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Spatial Data Infrastructure for Pro-poor Land Management
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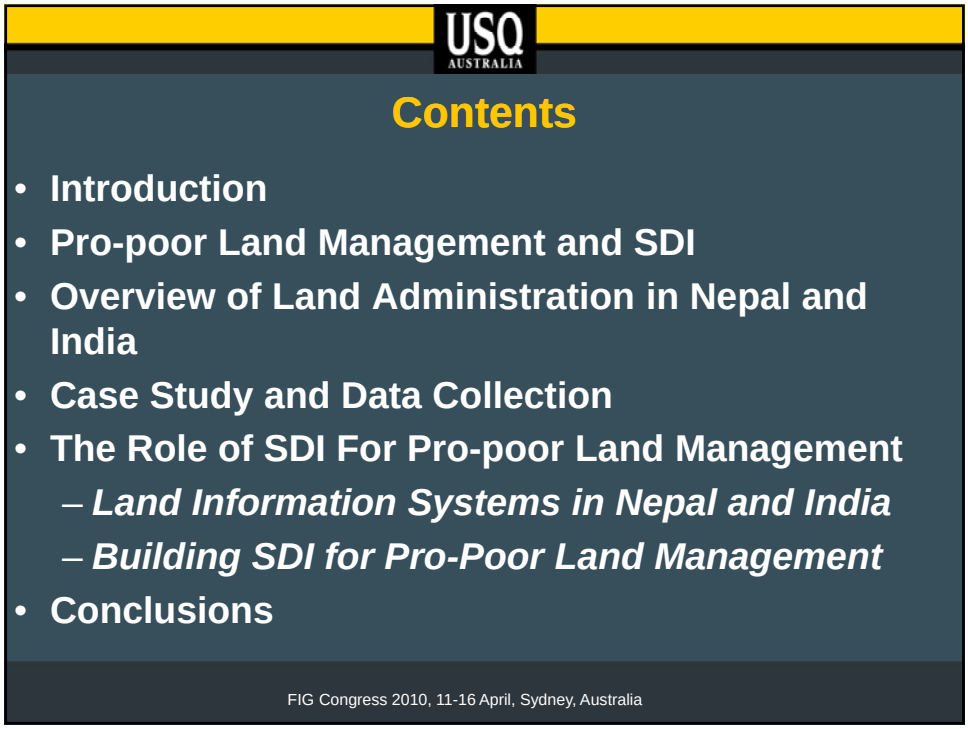
fulfilling lives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Introduction

Informal Settlements

Informal settlements in the Bank of Baghmati River, Kathmandu, Nepal

- 32% of urban population living in slums and 43% clustered in developing countries

(Homeless international, 2005)

- The issue is of global concern – Millennium Development Goal-7, target 11
- Not being in the part of formal land management system: Lack of reliable information for policy formulation and planning
- The current land management system only administers the formal part and does not cover informal settlements areas

Introduction

Informal settlers demanding for tenure security and ownership certificate, Nepal

- The issues of slum dwellers are one of the main concerns for Govt. of Nepal and India
- In Nepal, there were over 30,000 people identified as landlessness and 41,000 were identified as informal settlements during 2000 (LSHLC, 2000)
- In India, there are about 61.8 million slums (COI,2001)

Basic characteristics of informal settlements

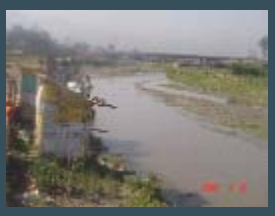
Poor sanitation

Poor durability of Housing

Forced eviction

Poor access to water

Poor electricity



No drainage

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Basic characteristics of informal settlements

School run by community

National Federation

Community members working

Community member's meeting

Working to improve roads

Employment opportunities

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Pro-poor Land Management and SDI

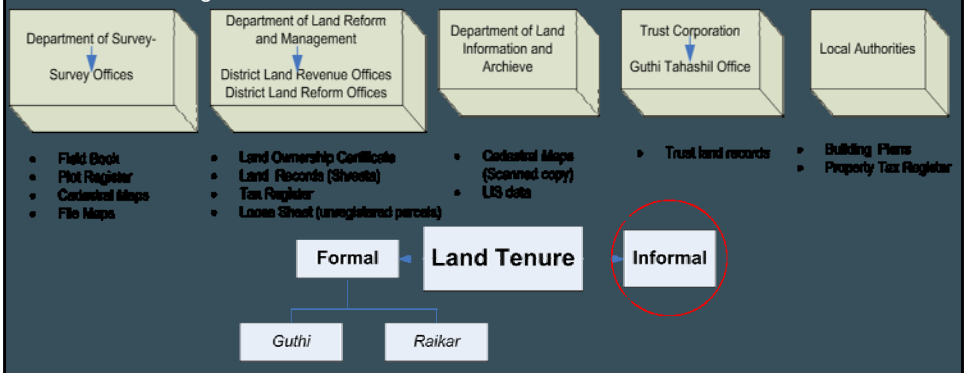
- Pro-poor Land Management concept originates from UN-HABITAT programme
- Traditional approaches of SDI development rely largely on formal land administration and do not adequately support to Pro-poor land management
- The advent of spatial technology and open models provide a new approach to Pro-poor land management

Slum locations in Allahabad City, India

Overview of Land Administration in Nepal and India

In Nepal:

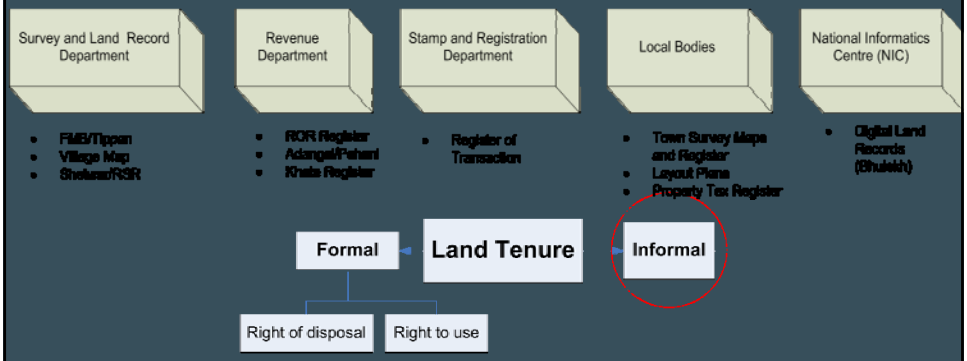
Institutional Arrangement



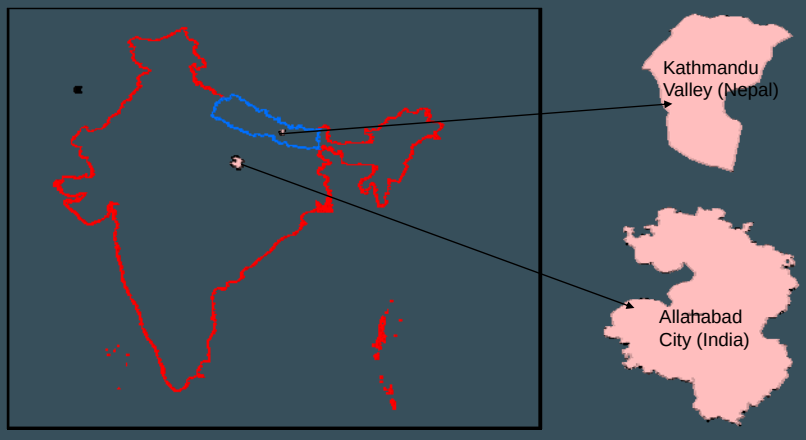
Overview of Land Administration in Nepal and India

In India:

Institutional Arrangement



Case Study and Data Collection



Study Area

Case Study and Data Collection

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Case study and Data Collection

Most of the settlements are on the banks of rivers occupying public land in Nepal

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Case study and Data Collection

Most of the settlements in Allahabad city are public land, private land, cantonment area and river-bed

Case study and Data Collection

Kathmandu Valley, Nepal

- Consists of three districts and five municipalities
- Population 1.5 million and 1/3 live in slum dwelling
- 64 informal settlements, 2844 households and 13243 landless people
- Settlements are relatively recent – within last two decades
- Many having own administrative division and local name
- Major policy interventions legalisation, regularisation & upgrading and resettlement and reallocation

Case study and Data Collection

Allahabad City, India

- Composed of three regions: Municipal Corporation of Allahabad (MCA), The outer growth (OT) and the Allahabad Cantonment (CB)
- Population 975,000 and 30% are informal settlers
- There are about 283 informal settlements (Oxfam Trust, 2005)
- Three types : Authorised slums (131), Unauthorised slums (152 including urban villages) and urban villages
- Settlements are very old and well accepted
- Three tier government structure exists, state government is responsible for land matters
- Major policy interventions legalisation, regularisation & upgrading, the development of alternative housing systems and resettlement and reallocation

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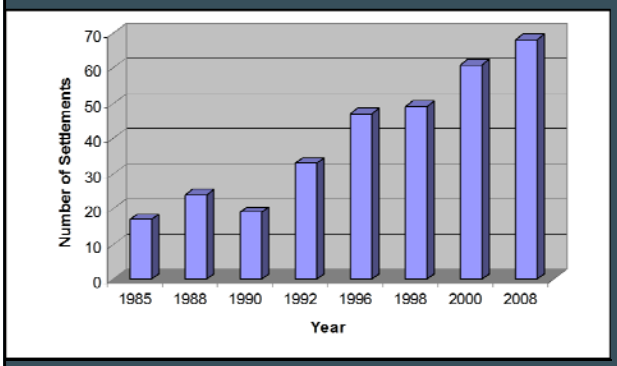
Informal settlements increasing trends



In Kathmandu Valley

Year	Slum percentage of urban population
1999	10.5%
2001	27.4

In Allahabad City

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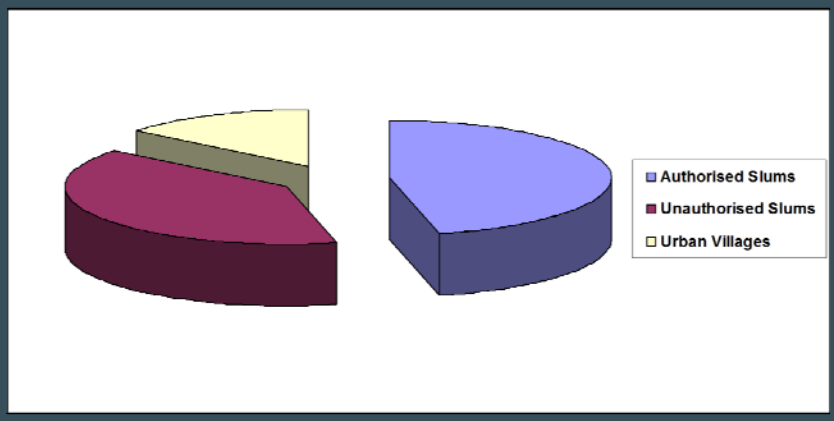
Classification of Slums in Allahabad City



Findings

- Cadastre is the base for both of the countries to build spatial data infrastructure
- Both top-down as well as bottom-up approach exists for building SDI
- The existing concept of SDI doesn't easily address pro-poor land management
- There is possibilities for of achieving improvements in providing good spatial information in public domain
- High resolution satellite imaginary, Open portals provide valuable contribution both for technical solution and new way of custodians of spatial data

SDI for Pro-poor Land Management Characteristics

- Open and inclusive model
  - formal & informal land management tools
- Affordable by grass-root citizens
  - Low maintenance and access cost
- Transparent and user-friendly
- With evidence of informal rights – Occupation rights, adverse possession, tenancy, use rights, customary rights and indigenous rights
- A range of identifier and units
- Dynamic – Deal with the upgrading, and incorporation of diverse information system over a time
- Use of local knowledge

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Conclusions

- Conventional cadastral based information system design approaches and government managed institutional arrangements do not appropriately address land management issues in informal settlements
- There is significant potential to use open spatial data portals for planning as well as decision making in informal settlements
- An informal open source SDI can provide a platform to facilitate improved planning as well as decision making at the local level
- In conjunction with local government and the community informal SDI can provide the basis for land management for the poor

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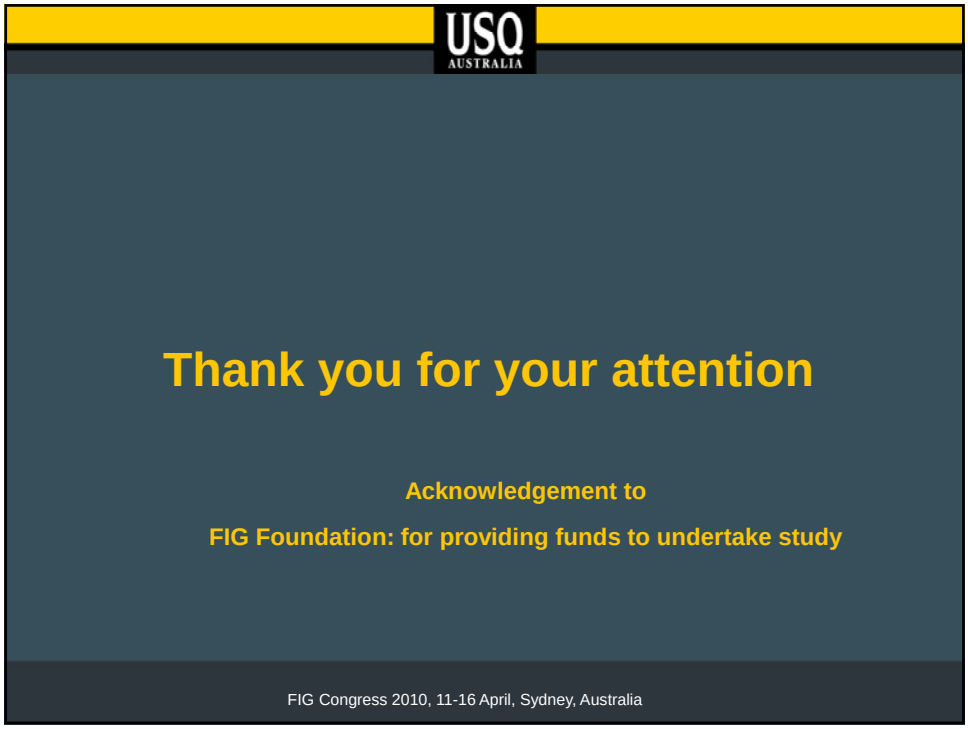
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