



United Nations Committee of Experts on  
Global Geospatial Information Management

key legal and policy issues and challenges impacting  
data sharing and data dissemination in Nepal



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Survey Department, Nepal



International workshop on Legal and Policy Frameworks for Geospatial Information  
Management: Licensing of Geospatial information  
7-9 November 2017, Tianjin, China

## Presentation Outline

- The Country Context
- Producers of Geospatial information
- Major Geospatial Information Available
- Prevailing policy and legal provisions
- Problems and Challenges

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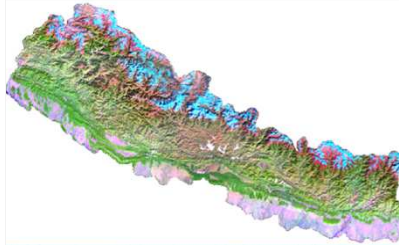
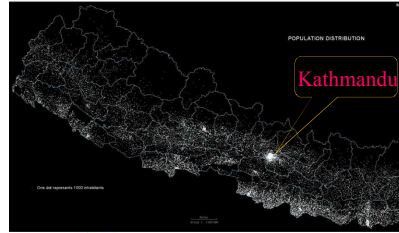


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# The Country Context

- Landlocked between two giants; China and India
- Federal Democratic Republic
  - 7 provinces, 77 districts, 753 municipalities
- Area: 147,181 Km<sup>2</sup>
- Population: 26.6 Million (2011 national census)
- Multi-lingual, multi-ethnic & secular with diverse culture

• Uneven geographical terrain (60m to 8848m)



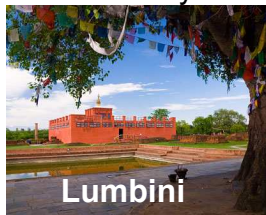
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# The Country Context ...

- The Country of Mt. Everest
- Birth Place of Lord Buddha
- The country of Adventures



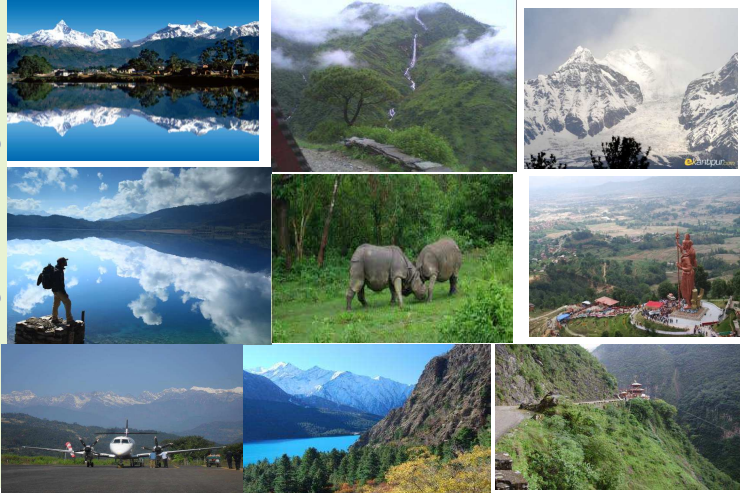
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## The Country Context ...

Heavenly Countrysides



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## Major Producers of Geospatial Information

- Survey Department, the National Mapping Organization
  - Core data sets including
    - Cadastral Surveying
    - Geodetic Surveying
    - Topographic Surveying
- Department of Forest Research and Survey
- Department of Mines and Geology
- National Land Use Project
- Department of Land Information and Archive
  
- Other public and private sector organizations for their specific uses

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## Major Geospatial Information Available

- **Nationwide coverage of Topographic Base Map Series**
  - 1:25,000 for Plain Mid hill region
  - 1:50,000 Mountainous region
- **Nationwide Coverage of Geodetic Network**
- **Nationwide Coverage of Cadastral Maps**
- **Land Resources Maps**
- **Forest Maps**
- **Geological Maps**
  
- **Aerial Photographs, Orthophotomaps, Geodetic Data, etc**

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## Prevailing Geospatial Information Policy and Legal Provisions

- **Comprehensive/integrated geoinformation Policy is lacking**
  - However, legal provisions in **Land (Surveying and Mapping) Act, 1964**, govern overall geospatial information policy issues
  - 'Policy for the dissemination of digital data produced by the organizations under MoLRM' is in place
- **Survey Department (DoS) is responsible for providing standards and framework data for geospatial information**
  - Geospatial information produced with public fund should be based on the standard and specifications set by the DoS
- **Approval from DoS is required;**
  - to carryout surveying and mapping activity including aerial photography, and selling of Nepal related mapping products produced in foreign country, in the country

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## Prevailing Geospatial Information Policy and Legal Provisions...

- National Mapping Committee is constituted under the chairpersonship of the Secretary of Land Reform and Management
  - a Technical Subcommittee under the coordination of the Director General of Survey Department, the National Mapping Organization.
- Geospatial information produced in Nepal, by a public or private or international organization, should be approved by National Mapping Committee
  - in order to maintain standard, verify security concern and avoid duplication of efforts for the product of similar kind

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## Prevailing Geospatial Information Policy and legal provisions ...

- NSDI Initiatives
  - DoS has established National Geographic Information Infrastructure Division in 2016 as an effort to establish functional NSDI.
  - NSDI policy is under formulation
- No data restriction,
  - except the strip maps and data related to international boundary
- Pricing
  - Principally, no data is free
  - However, recently, 1:1 million scale map data and administrative boundary data is made freely available through web ([www.nggip.gov.np](http://www.nggip.gov.np))

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## Legal and Policy issues (in the context)

- Formulation of comprehensive policy and laws in the changed context of state restructuring and technological advancement
- Ensuring benefits of sharing data
- Ensuring data security
- Protection of the custodianship of the data producer
- Rule of law
  - Ensuring that the policy and legal provisions are strictly followed by the data producers and users
  - Ensuring that there is no misuse of data
  - Ethical considerations

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## Challenges (in the context)

- Sufficiency of legal and policy provisions: **lacking**
- Bringing geospatial organizations within NSDI Network: **difficult, especially non-government sector**
- Up-to-date-ness of the available data: **mostly outdated**
- Maturity of the digital data and system: **immature**
- Capacity of the geospatial organizations: **strengthening required**
- Infrastructure available for data sharing and dissemination: **weak**
  - Data sharing/dissemination platform /web-portal: **immature**
  - electronic payment : **not yet**
  - availability of physical infrastructure with the end user : **almost no**

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## Finally, Closed Invitation

- Survey Department is organizing an **international workshop** for finalizing the methodology for the **measurement of the height of the Mt. Everest** by its own effort.
- If you poses any expertise of any field for the mountain measurements, please, join with the workshop and our future endeavors.
- **Date and venue of workshop**
  - Dec 11-12, 2017
  - Venue: Kathmandu, Nepal
  - Organizer: Survey Department, Nepal

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# Thank you!!!

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