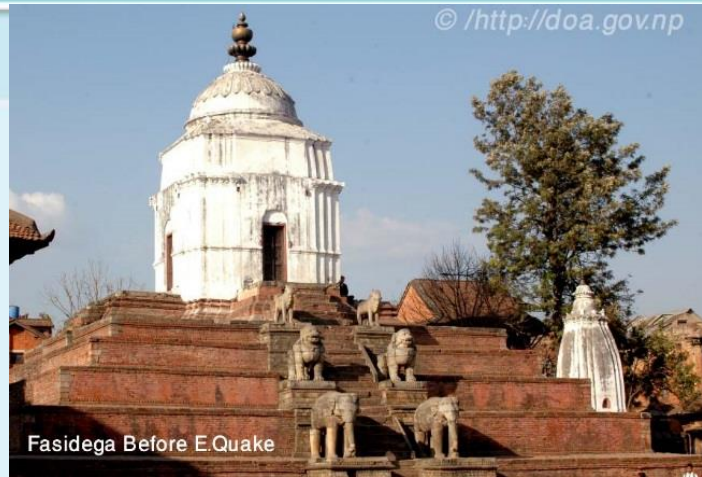
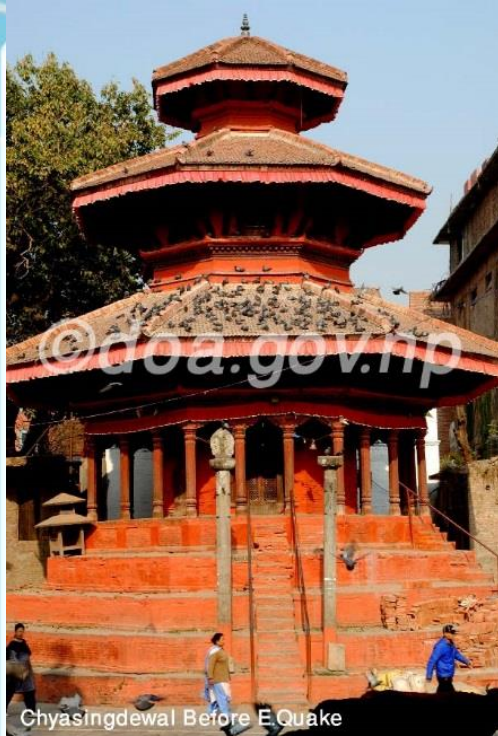


Nautale Durbar After E.Quake

In the aftermath of the 2015 earthquake,



In the aftermath of the 2015 earthquake





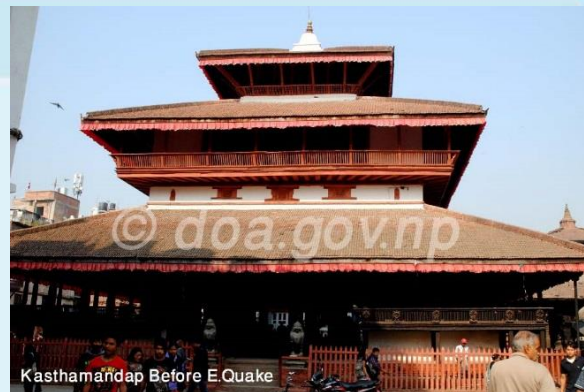
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In the aftermath of the 2015 earthquake,

Hari Shankar Temple Before E.Quake



Laxmi Narayan Temple Before E.Quake



Kasthamandap Before E.Quake



Laxmi Narayan Temple After E.Quake



Kasthamandap After E.Quake





In the aftermath of the 2015 earthquake,

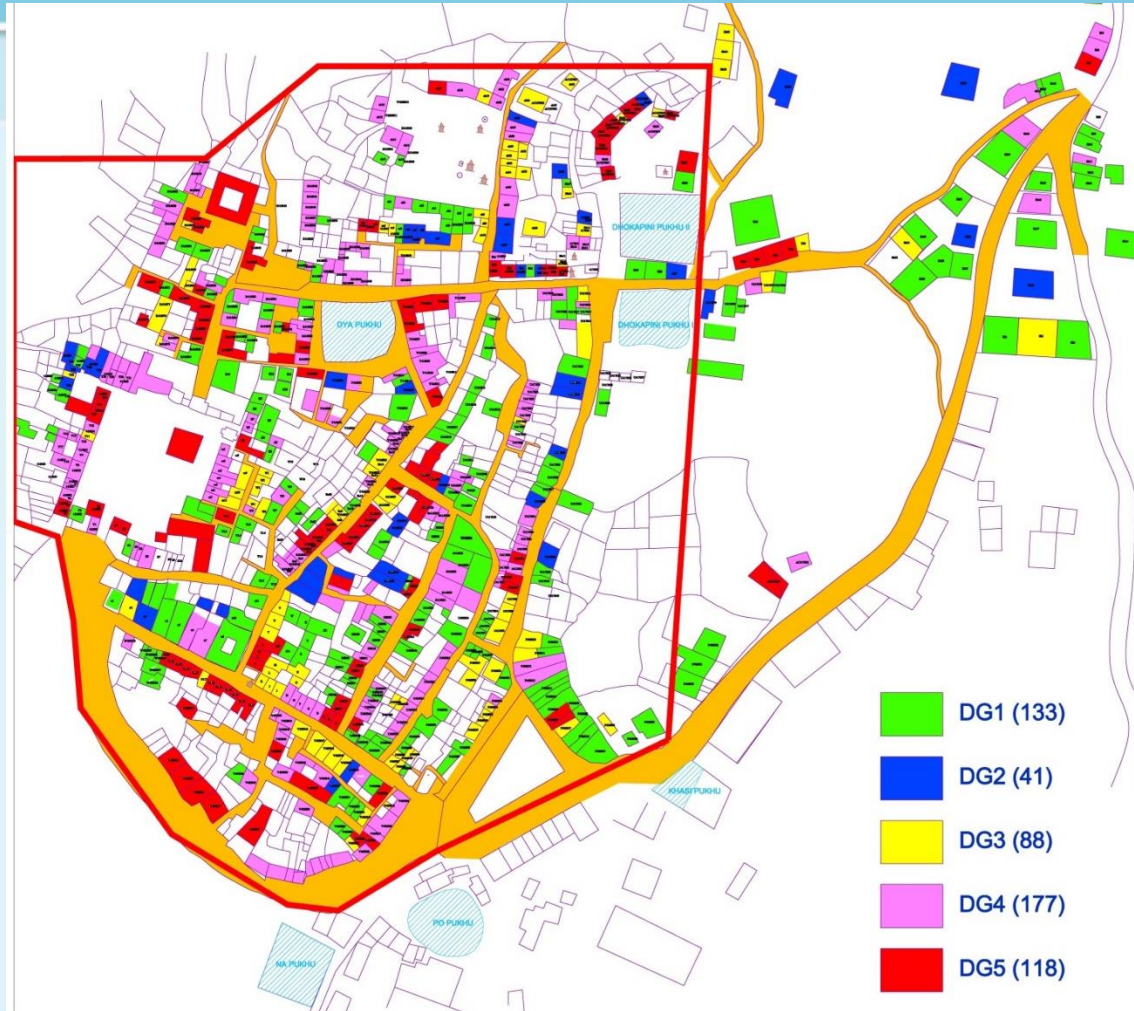
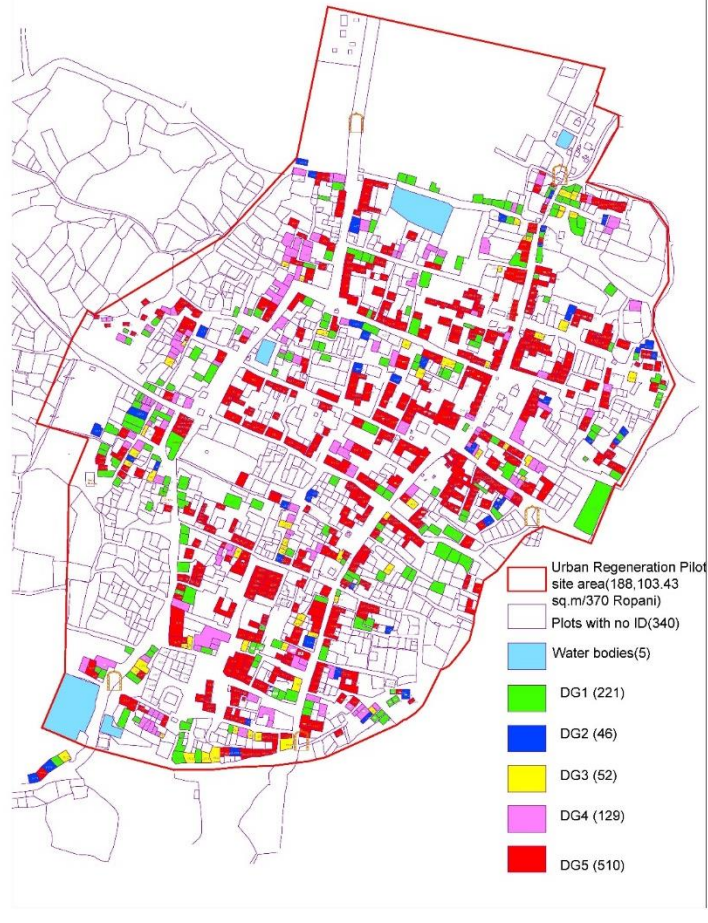
- Nepal suffered its worst loss of heritage since the earthquake of 1934.
- Major monuments in Kathmandu's seven World Heritage Monument Zones were severely damaged and many collapsed completely.
- Across the earthquake affected 94 municipalities 63 heritage settlements are also badly damaged.



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Heritage settlements badly affected by 2015 EQ

DAMAGE GRADE MAP OF SANKHU
AUGUST 2015



Sankhu (4th centuries A.D) Bungamati (644 -680 A.D.),

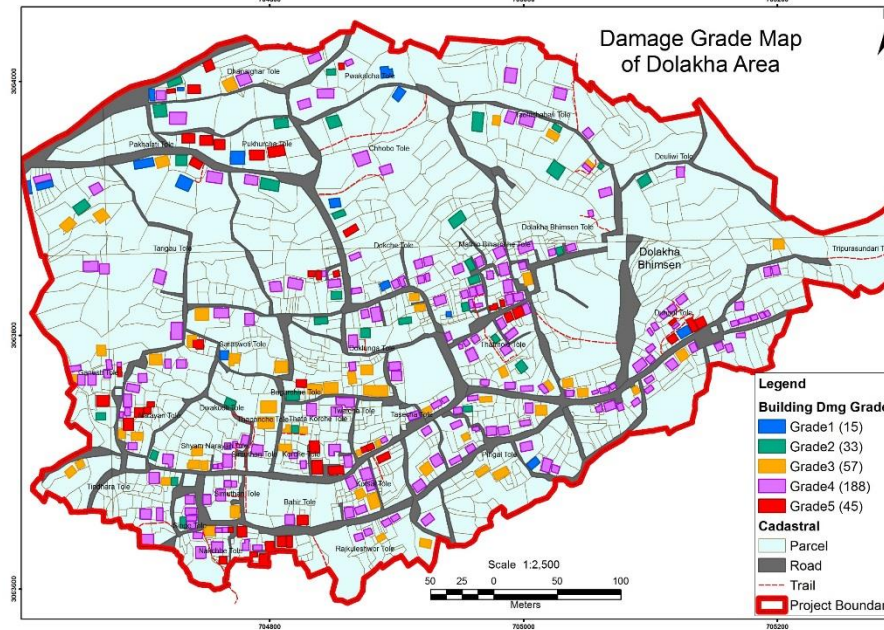


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Heritage settlements badly affected by 2015 EQ

Dolakha (*Kirati and
Lichhavi* period,
4th centuries A.D
&Before)

Khokana (1513.A.D)





In the aftermath of the 2015 earthquake,

- In addition, in >20 districts, thousands of private residences built on traditional style, historic public buildings, ancient and recently built temples and monasteries, were affected by the disaster, 25 percent of which were destroyed completely.
- The total estimated damages to tangible heritage is NPR 16.9 billion (US\$ 169 million).



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Post Disaster Reconstruction Framework



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Strategic Objective of the Post Disaster Reconstruction Framework

Strategic Objectives outlines plans for restoring monuments and urban heritage settlements, unsafe neighborhoods, and affected market towns, including:

- Improving access to planning and building skills
- Engaging small and medium sized businesses and cooperatives to increase investment in revival of urban areas



Post Disaster Reconstruction Framework

- Strengthening effectiveness of municipalities and other stakeholders to plan and enforce safe and resilient rebuilding and expansion of settlements
- Advocating for comprehensive risk reduction and enforcing the safeguarding of public and open spaces for evacuation



Post Disaster Reconstruction Framework; Sector Plan

- **Regeneration of heritage settlements**
(including 52 in the Kathmandu Valley) :—
recovery in heritage settlements needs specific support and cannot take an approach focused on individual houses. Settlement planning is required accompanied by technical support for reconstruction that protects / promotes heritage building styles.
- **Community grants for local infrastructure**
- **Rental housing for urban poor**



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NRA Progress as of September 2018

Reconstruction Target 753 monuments

Reconstruction Completed 190 monuments

Under Reconstruction 329



Kilesware Mahadev Temple



Narayan Temple, BDS

Reconstruction of Heritage Buildings



Shidhi Laxmi Temple , Bhaktapur Durbar Square(BDS)
Under reconstruction



Badrinarayan Temple (BDS)

Heritage Buildings Restored



Reconstructed Gaddi Baithak
Hanuman Dhoka Palace area



Anantapur, Swoyambhu

Heritage Buildings Restored



Boudha Stupa



Pratappur, Swoyambhu



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Thank you