

SPATIAL PLANNING IN BHUTAN USING THE LAND POOLING TOOL

(5th Spatial Planning Platform Conference)



Kinzang Deki, Deputy Chief Urban Planner, Ministry of Infrastructure and Transportation, BHUTAN

02.02.2023

INTRODUCTION

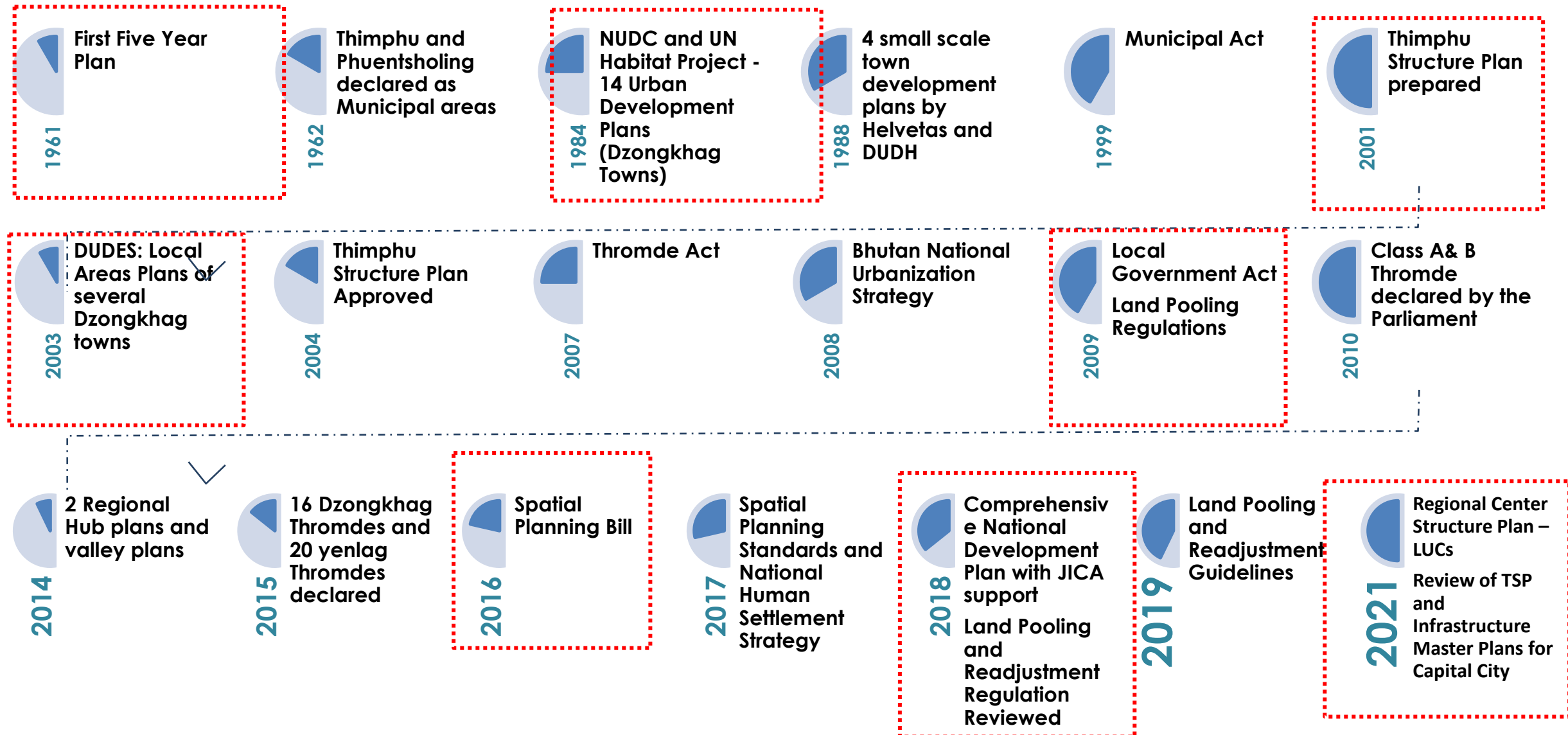
TOTAL LAND: **38,394KM²**

POPULATION: **763,249**

URBAN POP.: **~50%**

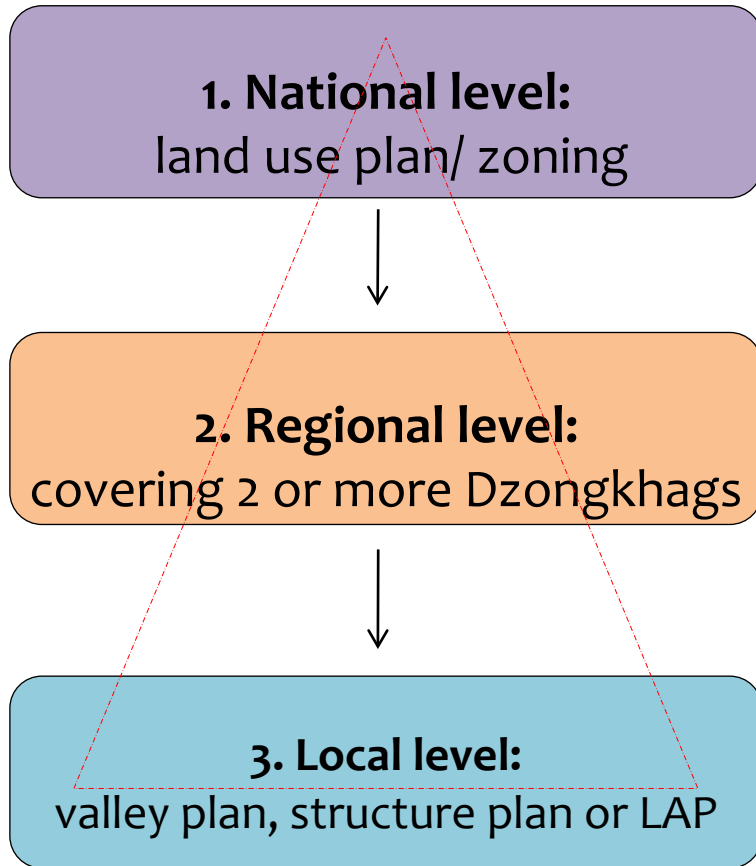


URBANIZATION IN BHUTAN



SPATIAL PLANNING FRAMEWORK

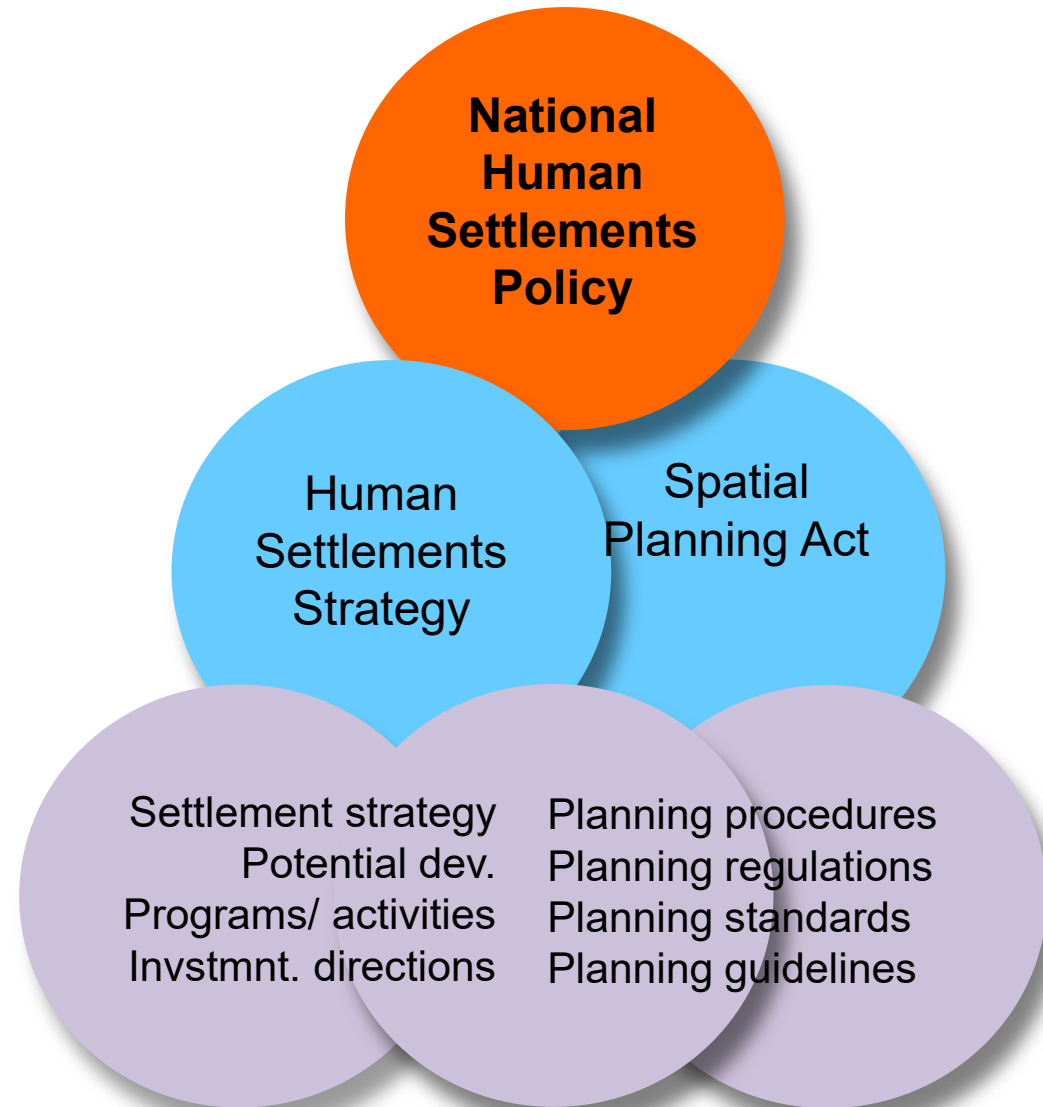
Institutional framework



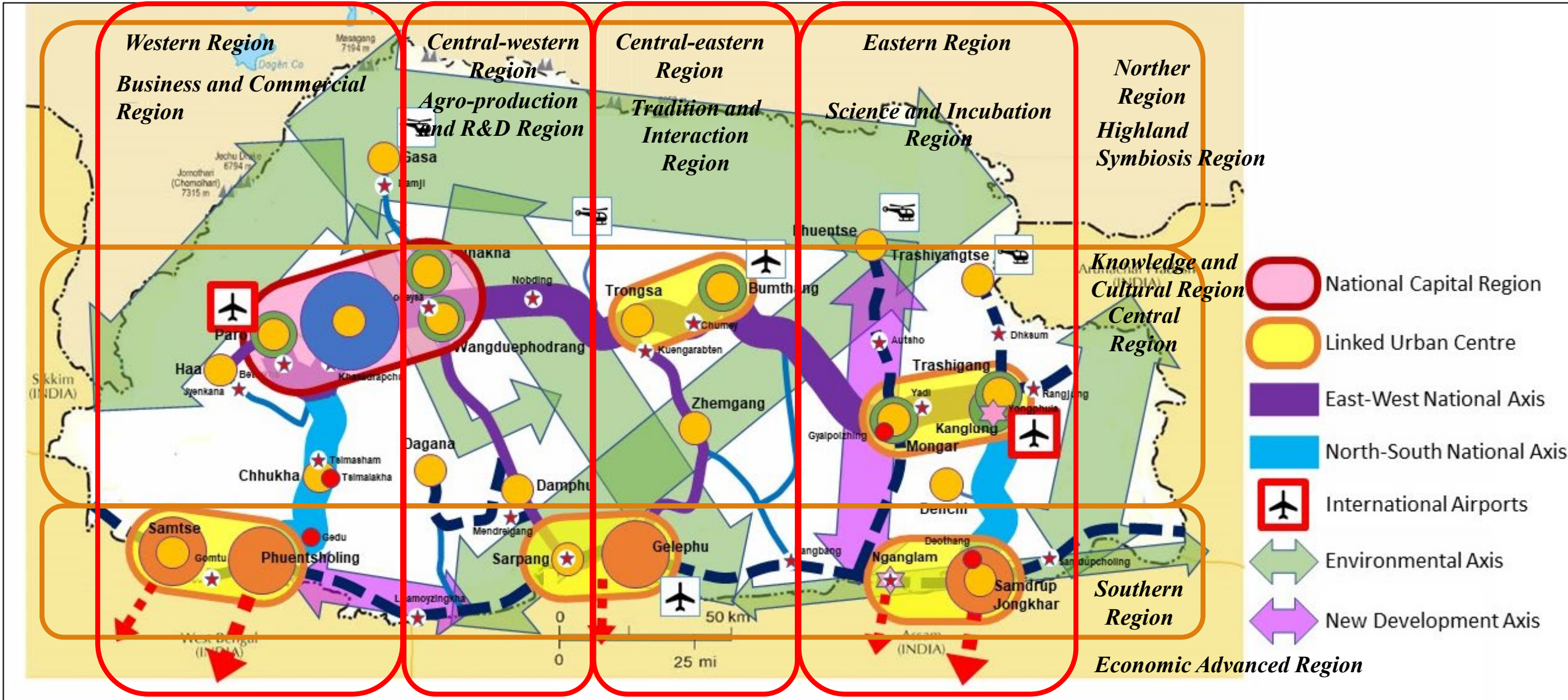
↓ Order of precedence (planning sequence)

△ Order of priority (plan provisions)

Legal framework



COMPREHENSIVE NATIONAL DEVELOPMENT PLAN



National Spatial Structure

LAND MOBILIZATION MECHANISMS



LAND ACQUISITION

- Used to plan the first towns in 1990s
- Discontinued as it became unpopular due to equity issues and displacement of landowners

(KHURUTHANG TOWN, BAJO TOWN, DEKILING TOWN)



LAND POOLING

- Used as an alternative tool for lap preparation since early 2000
- Today almost all laps prepared using land pooling

(RANGJUNG LAP, LAPs IN THIMPHU, DEBSI LAP, SAMTSE LAP, TSIRANG LAPs, BUMTHANG LAP, ETC)



GUIDED LAND DEVELOPMENT

- Used as an alternative tool where landpooling is not feasible in built-up areas

(JUNGSHINA LAP, SHERUBLING LAP, JOMOTSHANGKHA LAP)

LAND POOLING FRAMEWORK

IRREGULAR
PLOTS

1

2

3

Unified
Infrastructure
Planning and
Replotting

Land Pooling
Contribution

4

4a

Road and
Footpaths

4b

Parks and open
space

4c

Amenities and
Services

4d

Reserve Plots

1

2

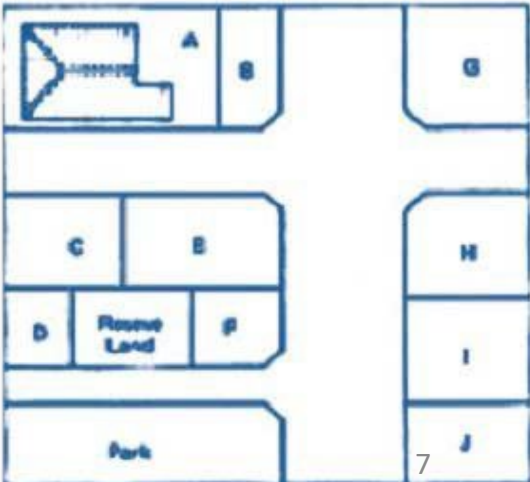
3

REGULAR
PLOTS

Before



After



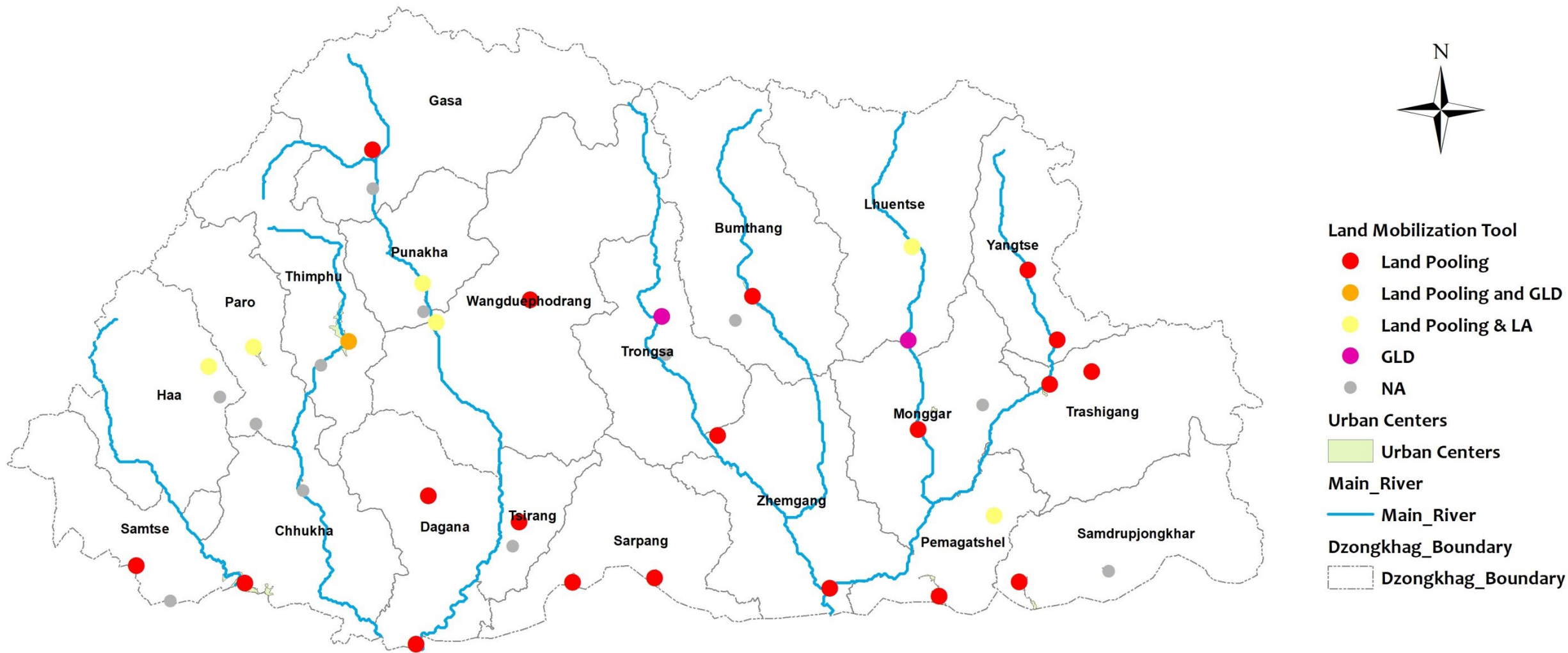
LAND POOLING BACKGROUND

- First introduced in 1990s as an alternative tool to land acquisition
- Uses simple area-based method for land pooling contribution (land value is not considered) differential land pooling contribution initiated to take equity into consideration
- Used for planning almost all planned areas in the country
- Most preferred land mobilization tool as it is simple and does not displace the original landowners

REGULATORY FRAMEWORK

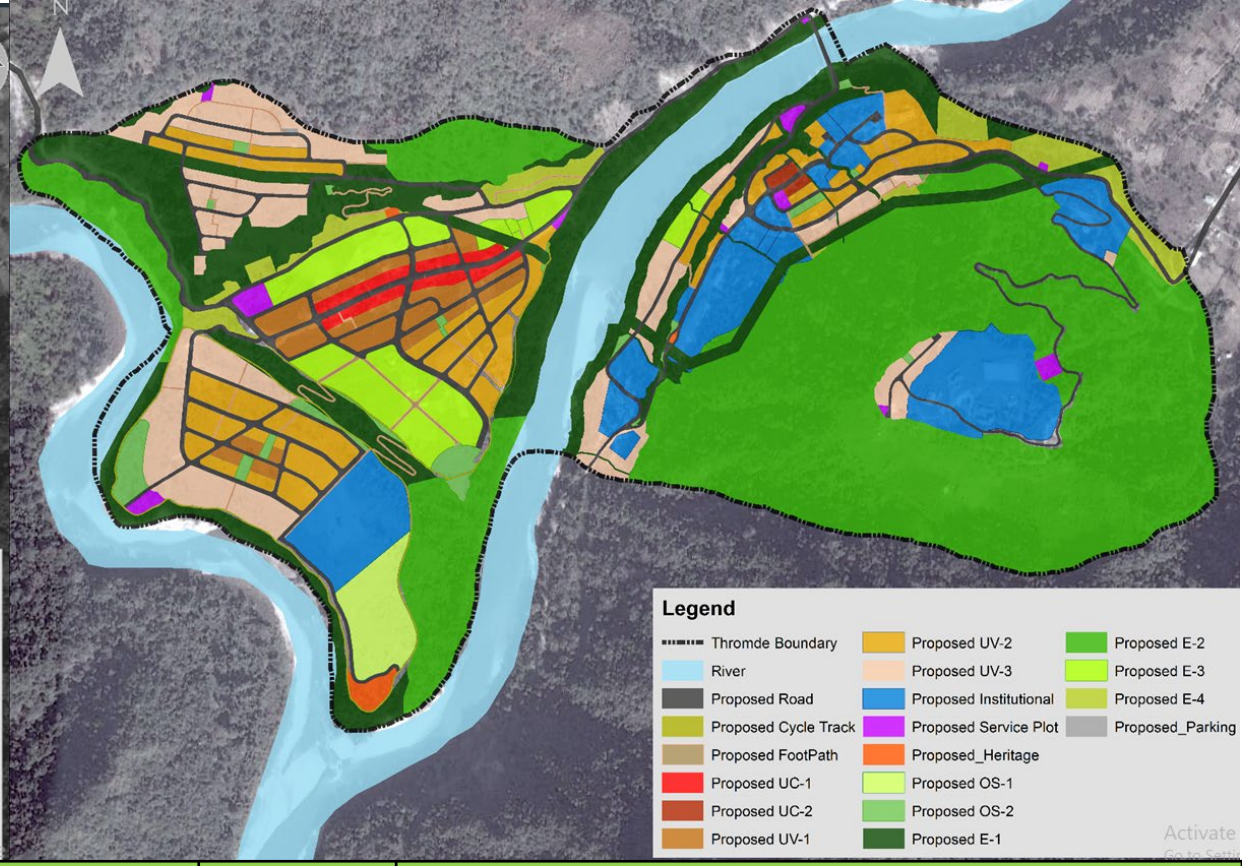
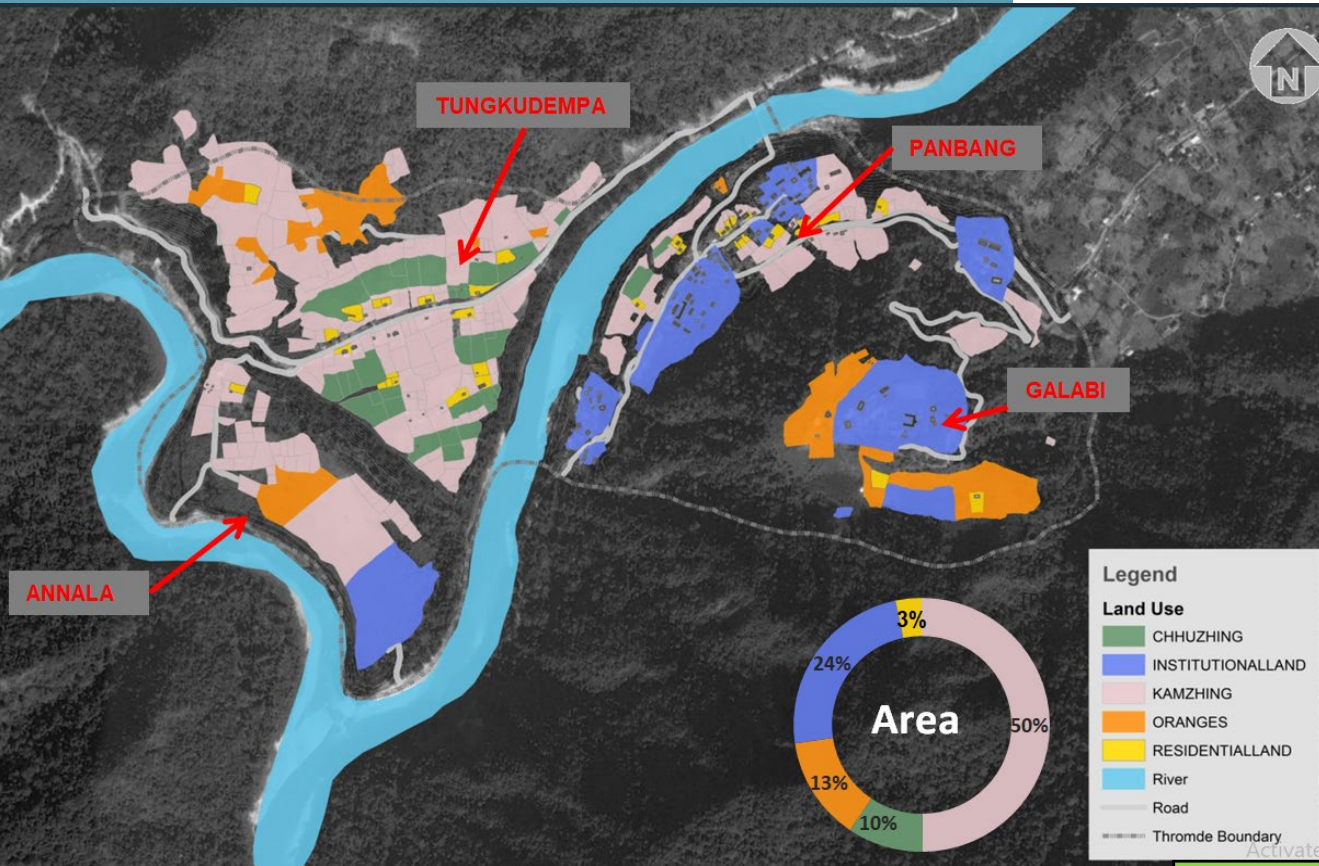
- National sustainable human settlement policy 2018
- Land act 2007
- Local government act 2009
- Spatial planning bill
- Land pooling regulations 2009
- Land pooling and readjustment regulations 2018
- Land pooling and readjustment guidelines 2019

LAND POOLING IN BHUTAN



LAND POOLING EXAMPLE

PANBANG LAP



Road and Pathways: 16.42%
Parks and Open Spaces: 8.18%
Services and Amenities: 2.20%
Land Pooling Contribution: 26.8%

Precinct	LP Rate	DCR
UC-1	29%	-3 Floors, 2 floor of commercial use, 50% plot coverage
UC-2	27%	-2 floors, 1floor of commercial use, 50% plot coverage
UV-1	26%	-2 floors, 0.5 floor of commercial us, 45% plot coverage
UV-2	25%	-2 floors, all residential use, 40% plot coverage
UV-3	23%	-2 floors, all residential use, 30% plot coverage
E-4	15%	-1 floor, agri-based, 20% plot coverage

CHALLENGES



- Lack of capacity especially at the local governments
- Lack of funds to implement land pooling projects
- Legal provisions inhibits fund generation through sale of reserve plots
- Current land pooling practices doesn't fully consider the inequity issues created through landuse planning
- Land pooling contribution ceiling of 30%
- Public consultation and awareness

OPPORTUNITIES



- Explore the feasibility of self-financing mechanism and amend provisions in the land act 2007
- Use value-based method to create more equity in our land pooling practice
- Collaborate with international partners to create local capacity
- Review the land pooling contribution ceiling in lpr 2018
- Carry out research into bhutanese land pooling practice to improve it for the current time and age

THANK YOU FOR YOUR TIME

