



FREQUENTLY ASKED QUESTIONS
And
ANSWERS

THIMPHU THROMDE

----- LETS KEEP THIMPHU CITY CLEAN AND GREEN

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1. ABBREVIATIONS

| | |
|--------------|--|
| ADB | Asian Development Bank |
| DCR | Development Control Regulations |
| DPR | Detailed Project Report |
| EIA | Environment Impact Assessment |
| LAP | Local Area Plan |
| LGA | Local Government Act |
| LP | Land Pooling |
| LPA | Land Pooling Agreement |
| LPR | Land Pooling and Readjustment |
| MoWHS | Ministry of Works and Human Settlement |
| NLCS | National Land Commission Secretariat |
| RAP | Resettlement Action Plan |
| SIA | Social Impact Assessment |
| TSP | Thimphu Structure Plan |
| UPD | Urban Planning Division |
| WB | World Bank |

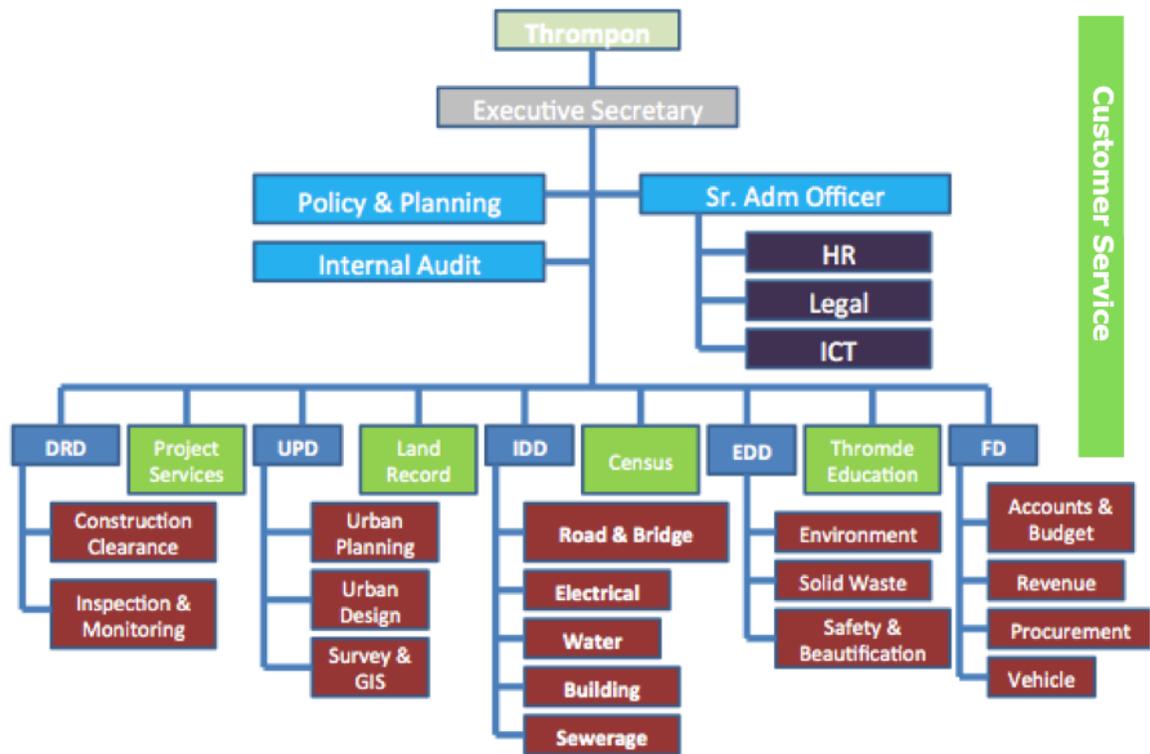
1. The aims and objectives of Thimphu Thromde:

- a. To serve the residents of Municipality and instil in them a deep civic sense needed for the general well being of all.
- b. To ensure a smooth progression of all developmental and other activities within the boundaries of a municipal Corporation, as per the plan.
- c. To ensure that all the activities that it undertakes are consistent with policies and laws of the Royal Government to preserve and promote the environment within its limits.
- d. To carry out activities that the Royal Government may assign to the best of our ability.
- e. To ensure proper implementation of the Thimphu Structure Plan, 2002-2007.

2. Vision:

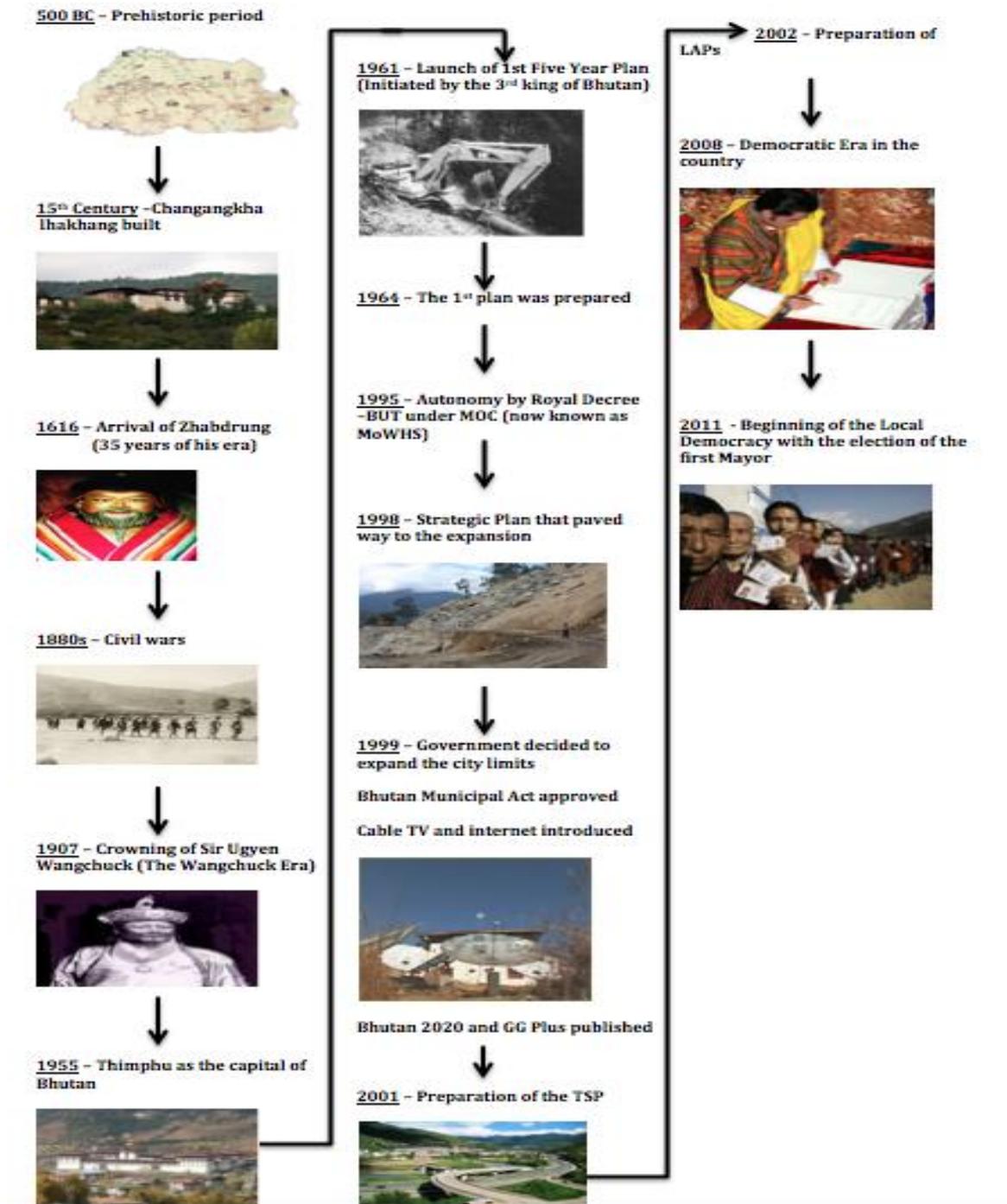
'An exemplary Thromde (City) in the region that is culturally vibrant, progressive, safe and liveable'

3. Organogram of the Thimphu Thromde:



4. History of the capital city

Thimphu was said to have been established as the capital city of Bhutan in 1955 coinciding with the birth of our 4th King Jigme Singye Wangchuck. The evolution of Thimphu may briefly be explained with the timeline shown below:



5. Area

Up until 2000, the area of the Thimphu municipality was just over 8 sq. km, encompassing areas of the core city area, Changzamtog, Changangkha, Motithang, Kawangjangsa, Zilukha, Hejo and Langjophakha. After 2000, Chang and Kawang gewogs were included in the municipality; and the total area increased to 26 sq. km. The Chang gewog includes areas such as the Changbangdu, Changjiji, Lungtenphu, Simtokha, Babesa, and Serbithang. The Kawang gewog includes the areas of Samtenling, Jongshina, Pamtsho, Taba and Dechencholing.

6. Demography

No comprehensive population and demographic study of the city has been done to date. The latest census data of 2012 shows the population of the city to be around 1,20,000 (NSB). It is projected to grow to 1,62,327 people by the year 2027 (TSP). However, NSB reveals that the population of the capital city could be around 1,50,000 in 2015. If this is true, the city's carrying capacity has almost been achieved. Therefore, there is a dire need to conduct a comprehensive demographic study.

7. Landscape

Thimphu runs along the Wang Chuu river in a North-South direction, surrounded by mountains in the East and West directions. While the surrounding hills are in an altitudinal range of 2,000–3,800 meters (6,600–12,500 ft), the city's altitude varies between 2,248 metres (7,375 ft) and 2,648 metres (8,688 ft) above mean sea level.

8. Climate

The altitude variation of the city determines the habitable zones and vegetation typology of the valley. Thimphu lies in the subtropical highland and experiences a warm and temperate climate, influenced by southwest monsoon. Thimphu experiences a wet season, which runs from May through to September and the dry season covers the remainder of the year. Rainfall varies between 500 millimeters and 1,000 millimeters per year, the bulk of which is received during the monsoonal wet season. The average temperature recorded during winter varies from 5 to 15 °C (41–59 °F),

where as in summer, the variation is between 15 and 30 °C (59–86 °F). The coldest average (minimum) temperature in January is –2.6 °C (27.3 °F) and the average highest temperature recorded during August is 25 °C (77 °F).

9. When did the city planning begin?

Due to lack of proper documentation, it is generally assumed that the first plan for Thimphu city was made in 1961 with the launch of the 1st Five Year Plan. However, the Thimphu Structure Plan 2002-2017 (TSP) claims that the 1st plan was prepared in 1964, which remained in paper - unimplemented. The 2nd plan was prepared in 1984, which guided the growth of the city through the 1990s. The first-ever comprehensive strategic plan (TSP) was prepared in 2001 and was approved by the Government in February 2003.

10. What is a structure plan?

Structural plan is very similar to a ‘strategic spatial plan’ and may best be defined as a “broader level/prioritized spatial plan showing in a more conceptual form, desired future directions of urban development, accompanied by particular decision making processes.” It is a guide to major changes of land use, built form and public spaces that together aims at achieving economic, social and environmental objectives for the area/city. It is a statutory framework usually projected for duration of ten to fifteen years to guide land use developments.

Structural plans generally recognize inner city areas that are suitable for redevelopment, regeneration, areas which are underutilized yet having potential for housing and other uses, sensitive areas which require special controls and protection strategies, etc.

11. When did the preparation of Thimphu Structural Plan begin?

It began in 2001. The then Ministry of Communications (now MoWHS) spearheaded the planning process while the Thimphu City Corporation (now Thimphu Thromde) as an implementing agency provided support.

12. What are some of the important elements of TSP 2002-2027?

The TSP was prepared based on the 10 principles of Intelligent Urbanism, 10 fundamental strategies and 22 main themes. (Refer geleynorbu.wordpress.com).

The ten principles of Intelligent Urbanism include: Balance with nature; Balance with tradition, Conviviality; Efficiency; Human scale; Opportunity matrix; Regional Integration; Balanced Movement; and Institutional integrity.

The ten strategies include: Decentralization of growth; Regionalization of growth; Densification; Transport oriented growth; Resource utilization; Urban precincts; Public assets; Defining the urban core; Facilitating access to shelter; and 'Let it be!'

The 22 main themes include: Nation building & Civil Society; City of Our Dreams; Tashichho Dzong; Conviviality & human Scale; Public Policy and Urban Form; Bhutanese Dream; Parable of Archery; Urban growth; Domain of Automobiles; Reclaiming the Public Domain; City core; Gateway to the Capital; Urban Corridor; Urban Villages; Open space system & the Wangchhu; Footpath system; Forest boundary & city landscape; Peripheral zone control; Knowledge city; Social services; Utilities network; Shelter systems; and the National Capital region.

The TSP spells out the assumptions and considerations; opportunities and constraints; and provide appropriate evaluations and possible alternatives which mould the Structure Plan.

The proposals for action include the creation of Environmental Enhancement Zones, supported by the creation of a National Open Space System. The Natural Environmental Zones and the Open Space System will house a walkable footpath system which includes both, stairways and footbridges.

The Structure Plan identifies heritage sites which require conservation, restoration, and improved access. Proposals for linking religious precincts with open spaces will make them more accessible to daily users as the heritage "walks" and "drives" will enhance people's experience of these treasures. The proposal specially stresses on the urgency to enhance the Tashichho Dzong, the Memorial Choeten, Prayer Wheels, and the

Heritage Villages. The most compelling structural aspect of the plan is the proposed traffic and circulation system which lays out the Urban Corridor, arterial roads and connector roads.

Unlike the western planning system “land use plan” which specifies zones restricted for various functions and which generates dull “gray” areas, with dreary mono-functions, the Structure Plan has a mixed-use development which takes into consideration the heart essence of Bhutanese life the ‘Dharma.’ The precincts facilitate and promote various activities that make up our daily lives, and are sanctified as sacred places for all affairs and activities that which make up the city life. The precincts also provide provisions for religious functions and other residential “house holding” activities to be carried out without disruptions of the industrial functions or the intensive retailing and wholesaling activities.

The Structure Plan also recognizes that the city must be planned for people who do not now live in it and for those future generations who have no “voice” in the preparation of the plan. Thus, the housing strategy is to design houses which can accommodate future residents in an affordable and compact and walkable neighborhood. .

The Structure Plan is farsighted as it also sets aside space for social services and amenities, so that the future city dwellers will have easy access to basic health care and educational facilities. It has provision to facilitate distribution of potable water, electricity and communications networks. Furthermore, it also has a systematic plans for storm water drainage, sewage drainage and solid waste disposal.

The components of plan in the TSP are designed to cater to the needs of the future population, more than the present ones. These plans will affect the citizens of Bhutan who own the capital as an image of their “nationhood,” more than the owners of the shops and plots in the city today. These proposals are the structured aspects of the city, which are not negotiable components of the urban structure proposed in consultation with the various stakeholders (ie. public, managers, engineers etc).

Please refer to the comprehensive Thimphu Structure Plan document available for download at www.dudh.gov.bt or www.thimphucity.bt.

13. Who approved the structural plan for Thimphu?

Structure Plans were usually initiated and prepared by the Ministry of Work and Human Settlement. So far, most structural plans and urban development plans are approved by the National Consultative Committee for Human Settlements. Because of the importance accorded to the capital city, the TSP 2002-20127 was approved by the Council of Cabinet Ministers on 3rd February 2003.

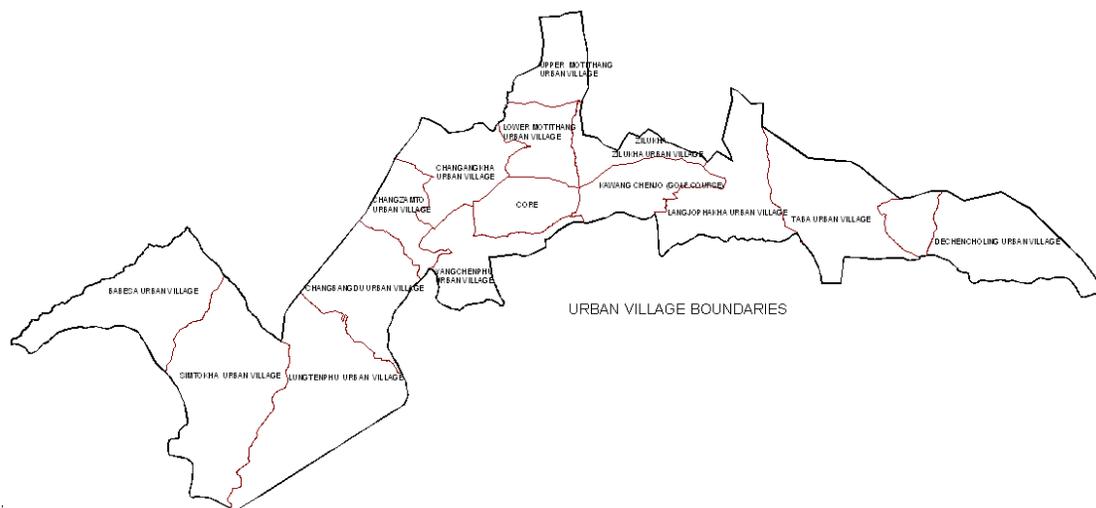
14. Is public participation integrated in structural plan preparation process?

Yes. The available records reveal that the TSP has gone through a minimum of 19 public consultation meetings before it was presented and approved by the Cabinet in 2003.

15. What is an Urban Village?

For the purpose of planning, the municipality is been divided into sixteen urban villages according to the settlement pattern, population concentration, environmental assets and geographical features. Urban Villages are therefore basic unit for planning.

The map below shows the boundaries of urban villages:



16. What is a Local Area Plan and what are some of its salient features?

Local Area Plan/s are detailed spatial/physical plans, which presents proposals and solutions at the local level. The LAPs were prepared to help translate and implement the visions of TSP, while also taking into account the specific local contexts. The LAPs are prepared based on an analytical assessment of the existing situation, looking into aspects such as the present land use pattern, buildings, land holdings, and infrastructure layouts. The topography, surface hydrology, and natural environment also help shape the plan.

The new layout for LAPs considers efficient vehicular and pedestrian access to public amenities, located within a comfortable walking distance from a transportation halt, within a neighborhood node. Rationalizations of the existing plots were proposed, which draws on the principles of Land Pooling and Readjustment. Land Pooling is a democratic and equitable process, through which an equal proportion of land is taken from each plot, in return for the provision of proper infrastructure services, amenities, regular plot layouts and access facilities. The proportion of land to be deducted was determined so that it is sufficient to provide community facilities and roads. Although it was expected to generate finance for the establishment of the services Thimphu Thromde has not been able to do so due to conflict with other policies. As a principle, the plan avoids the destruction of any private houses.

A major consideration of each LAP was the housing of population, which will have to be accommodated in the city as a whole over the coming decades. Should the city population reach 1,62,000 by 2027, each LAPs will need to accommodate its share! Implementation of any LAP is a consultative and collaborative process. It involves educating the stakeholders about the benefits of local level planning, and the need for Land Pooling and other collaborative efforts. The attempt in all the LAPs was to avoid land acquisition wherever possible.

17. How many LAPs did the Thromde prepare and implemented so far?

As of 2015, the Thromde has prepared 14 LAPS which are at various stages of implementation. Infrastructure provisions in 4 LAPs (Lungtenphu, Simtokha, Babesa and

Changbangdu) were implemented through funds provided by the Asian Development Bank, where as 2 LAPs (Dechencholing and Langjophakha) were implemented through funds secured from the World Bank. In the meantime, the Lower Taba LAP, which is also under WB funding, is still under tendering process.

Below is the table showing the status of LAPs in Thimphu:

| Sl no | Name of LAP | Total LAP Area (acre) | Total no. of plots | Total no. of land owners | LP ¹ % Contribution | No. of public consultations before approval | Plan approval year | Remarks |
|--------------|------------------------------|-----------------------|--------------------|--------------------------|--------------------------------|---|--------------------|--|
| 1 | Serbitang LAP | 192.63 | 100 | 38 | 15 | 5 | 2004 | |
| 2 | Babesa LAP | 204.22 | 452 | 295 | 27.5 | 12 | 2005 | A cluster of TV precincts do not have LP |
| 3 | Simtokha LAP | 173.64 | 346 | 247 | 29 | 8 | 2004 | Excludes the old workshop area |
| 4 | Lungtenphu LAP | 182.9 | 583 | 381 | 28.9 | 12 | 2004 | A clusters of TV precinct do not have LP |
| 5 | Changbangdu LAP | 97.485 | 242 | 167 | 27.5 | 7 | 2007 | |
| 6 | Langjophakha LAP | 67.61 | 144 | 126 | 25 | 6 | 2007 | A cluster of TV precinct do not have LP |
| 7 | Hejo-Sling LAP | 313.22 | 464 | 323 | 29.5 | 2 | 2008 | 2 clusters of TV precinct & the Hejo village do not have LP |
| 8 | Jongshina LAP* | 149.82 | 324 | 261 | 29.5 | 2 | 2008 | The GLD area has 13.5% LP while the workshop area has 35% LP |
| 9 | Taba LAP* | 237.09 | 444 | 391 | 28.5 | 11 | 2005 | The GLD area has 12.67 % LP, (total land owners=64, total no. of plots=66) |
| 10 | Dechencholing LAP | 93 | 220 | 152 | 25 | 7 | 2005 | |
| 11 | C/zamto LAP (Middle) | 27 | 118 | 106 | 25 | 3 | No records. | |
| 12 | C/zamto LAP (upper & lower) | 90.46 | 265 | 249 | 25 | 4 | 2014 | |
| 13 | Simtokha workshop area (old) | 9.2 | 35 | 26 | 35 | 9 | 2006/14 | |
| 14 | Zilukha AAP | 7.89 | 20 | A20 | 25 | 3 | 2010 | |
| Total | | 1846.16 | 3757 | 2782 | 375.4 | | | |

Notes:

^[1] The TSP alone has gone through 19 public consultations which are not included here. Furthermore, numerous meetings held even after the plan approval and consultations with government and utility agencies are also not accounted for in this table.

^[2] Dense clusters of settlement are designated to fall under the category of “Guided Land Development” (GLD), and smaller land contribution ratios are applied.

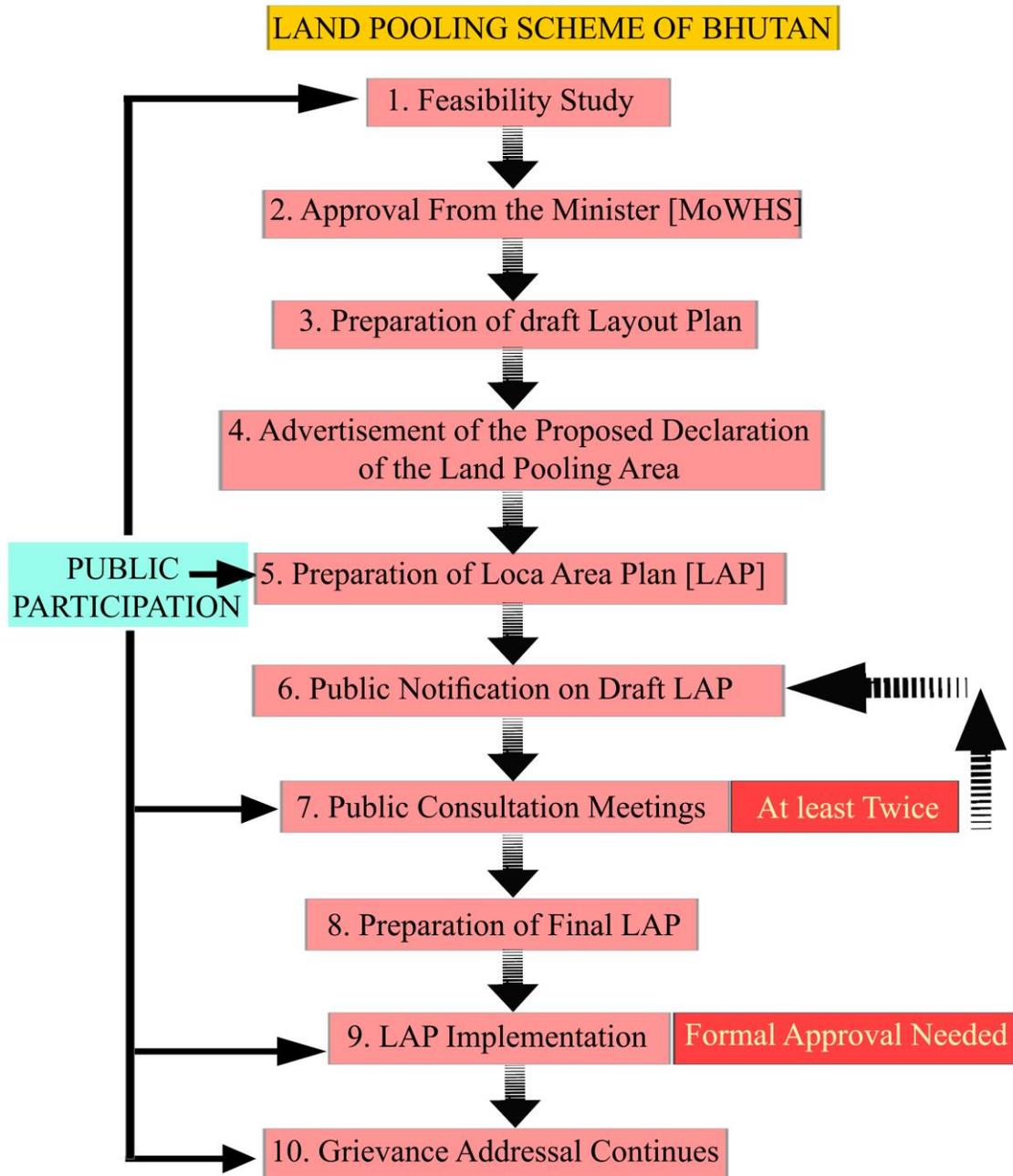
^[3] TV stands for Traditional Village.

18. Who prepares and approves the LAPs?

Most of the above listed LAPs were prepared and approved between 2002 and 2008. The MoWHS provided a lot of support in the planning and consultation process. After 2009, the TT initiated the preparation of Changzamto LAP (upper and lower) and Zilukha Action Area Plan (AAP). Most of the LAPs are approved by the Municipal Council (Thromde Tshogde).

19. What are the processes involved in the preparation of LAP?

The processes involved in the preparation of LAPs are guided by the Land Pooling Rules and Regulations 2009. In general, the chart below shows the steps followed:



20. What problems did the Thromde want to solve using land pooling and readjustment?

There are many problems we hope to solve through Land Pooling and Readjustment. Some of the important ones are:

- i. To help build TRUST between the government and the citizen. This require keepi ng the project on schedule

- ii. To engage the citizenry in a meaningful, robust and inclusive manner in the entire process of planning, implementation and monitoring
- iii. To reduce the burden of Government in mobilizing a huge capital budget for infrastructure investment.
- iv. To help build a foundation of strong democratic principles of – participation, collaboration, responsibility, transparency, accountability and enriching the culture and tradition through interactions during public consultations and meetings
- v. To help implement the visions of the master plan in an incremental manner
- vi. To explore ways to capture the land value increments generated by land pooling for financing social housing and other pro-poor initiatives. However this is an area we have not been able to do anything at the moment.

21. Why did the Thromde use LP as opposed to other mechanisms or tools?

We used Land Pooling and Readjustment because of the following reasons:

- i. To avoid compulsory land acquisition which was time consuming and sometimes unfair. Prior to 2002 most of the development activities in the capital city and also in the entire country happened through land acquisition. Prior to the preparation of the TSP and the drafting of subsequent LAPs, the government acquired lands from farmers for the development of urban centers and public facilities. This would involve the creation of regular-shape plots that were then serviced and allotted to the business community. As the time passed, this process was criticized and contested by the property owners citing the reasons listed below:
 - a. The compensation offered by the government was unfair because it was always less than the prevailing market value.
 - b. The lands were acquired from the farmers and were allotted as serviced plots to the business community.
 - c. The educated, rich, and the powerful were advantaged in their access to information.
 - d. The planning process was not as transparent as the public wanted it to be.
 - e. Plans were prepared in a top-down fashion, and there were hardly any public consultations.
 - f. A few people owning a vast expanse of land kept their land idle for speculative purposes, leading to distortions in the land and housing markets.
 - g. Urban life was deteriorating due to limited and/or lack of funding sources for infrastructure investment.
 - h. All too often, development plans were prepared hastily by the consultants without a complete understanding of the reality on the ground.
 - i. Reviews of plans were also prepared quickly, and their recommendations were normally ignored.

22. What were the biggest challenges and benefits in implementing the LP project/s? How did the Thromde solve those challenges?

| Challenges | How we solved them |
|------------|--------------------|
|------------|--------------------|

| | |
|--|--|
| There was no legislation supporting LPR to begin with (2000). The government was dragged to court by about 8 landowners (public interest litigation) | Through rigorous public consultation and perseverance so much so that many, who took us to the court, became staunch supporters. A LPR was prepared and approved in 2009 |
| Limited human resource (both in terms of number and capacity) | Consultants were hired. Officials were engaged on secondment to learn on the job. |
| No example to learn from and show to the public. It was a learning by doing | Endless public consultations, focused group discussions and one-to-one engagements were initiated to explain the benefits of LPR |
| The cadastral maps and the corresponding land records were not matching | A long process of verification with the land owners had to be done |

23. What would the Thromde do differently if it were to conduct the LPR project/s again?

If the LPR projects are to be conducted again, from square one, we hope to address the following issues first:

- a. A proficient and committed team will be established to manage the project/s
- b. Appropriate trainings will be provided to the local staff who work on the ground
- c. To offset the problem of funding the project the project will be designed to self-finance. However it is questionable if this will work in our context due to limited authority of the local government to raise funds from the sale and lease of land
- d. Having a law to legitimize the planning function of the government should have been in place before venturing into LPR projects. This is a central government function
- e. A household survey, followed by SIA, RAP and EIA should be conducted prior to physical implementation of LAPs
- f. A DPR will be prepared prior to actual physical implementation

24. If the Thimphu Thromde or the MoWHS were the first promoter/s of LPR in Bhutan, was it able to scale up the idea? What do you think is the most important factor to scale up such approach?

Yes, we have been able to scale up the idea because we now have 14 approved LAPs in the capital city alone. Moreover two areas immediately outside the municipal

boundary (Kabesa and debsi) have opted for land pooling. Furthermore, most of the smaller towns in other districts have also embraced LPR as a tool for urban development.

In short, the first few projects need to be implemented successfully and within time in order to scale up such approaches. That way it will be easier to gain the trust and confidence of the public. In general, we need to follow the following 10 principles, that will never let us go wrong:

- i. Land contribution ratio should be calculated and fixed at a level acceptable to the majority. Here, different categories of land may need to be considered.
- ii. Contribution from households may be made in the form of cash or land, or a combination of the two, depending on the specific situation of their parcel.
- iii. Households whose land parcels will become too small for construction after LPR may be given options such as:
 - a. contribute in cash instead of land;
 - b. purchase additional land to achieve the minimum standard plot size according to the urban planning regulations;
 - c. consolidate their remaining parcel with neighboring parcels occupied by other households;
 - d. transfer their land to the City or another household with compensation and move to the resettlement site.
- iv. Minimize demolition of existing structures, except for structures that do not conform to urban planning regulations and permissions. Demolished structures and other private assets need to be compensated at replacement cost.
- v. Account for any prior contributions made by the households
- vi. Final parcels returned to the participating households need to be reallocated at its original location, or as close as possible to the original location.
- vii. The land readjustment project will serve as a tool for achieving the City's broader urban planning goals.
- viii. In cases where the community's benefits and interests conflict with those of individual households, the former needs to be given priority.
- ix. LPR project may only be approved if at least 2/3 of the total households agree with the project. However the city will attempt to persuade all affected households about the

benefits of participating in the project and obtain their agreement to participate voluntarily. However, for households who cannot be persuaded to participate, the City will use compulsory purchase as the last resort to acquire their lands in accordance with the law.

- x. All land readjustment activities will be implemented in a transparent manner and monitored by the community.

25. What advice would Thimphu Thromde convey to other districts or developing countries that want to apply LPR to solve their urban problems?

Having worked on LPR projects for the last 15 years and knowing the challenges faced by Bhutan’s other districts and many developing countries we think the future lies in LPR. We are convinced that the urban challenges of developing countries can be solved through LPR. LPR can not only solve urban problems but has numerous unexpected and positive externalities which will be beneficial for a cultured society (good governance, participation, collaboration, responsibility, transparency, accountability and enriching the culture and tradition).

Therefore, it makes a good sense to build human capacity in LPR if such projects are to be successfully implemented.

26. How valuable are the lands in Thimphu?

It is very difficult to answer this question. Because we do not have a proper and predictable land market, it is mostly dependent on a deal fixed between a willing buyer and a willing seller, in an arm’s length transaction. However for the purpose of calculating land values for acquisition, compensation and transaction tax, the rates approved by the government in 2009 is being used. It is called the PAVA rate (Property Assessment and Valuation Agency). As per PAVA, different precincts within the city are valued differently as shown below:

| Land Use/Precinct name | Land Use/Precinct abbreviation | Land value (Nu/sqft) | Land value (Nu/decimal) |
|------------------------|--------------------------------|----------------------|-------------------------|
| Urban core (UC) | Sub Precinct 1 A | 1383.8 | 602,783.28 |
| | Sub Precinct 1 | 1,349.21 | 587,715.88 |
| | Sub Precinct 2 | 1,233.89 | 537,482.48 |
| | Sub Precinct 2A | 1,233.89 | 537,482.48 |

| | | | |
|-------------------------|-----------------|----------|------------|
| | Sub Precinct 2B | 1,176.23 | 512,365.79 |
| | Sub Precinct 3 | 1,176.23 | 512,365.79 |
| | Sub Precinct 4 | 1,176.23 | 512,365.79 |
| | Sub Precinct 4A | 1,176.23 | 512,365.79 |
| Urban hub | UH | 250.42 | 109,082.95 |
| Neighborhood node | NN | 250.42 | 109,082.95 |
| Urban village precincts | UV - 1 | 258.43 | 112,572.11 |
| | UV2-MD | 230.38 | 100,353.53 |
| | UV2-I | 230.38 | 100,353.53 |
| | UV2-II | 230.38 | 100,353.53 |
| | UV2-LD | 198.33 | 86,392.55 |
| | UV - 3 | 180.3 | 78,538.68 |
| Institutional precinct | I | 226.38 | 98,611.13 |
| Environmental precincts | E - 1 | 180.3 | 78,538.68 |
| | E - 2 | 180.3 | 78,538.68 |
| | E - 3 | 180.3 | 78,538.68 |
| | E - 4 | 182.3 | 79,409.88 |
| Heritage precinct | H | 194.32 | 84,645.79 |
| Dzong | D | 180.3 | 78,538.68 |
| Royal precinct | R | 180.3 | 78,538.68 |
| Defence precinct | M | 206.34 | 89,881.70 |
| Traditional village | TV | 250.42 | 109,082.95 |
| Green spaces | G1 AND G2 | 194.32 | 84,645.79 |

27. What is the land tax rate/s applied within the Thromde?

Although the TSP had categorized all areas within the Thromde under numerous precincts, they have been further grouped into various subgroups for the purpose of taxation. In the future the Thromde will fix the land tax based on the precincts.

Currently, below are the tax rates applied within Thromde.

| Sl no | Areas | Land tax rates (Nu/sq ft) | | Remarks |
|-------|---|-----------------------------------|------------|---|
| | | Residential | Commercial | |
| 1. | Core area: areas around Norzin lam, Chang Lam, below Doybum lam, Sunday market, Chubachhu, Clock tower etc | 0.50 (Nu. 217.8/dec) | Status quo | For the purpose of land tax all the precincts (except the UV-1 precinct, Workshop area, E4 areas and Warehouse/service precinct) will be treated as RESIDENTIAL area. The UV-1, |

| | | | | |
|----|---|------------------------------------|------------------------------------|---|
| 2. | Peripheral area: Changangkha, Lower Motithang, Kawangjangsa, Zilukha, Hejo, Langjophakha, RBP, JDWNRH, YHS, Changzamto, Changgedaphu etc | 0.25 (Nu. 108.9/dec) | 0.50 (Nu. 217.8/dec) | Workshop, Warehouse/service precinct & all sub-precincts of core area will be treated under the COMMERCIAL category. However the lands falling under the Dzong Green area will continue to pay taxes at rural rates. This shall be valid till the next revision which should be then based on the precincts and land values as per PAVA. With regard to building tax and other charges/fees the existing rates shall continue to be applied until they are revised and publically informed. |
| 3. | Extended area: Upper Motithang, Changbangdu, Changjiji, Lungtenphu, Simtokha, Babesa, Serbithang, Samtenling, Jongshina, Taba, Dechencholing etc | 0.25 (Nu. 108.9/dec) | 0.50 (Nu. 217.8/dec) | |
| 4. | Green area (Dzong) | Status quo | Status quo | |
| 5. | All E-4 areas defined under the Thimphu Structure Plan and the corresponding Local Area Plans | 0.125 (Nu. 54.45/dec) | 0.125 (Nu. 54.45/dec) | |

28. What do the terms “core area”, “peripheral area”, and “extended area” mean?

Areas within the Thimphu city had came under the municipal administration at three different times. Accordingly, terms such as “core area”, “peripheral area”, and “extended area” were used for the purpose of administration and management.

The core area includes the areas which were under the municipality during the 1980s. The then NUDC used to manage the urban area which included areas below the Doybum lam in the west, Wangchhu in the east, Chubachhu in the North and RBP boundary in the South.

The peripheral areas are the areas which came under the municipality in 1994. It included areas such as Changangkha, Motithang, Kawangjangsa, Zilukha, Hejo, Langjophakha, RBP, JDWNRH, YHS and Changzamto.

The extended areas include those areas which came under the municipality in 2000. It included areas such as Changbangdu, Changjiji, Lungtenphu, Simtokha, Babesa, Serbithang, Samtenling, Jongshina, Taba and Dechencholing.

There is another set of definitions introduced by the Thimphu Structure Plan. As per the TSP the entire municipality is divided into 16 urban villages defined by geographical features, and population density. Each urban village is composed of one or two Local Areas (LAPs).

In the future, for the purpose of maintaining consistency and continuity, it is recommended to use “Urban Villages” instead of the terminologies such as; core, periphery or extended. This will ensure proper planning, budgeting, monitoring, and equitable and balanced development apart from offering other advantages such as systematic maintenance and segregation of land and property records, census records, tax collection, database management and even for delimitation and election purposes.

29. What facilities would be constructed in Neighborhood Nodes?

Several LAPs have identified and set aside lands earmarked as Neighborhood Nodes. These Neighborhood Nodes would have amenities and facilities for the Urban Village it belongs to. Some of the proposed amenities in Neighborhood Nodes are:

| Facility | Nature of Facility |
|---------------------|---------------------------------|
| Neighborhood Clinic | Diagnostic, Casualty, Emergency |
| Nursery School | of Age Group of 3 - 6 years |
| Convenient shopping | Convenience Shopping |
| | Fuel Station, Auto Repair Shop |
| | Café, Neighborhood Bar/ Pub |
| | Internet Café |
| Transportation | Bus Stop, Taxi Stand |
| | Tram Station (in future) |
| Public Conveniences | Phone Booth, News Stand |
| | Public Toilets |
| Fire Fighting | Provision of Fire Engine |

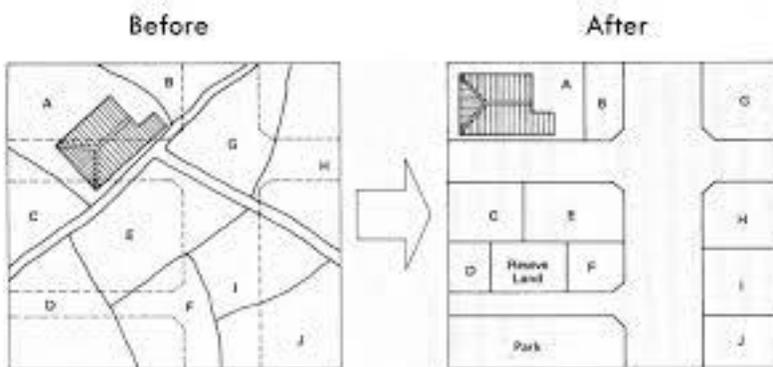
| | |
|----------------------------|--|
| Infrastructure Maintenance | Electrical Sub Station |
| | Water Supply Monitoring Cell |
| | Tel. Complaint/ Bill Receipt Cell |
| Social Infrastructure | Postal Agency/ Collection Center (Creche, Medical store) |
| Solid Waste Disposal | Store for Recyclable Wastes |

30. What is Site Plan?

A Site Plan is a map showing the spatial location, size and orientation of a plot usually valid for 2 years. The two types of site plan are Conveyance Site Plan (which is used for the purpose of land transaction), and Development Site Plan (which is used for the purpose of construction and availing building permit).

31. What is land pooling?

Land pooling is a technique of rationally planning an area whereby landowners contribute a certain percentage of land and in return the government provides basic facilities like road, drain, footpaths, water and sewerage. Land pooling will increase the value of the land and will benefit the owners from the services and amenities. A pictorial illustration of land pooling is shown in the figure below.



(Source: City Planning Bureau of Nagoya, Japan, 1982)

32. What percentage of land is contributed towards land pooling by the landowners?

The Land Pooling Rules of the Kingdom of Bhutan 2009, states that the calculation of the contribution ratio is expressed as a formula in:

$$\text{Contribution Ratio (\%)} = \frac{(\text{land required for infrastructure}) + (\text{area for reserved plots (if any)}) \times 100\%}{(\text{Area of all contributing land})}$$

The Rules set the upper limit of contribution ratio at 30% (rule 61 (b)) but allows for acquisition of land in order to reduce the land pooling contribution ratio (rule 40). Every LAP has got different pooling percentage and accordingly the deductions are made.

| Location | Land contributed for pooling |
|-----------------|------------------------------|
| Dechencholing | 25% |
| Taba | 28.5% & 12.67% (GLD) |
| Langjophakha | 25% |
| Hejo- Samteling | 29.5% |
| Jungshina | 29.5% & 35% Workshop area |
| Thimphu Core | 0% |
| Changzamtog | 25% |
| Changbangdu | 27.5% |
| Lungtenphu | 28.9% & 15% (Below EW) |
| Simtokha | 29% |
| Babesa | 27.5% |
| Serbithang | 15% |

33. Can you tell me about the expansion Thimphu experienced in the late 1990s?

In the 1990s the municipal area was confined to about 8 sq km of area, encompassing the city core area and some areas immediately adjoining the core area. Its growth was guided by an urban plan prepared in 1986 which contained a land use zoning map.

In 1998, the then Ministry of Communications (now MoWHS) prepared a strategic plan which influenced the expansion of the city limits from 8 sq km to 26 sq km. Chang (south) and Kawang (north) were then included in the municipal boundary.

In 1999, the Council of Cabinet Ministers instructed the MoC to prepare a comprehensive plan for the capital city.

During this period the population of the capital city kept on growing, mainly due to migration. As of 2005 the city's urban population accounted for 40.4 % of Bhutan's urban population. Between 2000 to 2005, Thimphu's urban growth rate was 13.5% while that of Bhutan is 7.3% (BNUS).

34. What was the cause of this rapid migration?

The answer to this question is very obvious. Thimphu is the capital city of Bhutan. It is home to all the central ministries, government organizations, corporations and businesses. It is a place of employment and opportunities for the Bhutanese.

35. How did this affect the city? What changes did Thimphu experience?

The city was not able to meet the expectations and demands of its population, both in terms of quantity and quality. Water supply, sanitation, housing, schools, health etc. There were land speculation and unsustainable fragmentation going on. If one looks at the media articles covered during the period of 2000 to 2009 one will notice the insurmountable challenges that the city had encountered.

There were complaints and accusations. All this led to loss of public's trust towards the institution

36. How did you plan and build infrastructure to deal with this rapid increase in population, and what challenges you faced?

Before I answer this question, let me tell you that the preparation of the TSP and the LAPs happened at the nick of time. Had it been delayed by a few years, the capital city that we are proud of, would have degenerated. We still have challenges but we are on track.

Well! Immediately after the TSP was approved, numerous LAPs were prepared. These LAPs went through numerous public consultations until they were approved between

2004 and 2008. These LAPs were planned to accommodate the growing population of Thimphu and contained details of lay out for road, footpath, drains, NN, etc.

After these plans were approved, the main challenge we faced was the lack of budget for implementation. People were losing their patience and the newspapers covered stories such as “Hejo wants urban amenities: City says it’s broke” (8/8/2007) “Enough is enough, say South Thimphu farmers” (3/1/2009), “Slow City costs dear” (25/3/2009), Changbandu: On the city’s blindspot (31/5/2008), Keeping Thimphu clean: an uphill task (31/10/2007), etc

Fortunately the WB and ADB came to our rescue by financing the implementation of infrastructure in these LAPs. So far, out of a total of 14 LAPs, 7 are implemented.

We are still looking for money to implement the rest. We have already begun to face pressure from the landowners of the remaining LAPs.

37. What is Thimphu’s history with eminent domain? Why did you use eminent domain?

Historically, in Bhutan, whenever a site is identified for urban development, or for construction of schools, hospitals or roads, lands were acquired and compensations were paid as per the government approved rates. In Thimphu, land acquisition was done for the construction of sewerage treatment plan, express way and the Changjiji housing complex.

Eminent domain was used, may be because eminent domain was the only tool available at that time which was also legitimized by the then Land Act of 1979.

38. When and why did the city decide to use land pooling as a means to facilitate urbanization?

Prior to the preparation of the TSP and the drafting of subsequent LAPs, the government acquired lands from farmers for the development of urban centers and public facilities.

This would involve the creation of regular-shape plots that were then serviced and

allotted to the business community. As the time passed, this process was criticized and contested by the property owners citing the reasons listed below:

- The compensation offered by the government was unfair because it was always less than the prevailing market value.
- The lands were acquired from the farmers and were allotted as serviced plots to the business community.
- The educated, rich, and the powerful were advantaged in their access to information.
- The planning process was not transparent.
- Plans were prepared in a top-down fashion, and there were hardly any public consultations.
- A few people owning a vast expanse of land kept their land idle for speculative purposes, leading to distortions in the land and housing markets.
- Urban life was deteriorating due to limited and/or lack of funding sources for infrastructure investment.
- All too often, development plans were prepared hastily by the consultants without a complete understanding of the reality on the ground.
- Reviews of plans were also prepared quickly, and their recommendations were normally ignored.

In view of these inadequacies and challenges, the government introduced land pooling as an alternative tool for urban development. Simultaneously, during the preparation of the master plan for Thimphu, the government initiated rigorous public consultation and detailed assessments of the socio-cultural, traditional, and environmental aspects of the localities.

39. How does land pooling work in Bhutan?

The most important aspect of Thimphu's experience was the introduction of land pooling to help reduce the cost of implementing the LAPs. It is important to note that land pooling did not have legal "teeth" until the passing of the Local Government Act (2009, 69), which defined land pooling as "*a planning technique to redefine ownership of land in such a way that: (1) the shape and configuration of plots is more appropriate for urban structures and uses, and (2) the size of all plots is reduced by an agreed proportion to create sufficient public and planned provision of roads, infrastructure, social facilities, open space and reserve plots.*"

The landowners within the land pooling area contributed between 15 to 30 percent of their land for the construction of roads, footpaths, open spaces, schools, neighborhood

nodes and other public amenities. This arrangement provided land for local infrastructure development without resorting to eminent domain to acquire private land. The Thimphu Municipality was responsible for building the infrastructure, which was financed mostly through loans from the World Bank and Asian Development Bank.

After the completion of the LAPs for Thimphu, other towns in Southern Bhutan such as Damphu, Gelephu, and Samchi followed suit. By 2004, Thimphu completed the planning of twelve LAPs that are currently at various stages of implementation. All of these LAPs are equally unique and worthy of discussion independently.

Overall, LP has been very successful in Thimphu. As of December 2015, about 260 acres of land were contributed as land pooling by about 2800 landowners.

40. What were the challenges in getting the LP system started?

When land pooling was initially introduced there were strong resistance from the public. Several people even took the government to court.

To make matters worse, there were no actual examples of land pooling in Bhutan. The case of land pooling in Thimphu was an example of learning by doing. It was an exercise where every stakeholder were working together amidst an atmosphere of suspicion and constraints on building trust between the government and citizens. Keeping the project on schedule was a challenge. Other challenges are:

- No legality for LP
- No qualified and trained people to work on land pooling
- No dedicated team to work on land pooling
- Public meetings were attended a few landowners
- Because LP was not supported by law we required the landowners to sign an agreement on land pooling
- Bad record keeping, especially with regard to public meetings, media coverage, and the signed land pooling agreement
- Could not capture the land value increments generated by land pooling
- Financing social housing and other pro-poor initiatives were not thought of
- Cadastral maps and land information were not updated
- No inclusiveness, especially for tenants and those who did not own land

41. Explain the Thimphu's master plan in a few sentence? How do it come about and what are it's goals?

- It is a 25 year (2002-27) master plan for the capital city
- The vision is to make Thmphu the best of what the country can be
- It is the 1st comprehensive plan approved in February 2003
- The plan was prepared through an in-depth understanding of existing scenario
- Attention was given to environment (flora, fauna, avifauna, hydrology, geology), culture, tradition, market conditions, infrastructure, social amenities
- Detailed analytical assessment of the existing scenario was done
- Proposals for action were translated into the land use plan (precincts)
- The DCR was the main tool for implementation
- 27 Extensive public consultations were done prior to its approval
- The TSP is woven around 22 main 'Themes', 10 Principles of Intelligent Urbanism, and 10 fundamental 'strategies'
- The ten principles of Intelligent Urbanism include: Balance with nature; Balance with tradition, Conviviality; Efficiency; Human scale; Opportunity matrix; Regional Integration; Balanced Movement; and Institutional integrity.

42. What were the roles of international financial institutions for implementing land pooling or Local Area Plan (LAP) in Thimphu?

- Direct role:
 - They helped fund the infrastructure implementation
- Indirect role:
 - They helped us in getting the LPRR approved
 - They helped institutionalize the conduction of socio-economic surveys and preparation of RAP, SIA and EIA
 - They helped us learn and know more about social safeguard policies

43. What were the main challenges during the process of preparation and implementation of first 9 LAPs in Thimphu?

- There were no local capacity (both in terms of number and quality). Municipality depended on Indian consultants
- There were initial resistance to LP
- Inaccurate cadastral maps and mismatch with land records
- Unresolved land cases and disputes
- Less attendance during public meetings
- No example to look at. It was a case of learning by doing
- Poor coordination, both with external agencies and internal divisions. This issue still persist
- Prior to actual implementation numerous corrective surgical exercises had to be carried out

- The Neighborhood Nodes are still not implemented

44. How were those challenges of low human capacity addressed?

- Counterpart local staffs were engaged with consultants
- Persistent follow up with NLCS were done especially with regard to resolving issues related to mismatch in cadastral map and land records
- Municipality hired Indian Urban Planners/Designers
- Public meetings during weekends in order to get more attendance
- Endless surgical operations were done on the approved LAPs prior to actual implementation

45. What lessons were learned from the LP experience in Lugtenphu and other LAPs?

- Initially, it was an exercise where every stakeholder was working together amidst an atmosphere of suspicion and constraints on building trust between the government and citizens.
- Keeping the project on schedule would have helped engender trust.
- The process helped build a foundation of strong democratic principles – participation, collaboration, responsibility, transparency, accountability and enriching the culture and tradition through interactions during public consultations and meetings.
- The numerous public consultations and meetings followed by several site visits and one-on-one discussions helped the Municipality build a culture of good governance that was almost nonexistent during the inception of land pooling in 2000
- Although it would be good to have supporting legislation/s, they may not be necessary if there is a super majority support
- Leadership is important. The then-Deputy Minister Leki Dorji was thoroughly convinced of the benefits of land pooling, and he led the team of government planners and city managers in conducting numerous public meetings, consultations, and open house discussions
- Decentralization of powers of land administration and management to local authorities may expedite the implementation of land pooling projects
- It is important to have qualified and trained people to work on land pooling. dedicated team to work on land pooling
- Consultation, consultation, consultation is the key to success
- Truncating an area for the purpose of implementation serves well
- It is advisable to get property owners to sign an agreement on land pooling once they have reached agreement after having adequate time to think through the proposals and make their own decision.
- Electing local voluntary representatives/leaders (apart from council members) of the group of land and property owners of a locality also can help to broaden awareness and sharing of information and can facilitate the implementation process
- Proper record keeping and archiving is important

- Although it will entail tremendous time and effort to reach a point where every landowner is comfortable with and agrees to the land pooling, it is advisable to seek unanimous agreement if possible. Even one individual can and may drag the authorities to the court and prolong the implementation process. Furthermore, having universal agreement achieved through a robust and meaningful consultation process would be viewed positively when the project is funded by donor agencies that are concerned about litigation and other complications
- The municipality may also explore ways to capture the land value increments generated by land pooling for financing social housing and other pro-poor initiatives. This is important especially in the case of Thimphu because the land pooling projects have not been inclusive with respect to the poor, renters, and underprivileged residents
- Self-financing the project, if possible, will offer several benefits, the most important of which is the community's sense of ownership
- It is also very important to have clear and updated cadastral maps and land information to facilitate land pooling.
- It is advisable to engage the public — in a meaningful, robust and inclusive way — at all stages of planning and implementation. Such initiatives offer numerous intangible benefits that help build trust, community vitality, and good governance. Planning and implementation of land pooling projects require sustained efforts coupled with patience and perseverance
- While participation is important, it could prove counterproductive if it is not inclusive. In the case of Thimphu, propertied groups dominated public participation.
- A guideline specifying HOW a LPR may be conducted would be useful. All the above points should be incorporated into detailed, yet flexible, guidelines for land pooling. The guidelines should specify what should be done at the inception, planning, and implementation stages. Such a guideline will be immensely helpful for all stakeholders to engage in the discussion of land redevelopment

46. How did Thromde use those lessons to adapt and improve LP projects?

- In the subsequent LP projects we made sure that the cadastral maps and land records were updated
- We also modified the LPA to incorporate the principles of LP
- Records of minutes and LPA agreements were properly maintained and archived
- From the Changzamto case we were also able to collect a good amount of revenue from CPLC

47. What were some of the challenges in scaling up LP approach?

- Inability to implement the existing approved LAPs inhibit us from initiating more LPR projects.
- Shortage of manpower, especially urban planners, surveyors and sociologists have been a perennial problem

- Lack of capacity building, learning and continuous growth for Thromde officers

48. How important was the law legalizing land pooling in Bhutan and how did that come about?

- The inclusion of the term “Land Pooling” in the Land Act 2007 and LGA 2007 were an epoch in the history of urban planning in Bhutan.
- It provided legal teeth for LP. However there was no detailed rule to guide the process of LP
- Had it not been for WB and ADB’s pressure (prior to implementing D/ling and L/phu LAPs) the LPRR would have taken longer for the MoWHS to draft and get it approved by the Cabinet

49. Briefly explain the Dechencholing LP project and the challenges encountered?

All the challenges that were highlighted earlier are generic challenges faced in all the LAPs. However, some specific challenges for Dechencholing are:

1. It was the first LAP to be handled entirely by a local staff who was a fresh Architect and not even a planner
2. The plan was prepared in the absence of a topographic map which would have actually guided a proper layout of road networks
3. Household survey was not carried out at the time of planning. The only input for planning used were the cadastral map and the corresponding land records
4. RAP, SIA and EIA were also not conducted until it was required by the WB prior to physical implementation
5. The Neighborhood Node is still not implemented

50. How did this project (Dechencholing LAP) achieve 100% community agreement?

There is no concrete answer to this question. There are many factors:

- The community representative was very active and helped convince and mobilize LPA
- Landowners of this local area wanted to capture the WB fund
- There was nobody who strongly opposed to LP
- Numerous public consultation meeting, site visits and one-to-one meeting with landowners would have also helped convince
- Perhaps, since the plan was prepared by a local staff, there wasn’t a need to make many corrections (other LAPs had to be corrected many times)

51. What lessons were learned from the Dechencholing experience?

- Communication matters. More the better
- Local leadership matters. The local representatives were very active
- Capacity building of local officials matters
- It is important to carry out HH survey, followed by RAP, SIA and EIA
- Patience, commitment, persistence and perseverance matters

52. Can you tell me about the Changzamto land pooling project? What challenges did you face in that project?

Changzamto, is close to the core city area which came under the municipality in 1994. It is a highly dense area which did not have a proper plan in place. The existing infrastructure were inadequate and of poor quality – narrow roads, no parking areas, shortage of water supply, no street lights or footpaths etc. In 2011, Thromde initiated LP project for the upper and lower parts of Changzamto with an intention to uplift its face by carrying out a corrective surgical exercise with the application of LP. Another intention was to treat the entire Changzamto landowners in a fair manner. There were about 280 landowners. Most of the plots were already built. During public consultations we developed nine principles of LP, which was also included in the LPA. These principles are specific to Changzamto:

1. All landowners will contribute 25% to land pooling in the form of physical land or monetary payment depending on actual site conditions.
2. All landowners will contribute only 20% to land pooling in the form of physical land or monetary payment if the land is not accessible by road.
3. Minimum plot size of 9.75 decimal (394.5 sq m) will be maintained wherever possible.
4. All vacant plots above 12.5 (505.75 sq m) decimals will contribute for land pooling in terms of land only.
5. All vacant plots below between 10 to 12.5 decimals will contribute for land pooling as a combination of both physical and monetary payment.
6. All vacant plots below 10 decimals will contribute for land pooling in monetary terms.
7. All vacant plots below 7 decimals will contribute for land pooling in monetary terms both for 25% pooling and additional land, if adjusted, depending on land availability.
8. All existing built up plots, having coverage, more than 40% shall contribute for land pooling in monetary terms.
9. All existing built up plots, less than 40% coverage, shall make land pooling contribution in terms of land.

As of July 2016, Thromde has collected more than Nu. 26 million as CPLC (USD 400,000). This amount will be ploughed back to improve infrastructure in the area.

Challenges:

- Many absentee landowners

- Could not create open spaces and recreation facilities
- Very difficult to work in already developed and dense areas
- Coordination problem, both internal and external. Internal with the Infrastructure Division, externally with the BPC, Telecom and cable operators.
- Principle no 7 was nullified by NLCS
- A few landowners adamantly refused to participate in LP. One owner has recently filed a case with the court

53. What lessons were learned from the experience of applying LP in already built up areas?

- Dense settlements can be given a face lift through the application of LP
- However, it is very challenging to attempt LP in dense areas
- Achieving 100% agreement is a myth, not a reality
- Commitment and perseverance is necessary from those who are involved in the project
- Every LP project is unique.
- New ideas germinate when you engage. For example, the 9 principles in the case of Changzamto

54. As of 2016, how many land pooling projects are in affect today?

So far we have prepared and approved 14 LAPs:

- 4 are implemented through ADB funding (Lungtenphu, Simtokha, Babes and Changbangdu)
- 3 are implemented through WB funding (Dechencholing, Lower Langjophakha and Lower Taba)
- 1 small LAP implemented through RGOB funding (Zulukha)
- 2 (upper and lower C/zamto) will be implemented through CPLC funding
- 4 LAP still do not have funding (Serbithang, Hejo-Samtenling, Jongshina-Pamtsho)
- Even in those so called implemented LAPs there are few important projects still awaiting funding:
 - Neighborhood Nodes
 - Pedestrian bridges/subways, bus terminals, stock exchange, market sheds etc
 - Upper Taba
 - Upper Langjophakha

55. In addition to facilitating urban expansion in peri-urban areas, has land pooling been used to upgrade or redevelop existing urban areas? What were the main challenges of implementing land pooling in existing dense urban areas compared to peri-urban areas?

Yes. Changzamto and Langjophakha are cases of upgrading an existing urban area.

Peri-urban areas were relatively vacant compared to existing dense areas and thus they were relatively easier to plan and implement. Although the challenges are quite similar, initiating LP in dense areas has the following additional challenges:

- Many absentee landowners
- Could not create open spaces and recreation facilities
- Very difficult to work in already developed and dense areas

56. What have been the benefits of land pooling in Bhutan?

- It has helped avoid the application of the unpopular and highly contested legal authority to use eminent domain, thereby avoiding the long and complicated process of land acquisition
- It has helped avoid burdening the government exchequer. It avoids the need for upfront capital for acquisition and compensation
- Process of consultation was a process of building trust between the landowners and the government
- The process helped build a foundation of strong democratic principles – of participation, collaboration, responsibility, transparency, accountability and enriching the culture and tradition through interactions during public consultations and meetings.
- It has helped introduce LP as an important tool for urban planning and management

57. What have been the biggest lessons from Thimphu's land pooling experience?

- LP is a very good tool to be used in developing countries like ours where the resources are limited
- It can also help solve numerous urban challenges that we are going through
- It can also be used as a very effective social entrepreneurship and trust-building tool
- It teaches one, the art of communication, mediation and convincing, on the job.
- Communication is very important. The more the better

58. How important is community involvement in land pooling?

We cannot stress more on this. Suffice it to say that the key to the success of LP is – Communication, Communication and Communication. The more you do it the better it is.

59. How is the city developing its internal capacity to carry out land pooling projects?

Sadly, even after 14 years of experience in the application of Land Pooling the municipality is lacking internal capacity, both in terms of number and quality. The Urban Planning Division (UPD), the key division responsible for LP has the highest iteration rate. It is not an easy division to work under. One will need commitment and perseverance. Between 2009 and 2016, (just within 8 years) the UPD lost 15 of

its dynamic and capable staffs¹. 6 resigned and the rest got transferred elsewhere. Currently, the UPD is left with only 6 staffs including myself. Of this, 2 are GIS officers while 1 is undergoing further studies.

This year (2016) we got two fresh urban planners. The CUP mentors them and takes good care of their continuous learning and growth. Recently, they also completed an online course on Land Pooling and Readjustment which was offered by the World Bank. In the meantime, the only choice is to do more with less. The quality of work/s could be compromised.

60. How have communities that have used land pooling improved?

In the LAPs which have been physically implemented it has helped the community in the following ways:

- Access to infrastructure has helped them put their land to productive use. They have made investments on improvement, constructed structures, and helped increase housing supply to the residents
- Sanitation has improved since the waste collections trucks can now access the properties
- Treated water supply are at every door steps
- Street lighting has helped brighten the localities
- Sewerage network has been built
- Land values increased exponentially
- Businesses are booming and local economy have improved

61. What are the most important elements for the design and implementation of land pooling project?

- A committed team with leadership at all levels is necessary
- Political commitment is important
- A good and reliable data is necessary
- A legal tool to support the action is essential

62. How is land pooling thought of today by the general population?

¹ 1. Sonam Tobgyel 2. Pema Tshomo 3. Keshar Maya 4. Aniz Pradhan 5. Sailesh Humagai 6. Gonpo Yonten 7. Kezang Deki 8. Ashok Sunwar 9. Rinchen Wangdi 10. Sonam Chhoden 11. Sonam Tshewang 12. Pusparaj Sharma 13. Suk Kr Gurung 14. Karma Singay 15. Thinley Norbu

General population has more or less accepted LP as a part of their lives. When people buy/sell land they make provision for LP contribution. It is now widely used as a tool for urban planning.

63. If one is to speculate what would be the future of Land Pooling in Bhutan?

In the future, apart from contributing land, people may also need to chip in some cash to fund the implementation of the LP projects.

Any or all LP projects may begin with a thorough household and socio-economic survey. Accordingly RAP, SIA and EIAs may be required as a part of the DPR.

The financing part of the LP project could be given due recognition and importance.