

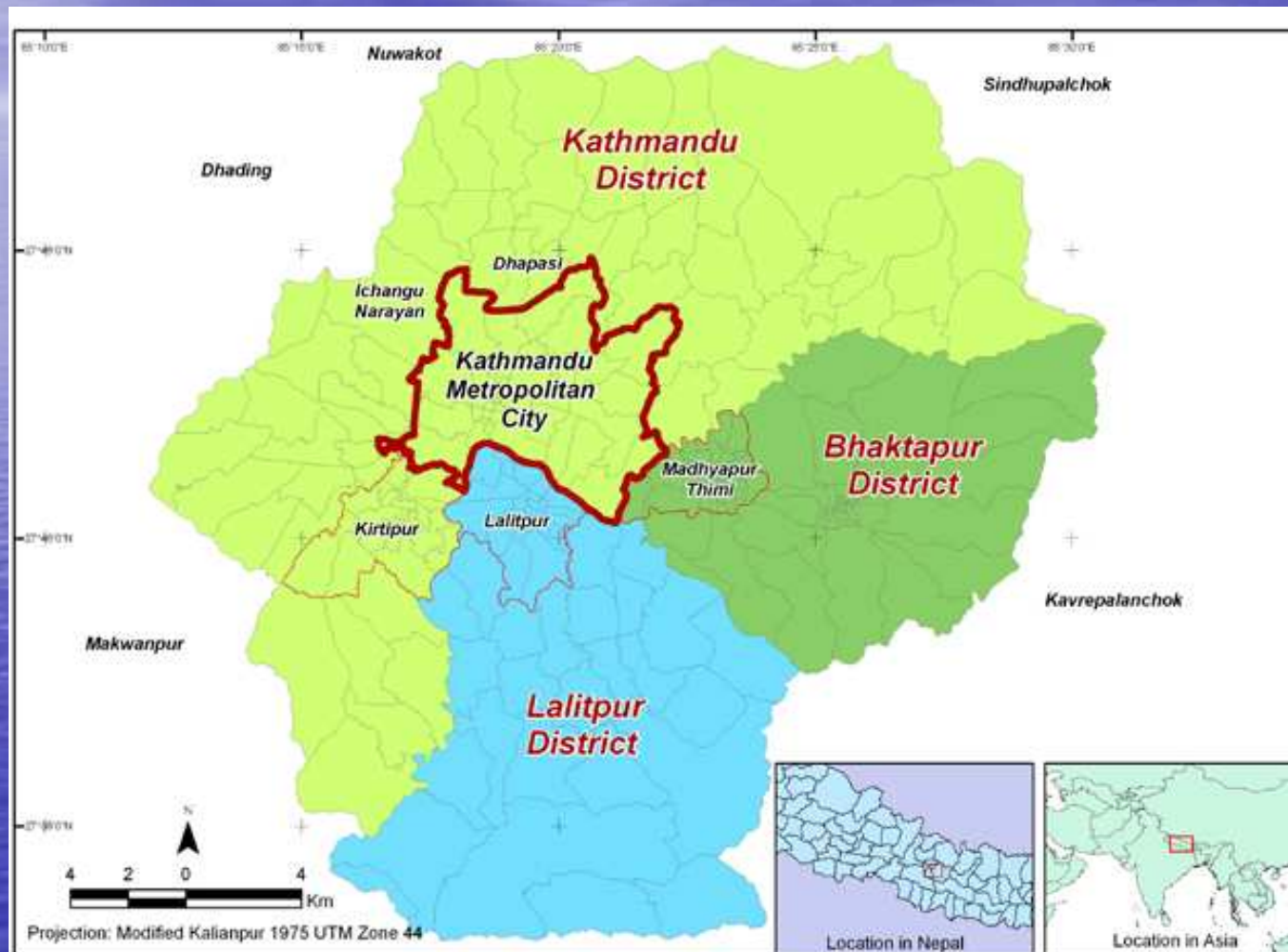


KATHMANDU METROPOLITAN CITY NEPAL

CITY PROFILE

- Capital city of Nepal
- Only metropolitan city of the country
- Political, Cultural, Historical, Commercial Centre
- Area – 5076.60 hectares
- Population – 1 million (approx.)
- Altitude – 1350 metres above sea level
- 5 sectors and 35 wards
- Prime values – Ancient Architecture and Cultural Tradition, Place of Worship

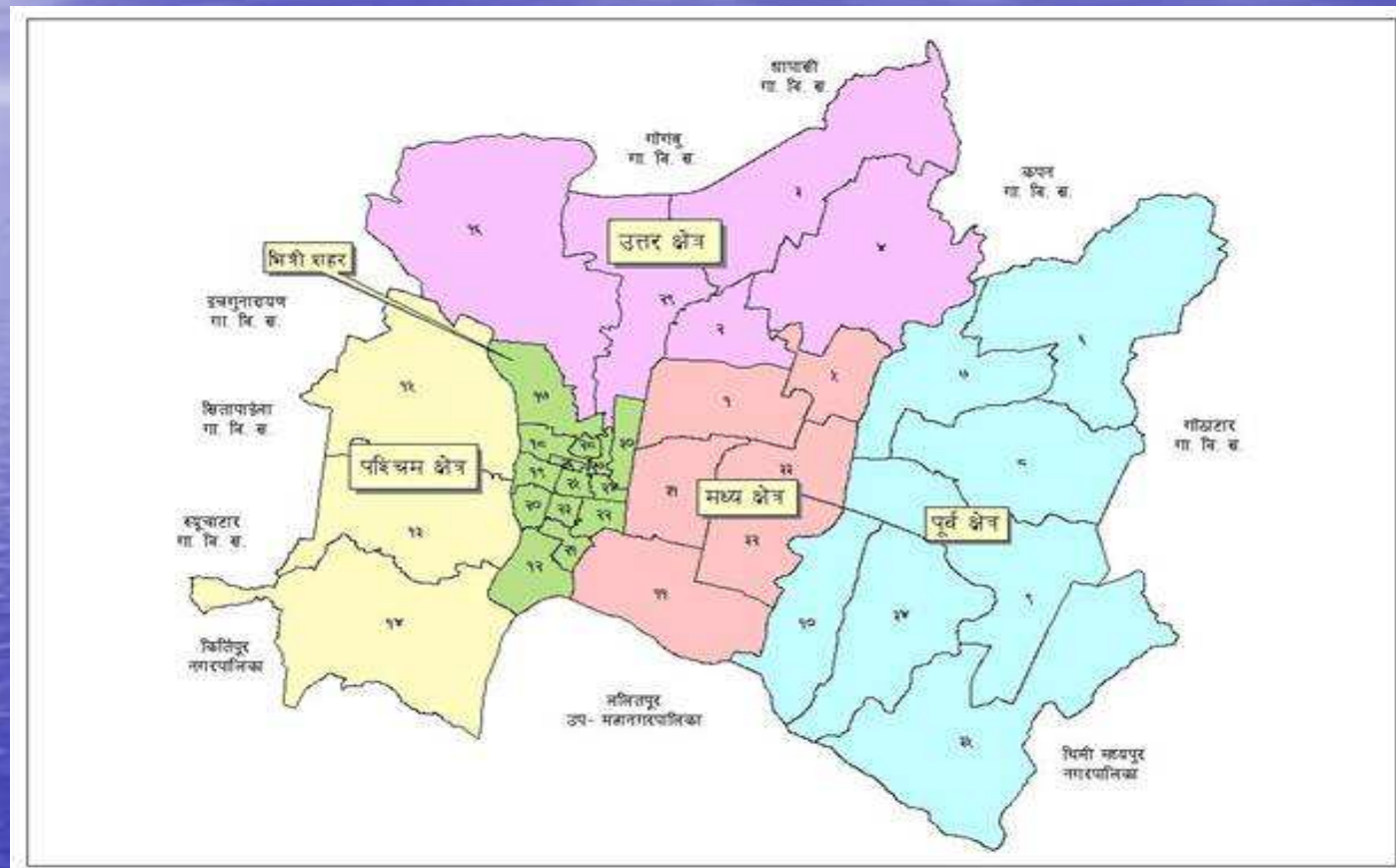
LOCATION OF KATHMANDU



Kathmandu Valley Location Map
Source: Kathmandu Metropolitan City Government

Map and projection modified by EMI-GIS, 2010

SECTORAL MAP OF KATHMANDU



Urban Land Use, 1995

Land Use Area	in ha.	%
• Mixed residential/commercial	3,273.6	64.5
• Commercial/Industrial	82.6	1.6
• Institutional	239.2	4.7
• Transport (airport/bus terminal)	166.3	3.3
• Others	1,314.3	25.9
Total	5,076	100

ISSUES ON DISASTER

Types of disasters –

- **Earthquake** – high vulnerability

Reasons-

- Lies in seismic zone
 - Concentration of development in Kathmandu
 - Rapid uncontrolled urbanisation
- **Flood** – seldom in certain lowlands
 - **Fire** – high risk
 - Fire fighting difficult in city core areas because of difficult access (narrow lanes)

- **The basement rock of Kathmandu is covered by a thick 500-meter, semi- consolidated layer of soil possessing high liquefaction potential.**
- **Recurrence of disastrous earthquake very likely in the near future as according to previous assessments.**
- **Probability of damage as deadly as the earthquake at Port-au-Prince, Haiti (2010)**

EFFORTS OF KMC

- **Conducting public awareness campaigns on disasters and safety measures**
- **Implementation of National Building Code for Earthquake Resistance in Building Permit Process since four years –**
 - **Mandatory Rule of Thumb for buildings below 3000 sq.ft. (built up area)**
 - **Structural design / Analysis by qualified structural engineer for buildings exceeding 3 floors or 3000 sq.ft. built up area**

- **Conduct trainings on:**
 - **skilled workmanship for masons**
 - **engineers / architects on earthquake resistance construction technology**
- **Co- ordination with**
 - **National Society for Earthquake Technology(NSET)**
 - **Earth and Megacities Initiative (EMI)****for mainstreaming disaster risk reduction (DRR)**
by preparation of Risk Sensitive Land Use Plan
(RSLUP)

- **This RSLUP is a ten-year guide (2010-2020) for realizing KMC's desired spatial pattern of development, with due consideration to the city's seismic risks, emergency response and disaster management capabilities, through different land use policies and urban renewal schemes**
- **It follows the policies and principles on disaster risk management (DRM) as stated by the Earthquake Disaster Mitigation in the Kathmandu Valley (JICA 2002)**

CHALLENGES ON URBANPLANNING IN KATHMANDU

- The present development trend leading to haphazard growth or Horizontal Expansion of city
- Encroachment on agricultural land and Open Spaces
- Limited Urban Area (defined boundary of surrounding mountains)
- High consideration for earthquake resistance very essential in building construction

RECOMMENDATIONS

- **Vertical expansion in buildings with structurally safe construction**
- **Revision of present Land Use Plan and corresponding Zoning Plan and Building Bye-laws**
- **Prevent encroachment on vacant lands for evacuation purposes / providing emergency camps during disasters**

- **Promote Land Pooling / Land Development projects**
- **Develop river corridors as spaces for recreation and greenery for environmental protection**
- **Promote Group Housing / Apartments to discourage fragmentation of land and uncontrolled horizontal expansion**



THANK YOU