

Introduction to Bhutan



Area: 38,394 sq.km

Population: 692,895 as per BLSS 2017



Capital of Bhutan: Thimphu

Area: 27 Sq.km

Population: 120, 000 persons



National Flag



Some Images of Thimphu City





ཐིམ་ཕུ་ཁྲོམ་སྡེ།
Thimphu Thromde
Building No: 08
Gongdzin lam
Thimphu -11001: Bhutan



Case Study on Sustainable Urban Planning



Organization: *Thimphu Thromde*
Country: *Bhutan*
Date: *14th May 2018*

Thimphu Structure Plan (TSP) 2002 - 2027

Intelligent Urbanism

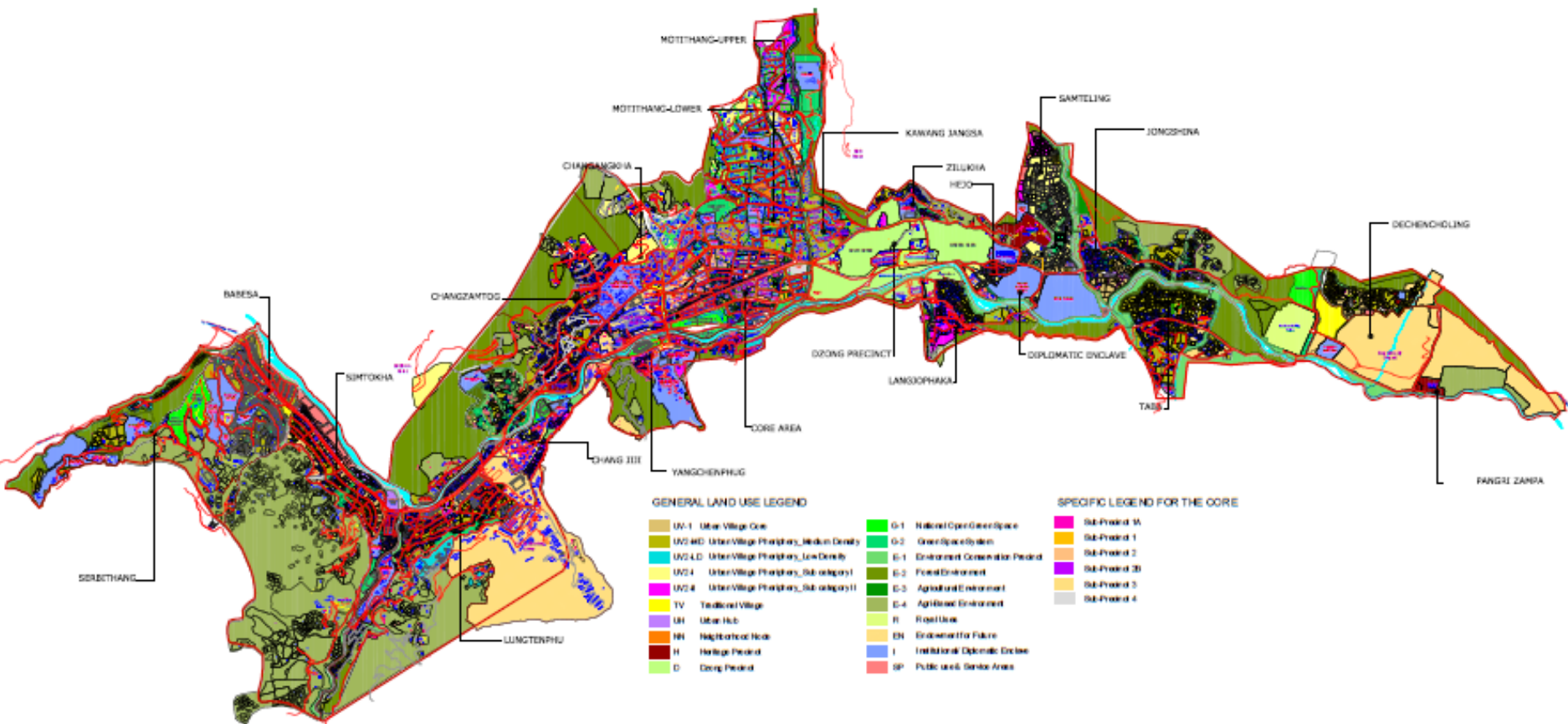
Principles:

1. Balance with Nature
2. Balance with Tradition
3. Conviviality
4. Efficiency
5. Human scale
6. Opportunity Matrix
7. Regional Integration
8. Balanced Movement
9. Institutional Integrity

Strategies:

1. Decentralized Growth
2. Regionalized Growth
3. Densification
4. Transport Oriented Growth
5. Resource Utilization
6. Urban Precincts
7. Public Assets
8. Defining the Urban Core
9. Facilitating Access to Shelter

Thimphu Structure Plan (TSP) 2002 - 2027



- GENERAL LAND USE LEGEND**

 - UV-1 Urban Village Core
 - UV-2 Urban Village Periphery, Medium Density
 - UV-3 Urban Village Periphery, Low Density
 - UV-4 Urban Village Periphery, Sub-category I
 - UV-5 Urban Village Periphery, Sub-category II
 - TV Traditional Village
 - UH Urban Hub
 - NH Neighborhood Node
 - H Heritage Precinct
 - D Deep Precinct
 - G-1 National Open Green Space
 - G-2 Green Space System
 - E-1 Environment Conservation Precinct
 - E-2 Forest Environment
 - E-3 Agricultural Environment
 - E-4 Agritourism Environment
 - R Road Use
 - EN Environment for Future
 - I Institutional Diplomatic Enclave
 - SP Public Use Sensitive Areas
- SPECIFIC LEGEND FOR THE CORE**

 - Sub-Precinct 1A
 - Sub-Precinct 1B
 - Sub-Precinct 2
 - Sub-Precinct 3A
 - Sub-Precinct 3B
 - Sub-Precinct 4

PROPOSED PRECINCT PLAN THIMPHU THROMDE

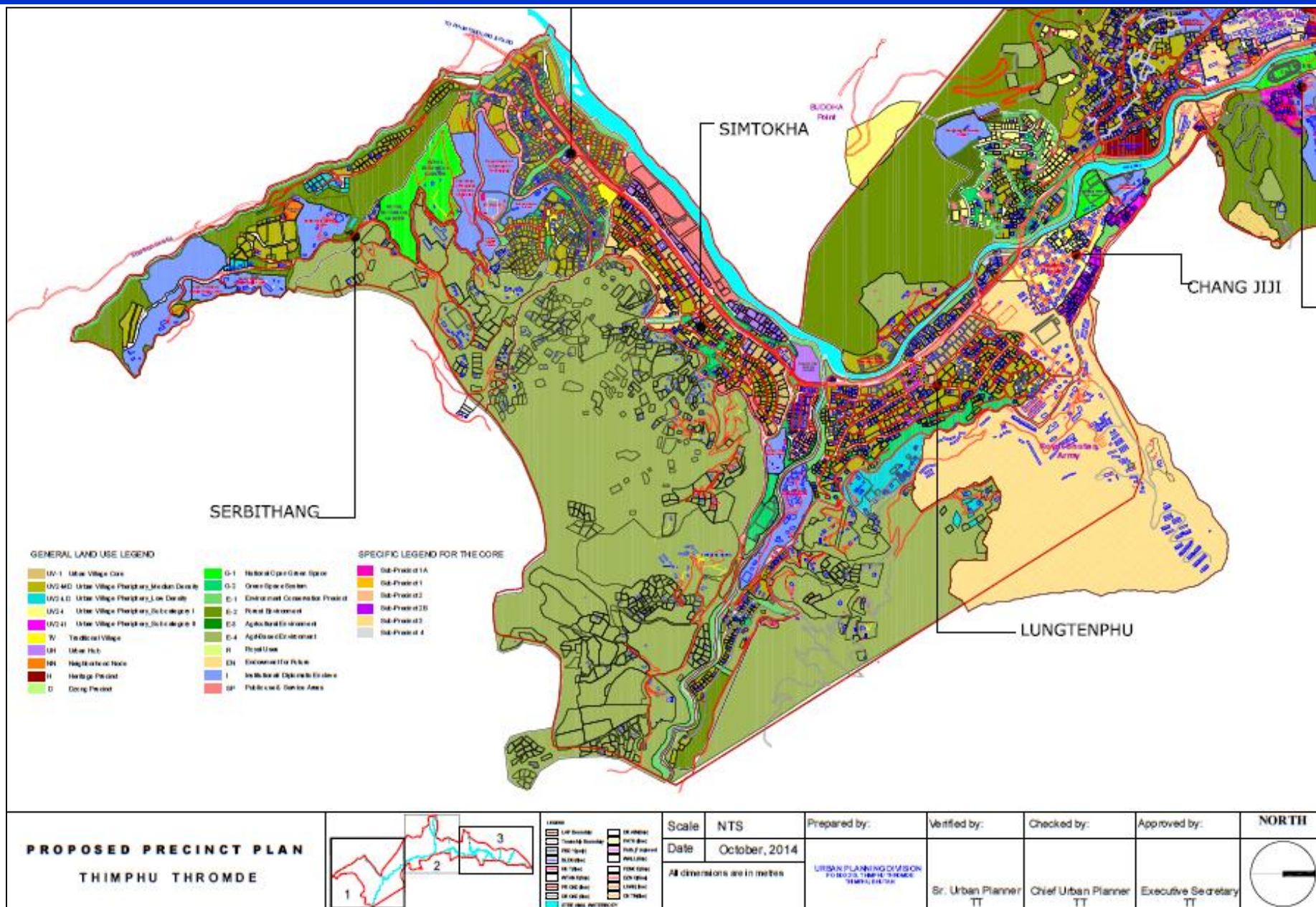


Legend	Color
Land Use	Green
Transportation	Blue
Water	Blue
Urban	Yellow
Rural	Orange
Mountain	Brown
Forest	Dark Green
Open Space	Light Green
Water Body	Blue
Urban Area	Yellow
Rural Area	Orange
Mountain Area	Brown
Forest Area	Dark Green
Open Space Area	Light Green
Water Body Area	Blue

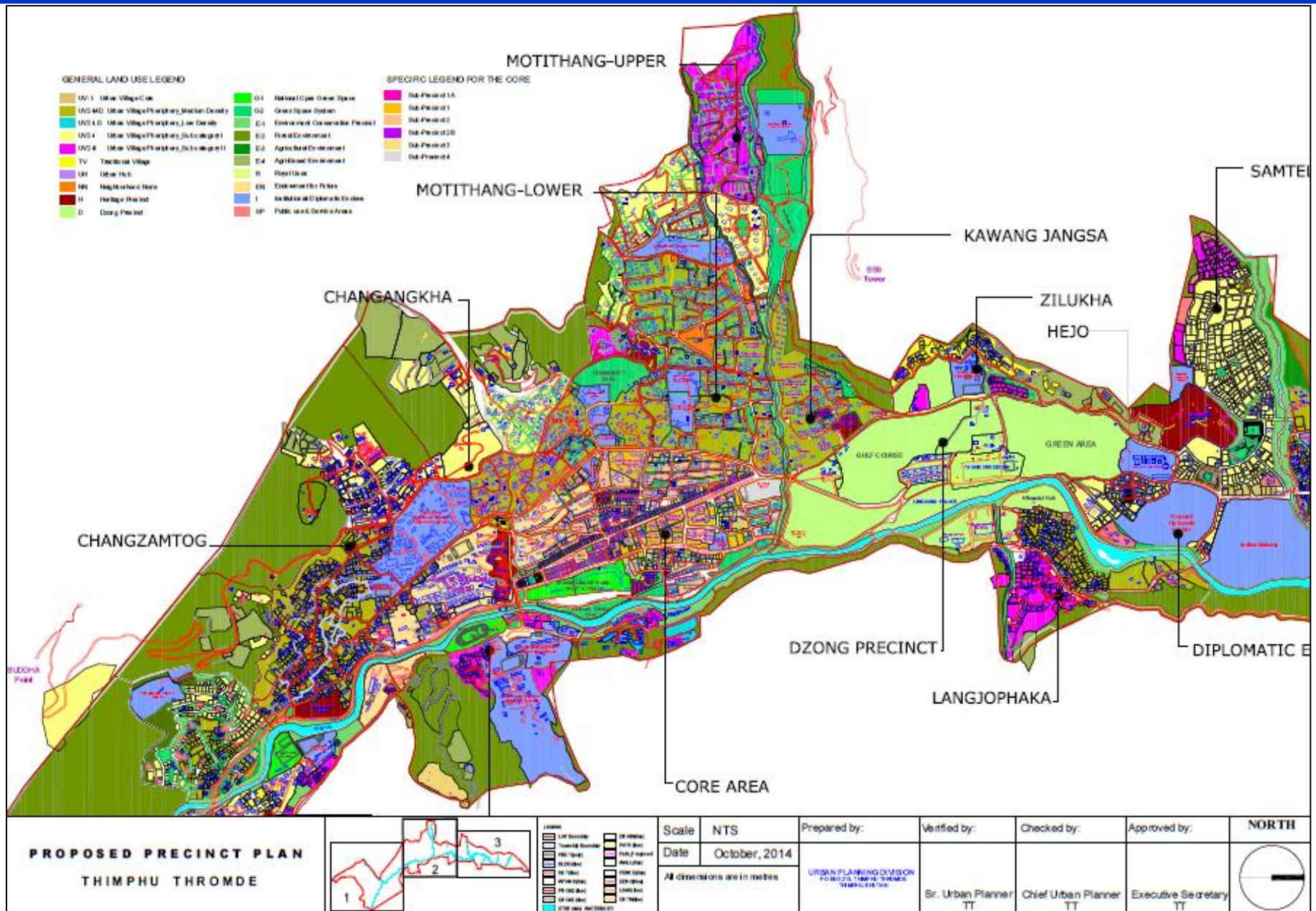
Scale	NTS
Date	October, 2014
All dimensions are in metres	

Prepared by:	Verified by:	Checked by:	Approved by:	NORTH
URBAN PLANNING DIVISION Roads, Buildings & Infrastructure THIMPHU	Sr. Urban Planner TT	Chief Urban Planner TT	Executive Secretary TT	

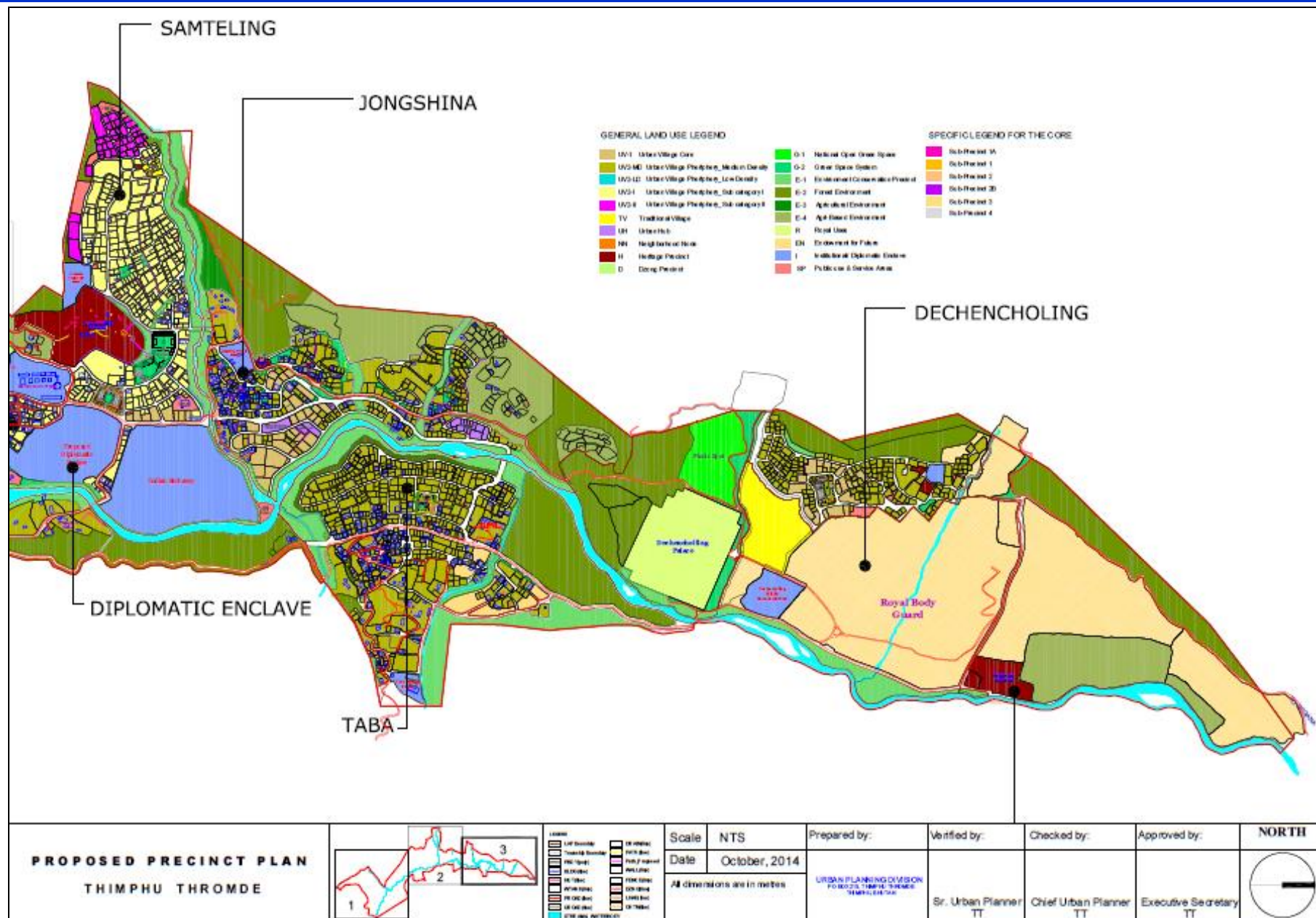
Thimphu Structure Plan (TSP) 2002 - 2027



Thimphu Structure Plan (TSP) 2002 - 2027



Thimphu Structure Plan (TSP) 2002 - 2027



Thimphu Structure Plan (TSP) 2002 - 2027

Main Theme

1. Nation Building and the Civil Society
2. The City of our dreams
3. The Tashichho Dzong
4. Community, Conviviality and Human Scale
5. Public Policy and Urban Forms
6. The Bhutanese Dream
7. The Parable of Archery, or the tragedy of the Power bow
8. The Domain of the Automobile



Tashichho Dzong: Icon of Bhutan



Prayer Flags Protect the City Below



Prayer Walls Mark out Auspicious Precincts



Playing Archery – National game

Thimphu Structure Plan (TSP) 2002 - 2027

Main Theme

9. Reclaiming the Public Domain
10. The City Core
11. The Gateway to the Capital
12. Urban Corridor
13. Urban Villages
14. Open Space System and the Wang Chhu
15. Footpath System
16. Forest Boundary and City Landscape
17. Peripheral Zone Control
18. Knowledge City
19. Social Services
20. Utilities Network
21. Shelter System
22. The National Capital Region



Dancers at the Thimphu Tshechu Accent the City's Unique Culture



Norzin Lam



*The Clock Tower Square:
Component of the Public Domain*

Sustainable City-Making

1. Several Local area plans
2. Extensive redevelopment of Urban Core



*Land pooling project
and land acquisition
project in some cases*

Goal of the project

1. To facilitate and address grappling issues like population increase, land fragmentation and ad-hoc development emerging due to rapid urbanization.
2. To have creative liveable self-sustaining places

Obstacles in the process of planning and implementation

1. Obtaining consensus from landowners: **difference in pooling %/ distribution & relocation of plots/ feeling of deprived/ mine to our**
- Policy level weaknesses: **No legal teeth/ award to low bidders**
- Implementation weaknesses: **paper based, centralisation of land administration and management**
- Management weaknesses: **inadequate managerial skills, supports, bad database & record keeping**
- Selfishness of staff and leaders/ politics
- Integrity of staff including leaders
- Difficult Terrain and Lack of awareness at all levels

Key Strategies to overcome the obstacles

1. Open house discussions **with leaders, relevant stakeholders, higher authorities and community representatives,**
2. Public participation through continuous and rigorous conduct of meeting and consultation **is seen as biggest strength to influence the decision of adopting the land pooling concept and its implementation.**
3. Using leaders, council members and local representatives

Thimphu Structure Plan (TSP) 2002 - 2027

Achievement

1. 12 LAPs have been approved and implemented
2. Infrastructural development - 8 completed
- 4 ongoing
3. Helped build a foundation of strong democratic principles

Failure

1. Compromised some land uses, which are technically not feasible
2. Land speculation
3. Low income housing provision and recovery of fund for the projects
4. Not inclusive of poor, renters, underprivileged residents

Lessons and Implications

- 1.Land pooling is acceptable and viable solution for urban redevelopment and addressing urban issues despite its obstacles at various stage**
- 2.Guided the management to know what they seek in staff during selection and recruitment**
- 3.What needed to be given in terms of trainings and capacity development**
- 4.Establishment of proficient and committed team to manage the project**
- 5.Design project for self-finance to offset the problem of self funding**
- 6.Win-Win to land owners and Municipality**

Thimphu Structure Plan (TSP) 2002 - 2027

Some national and city level projects

1. Proposed diplomatic enclave

2. Proposed Green Zone

3. Proposed relocation of two old Fuel Station from Core (Core Gateway)

4. Pedestrianisation of Norzin Lam

5. Gateway to capital city (Proposed Inter-State Bus Terminal)

Conclusion



Thank You

10-11-24