

Towards a Well-Tempered Thimphu

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The city of Thimphu is facing a significant choice. Either it will continue to grow a sprawling mass of soulless, unaffordable concrete buildings until all of the land reserve has been commercialised, and the promise of Gross National Happiness (GNH) is lost for generations, or it will rigorously plan and realise a compelling vision as the nation's cultural, spiritual, political and economic capital city as a model of GNH for the world. There is a way forward, but it must be chosen now.

I first visited Thimphu in 1982. It was barely a city, more a random group of scattered buildings, a vibrant market, and the imposing Tashichho Dzong, lhakhangs and monasteries, surrounded by farmers' fields and a golf course. By 2020, its fields were filled, its beautiful cultural buildings surrounded by sprawl.

In 2017, His Majesty Jigme Khesar Namgyel Wangchuck read my book, "The Well-Tempered City", and enthusiastically shared it with others. With his encouragement, in 2018, The Bhutan Foundation and the Royal Institute for Governance and Strategic Studies (RIGGS) invited me to return to Bhutan to advise on Thimphu's structure plan. I returned with a colleague, a distinguished British architect and city planner who had worked in the Himalayas, and who happened to also be named Jonathan Rose. We held a series of "Well-Tempered Thimphu" workshops to explore the elements of what could help Thimphu become a "Well-Tempered City". One theme stood out: Bhutan's traditional villages deeply reflected and supported its culture, but there was a discontinuity between its past rural development and its contemporary urban development.

In November 2019, as part of the Thimphu Structure Plan Review, Jonathan Rose (UK), I and Peter Studdert were invited by Ministry of Works and Human Settlement (MoWHS) to help facilitate an Urban Design & Planning Workshop, with MoWHS, Thimphu *thromde* and other key stakeholders.

We proposed 10 steps which could set Thimphu on the pathway to embody Gross National Happiness. The following is a synopsis of these ideas. The

full proposal can be found via this link: http://www.welltemperedcity.com/wp-content/uploads/2020/10/Towards-a-Well-Tempered-Thimpu_FINAL.pdf

Thimphu as a Global City of GNH

We proposed a **Capital City Vision** grounded in Bhutan's history and culture, manifested through a network of linked spiritual, educational and cultural institutions, energising economic development, welcoming visitors, and employment, realising GNH.

The world's greatest smaller cities distill the best of their historic, spiritual and cultural foundations, adapting them for the 21st century. Their historic character becomes the foundation of their contributions to the emerging future.

Cambridge, UK (Population 123,000), and Oxford (Pop. 154,00) are vibrant global centres of knowledge, science and the humanities. Salzburg, Austria (Pop. 154,000) has built a cultural primacy and economy based on the musical legacy of Bach and Mozart, continuing through the music, performance and art of the 21st century.

Each of these cities offers its residents and visitors the highest level of excellence, building from its history, adapting to the present. Each city has a distinguished architectural and landscape heritage, a clear urban growth boundary to stop sprawl, balancing city and nature, and a strong educational, cultural and spiritual essence, driving its economy.

For Thimphu to be a truly great world city, it must do the same. It too, has an extraordinary intellectual and cultural legacy to offer the world. At its heart are several great institutions, housed in buildings that are uniquely Bhutanese, representing ideals that must be the seeds of a future vision for Thimphu.

For Thimphu to claim an influential place in the world, it needs to weave together institutions -- such as the Changangkha Temple, Tashichho Dzong, Simtoka Dzong, the Memorial Chorten and others -- as the carriers of its greatest offerings to the world, and give them primacy.

2022 will be the 50th anniversary of the GNH philosophy. We propose that the next two years should be used to prepare to launch Thimphu to the world as the world's leading city of Gross National Happiness.

To be a world class GNH city requires a network of spiritual, academic and cultural institutions focused on the application of Buddhist principles of wisdom, compassion and efficacy to contemporary issues. These should address challenges such as income inequality, sustainable economic development, the provision of social services and adaptation to climate change.

These could be organised under the University framework, collaborating with monastic and cultural institutions. It would also offer visitors preliminary and advanced classes on Buddhist Ecology, Economics, meditation, Buddhism, GNH theory, and its application to the issues of the 21st Century.

The University would drive Thimphu's new economy, attract and engage a new class of tourist -- longer staying, culturally contributing visiting scholars and students. They would support a vibrant street life, and entrepreneurial businesses aimed at students and scholars. They are more likely to walk, bike, and take mass transit, and generate new, GNH-related business and institute offshoots.

The Royal University of Bhutan would provide employment for its young people and create intellectual capital to export. It would combine physical and virtual programming, with distance learning courses, which would spread Bhutan's knowledge and brand, and provide income to supplement place-based tourism.

It would generate new development, the conversion of some of its regional tourist buildings into student housing, incubators and institutes from affiliated universities from around the world. This vision should also inform the curricula of a superb network of pre-school to 12th grade schools in each neighbourhood.

One potential location identified for a new centre is the Thimphu Centenary Market -- which currently fills the very centre of the city with traffic and waste -- bringing the new vision to the very heart of the city.

1. A Regional Framework Plan

The Thimphu/Paro region needs a Capital City Regional Plan, from North Wang Chu River/Kabesa Valley to the north and west ends of Paro, with forest and agricultural lands integrating open spaces within the city and the region. The Regional Plan should allocate industrial and other service needs throughout the region, along with the development of clustered villages in the Green Belt area.

Such a plan would establish clear urban growth boundaries to the northern and southern limits of the city, and rigorously resist urbanisation beyond them. It would map all cultural, agricultural and village landscapes for preservation and conservation and develop specific design guidelines and codes for these areas.

A regional plan should address the need for industrial occupancy, recycling centres, the crematorium, and other supporting land uses, and where to best locate them inside the city. Alternately, relocate them outside of the city into the Thimphu/Paro region, in ways that are well connected, contained and when appropriate, hidden.

It should preserve traditional village clusters, carefully regulate their expansion, and map locations for new villages and connect to mass transportation infrastructure.

2. Commit to Making Thimphu a Beautiful City

“Traditional architecture in Bhutan evolved over many centuries to suit the local environment, climate, materials, technology, and more significantly, cultural traditions and spiritual beliefs. Architecture in Bhutan was consequently adapted to satisfy not only functional and economical needs but also social and spiritual requirements. Inspired by nature, local natural materials such as earth, stone, timber, and bamboo are the core construction building blocks of traditional Bhutanese architecture.”¹

Bhutan's *Dzongs* are amongst the most beautiful buildings in the world, and its farmhouses sit perfectly in Bhutan's rural landscape. Unfortunately, its recent urban (and rural) development do not match Bhutan's magnificent past.

¹Bhutan Architectural Guidelines 2014, Ministry of Works and Human Settlement.

Bhutan has a model for its future urban design: The 108 chortens at Dochula Pass and the associated restaurant and landscape, and the Royal Academy School exemplify how Bhutan's design legacy can be translated into its future. If Thimphu is to be a world class city, this rigour must be applied to the design of every street, sidewalk, park and building façade.

We recommend the development of Thimphu city-wide “Street, Landscape & Public Realm Regulations”, upgrading building regulations and design codes to encourage higher quality design of buildings, infrastructure and the public realm, and require more sustainable, low/zero carbon outcomes.

3. Establish the “Royal Park Authority” and “City-*Thromde* Parks Department”

Thimphu has no parks department. We recommend establishing a “Royal Park Authority” and “City-*Thromde* Parks Department” to protect and maintain nature and the historic assets networks through the city

Thimphu sits in a beautiful mountainous context, with historic cultural landscapes at its northern and southern ends. It must preserve the remnants of these landscapes and restore them, so that they are the living carriers of the nation's cultural and spiritual DNA. The prime organisational system for a city and Royal Park system will be the city's water courses. This will be complemented with paths of green that weave together the city's historic/cultural landmarks and schools, tying to the city's transportation system and neighbourhoods. All cultural, spiritual and heritage buildings should be protected within green space.

To administer this, we propose a **Royal Park Authority** that will control all land use from New Bridge north to the entire upper Wang Chuu River and Kabesa Valley, up to the Cheri and Tango Monasteries. This entire area should be viewed as a social, cultural, ecological landscape to be preserved, with new developments to be carefully considered and designed. This would include a special waterfront park, with walking and bike paths, and bus and neighbourhood connections. This would connect to the city waterfront park system, run by a new City Parks Department within the *thromde*, which would design, build, protect and maintain the remaining city park and heritage sites, including local open spaces within the new neighbourhoods.

4. Define and Implement Green Transport Plan

Thimphu is planning a Bus Rapid Transit (BRT) route as its main transit spine. We propose that this should be a “Royal Boulevard” through the city, beautifully designed with ample sidewalks, crossings, street trees, and BRT stops. It will connect neighbourhoods by minibus, pedestrian and bike networks.

The city must be served by a public transportation system that is of better quality than private vehicle transportation. It must be multi-modal, integrating BRT local mini-buses, taxis and car sharing, biking and walking. It must move towards fossil fuel-free electric power, and be data informed, so that it can respond in real time to demand.

5. Foster a “Green Building Economy” and “Resilience Framework”

Today, new buildings in Bhutan are primarily built out of imported, mineral based resources -- concrete, steel reinforcement rods and metal roofs. These materials are made in polluting, energy intensive ways. The resulting buildings are often poorly insulated, leading to lower comfort and higher energy usage.

The alternative is to build with locally grown biological materials, absorbing carbon dioxide, and easily recycled. Timber can be used for a substantial portion of construction. The chaff of grain stalks can be converted into insulation, and Bhutan can develop its tradition of using rammed earth into a more structurally advanced material.

Bhutan is blessed with an abundant, biodiverse forest. However, with its current forest management practices, Bhutan imports six times as much wood products as it produces internally.

The careful increase in the use of sustainably harvested timber for construction would create sustainable rural jobs, reduce the usage of climate intensive steel and concrete, reduce wood products importation and make more sustainable, comfortable, earthquake resistant, beautiful buildings. Timber harvesting would need to take place with enormous care and attention to biodiversity.

The role of the forester would firstly, be that of a caretaker of the nation's precious ecological endowment, and secondly, to produce timber. This would create a larger rural profession of ecologically educated forest workers. Timber would be harvested at a sustainable yield, in balance with the production of local sawmills, creating life-long jobs.

Product manufacture could take place in distributed industries in intermediate towns, now struggling for their place in the economy. Barley and rice chaff could be converted into insulation or pressboard, bringing additional income to farmers, and growing local insulation manufacturing businesses.

A new building code would provide incentives for all new and regenerated buildings to be made of timber elements, insulation and rammed earth. These would include double pane, Low-E wood windows, and other energy conserving elements. The payback of more energy efficient buildings would leave more hydro-power for Bhutan to sell.

This could help to grow private sector employment and investment opportunities.

The world is warming. As Bhutan's middle class grows and its temperatures rise, there will be increased demand for air conditioning, raising energy consumption. At the same time, less rainfall may reduce hydro-power production.

To address these future climate conditions, all new buildings must be designed to meet a climate resilience energy and comfort code. Solar power should be explored for heating in northern, colder climates, and for cooling in sunnier climates, to release more hydro-power for export sale.

6. Develop an Affordable, Mixed Income Housing Strategy

Many residents of Thimphu currently pay as much as 60% of their net income towards rent.

Add the cost of a car, and there is little left for health, education, recreation, etc. This is twice the accepted housing cost goal of paying no more than 30% of net income for rent or for a home mortgage. Furthermore, the affordable

housing that has been built is allocated to government employees only, creating a disincentive for people to join the private sector.

There are typically many kinds of people who need affordable housing -- young people just joining the work force, retired people living on small pensions, growing families, and people with special needs. They often require different kinds of housing. The plan must determine current, and project future demand for affordable housing.

The nation or city must then establish a regulatory framework to keep newly built affordable housing affordable, and to determine how to fairly and transparently allocate it. The Structure Plan must identify locations and define sufficient land allocations for current and future new affordable housing, and reserve it.

See more details on affordable housing: http://www.welltempereditcity.com/wp-content/uploads/2020/10/200618_Affordable-housing.pdf

7. Develop and Implement “City Centre Action Plan” to Align the City Centre with a Capital City Vision

The centre of a city is its heart, communicating the essence of the city to its visitors, and often defining its economy. Its centre needs a specific “**City Centre Action Plan**” to reflect that.

The Central Food Market attracts unmanageable concentrations of vehicular traffic and waste. It should be re-distributed to local neighbourhoods, making it much more convenient for customers and freeing up space in the centre of the city for a university or other significant cultural or civic buildings.

The City Centre must exemplify Bhutan's spiritual traditions, including new chortens, or stupas and a publicly accessible lhakhang.

The City Centre area must have specific public realm and building design guidelines, to develop a cohesive and unique quality. This would include a pedestrian-friendly Norzin Lam and the stadium precinct area, ensuring that its buildings and public places can be easily supplied for, serviced and have its waste removed.

The City Centre must express Thimphu's connections with nature, by turning its streams back into free-flowing natural areas, and weaving fingers of nature through it.

Civic and tourist amenities must be upgraded significantly within the City Centre.

8. Develop and Implement “11 Local Neighbourhood Action Plans”

Great cities are built from great neighbourhoods. In the last Structure Plan, 11 neighbourhood centres were defined, including the elements comprising such centres. However, only four were built and all are unsatisfactory.

New neighbourhood centres should represent the highest aspirations of the community. They should be planned through community consultation. There needs to be a greater commitment and co-ordination among the relevant agencies to speed up the transfer of land to get such neighbourhood centres built.

Neighbourhood development will be easier to plan in the north, where more land is available, but it must be planned now, before any land is further developed. It will be harder to insert neighbourhood centres into the centre and southern neighbourhoods later.

9. Governance -- Institutional Transformation at Local Government Level

Bhutan's democratic institutions are relatively young and are yet to mature. Thimphu's future development is likely to be impeded unless local democratic institutions are strengthened to enable all its citizens to have a say in its future development.

We understand that only around 5,000 of Thimphu's 120,000 citizens can vote in local *thromde* elections. We recommend that anyone of voting age who resides in Thimphu can register to vote in Thimphu's elections.

At the same time, the number of councillors elected to serve on Thimphu *thromde* should be increased.

The *thromde* also needs to be a review of the local property taxation system. Currently the same level of property tax is applied to land use categories without reference to the location or value of the property, whereby the owner of a house in a low value area is taxed the same as for a house in a high value area. We would recommend that the property taxation system reflects the value of the property as well as the use. In this way, increased resources would flow to the *thromde* to fund additional staffing for key areas such as planning, housing and parks management.

The following steps are needed to advance this plan:

- **Immediately enact a new development moratorium until the new plan is completed.** This is essential, or the opportunities to create a coherent, green, vibrant GNH city will be lost.
- **Define a set of community health indicators and to measure, in real time, the city's progress towards achieving them.**
- **Establish a multi-agency “Royal Commission”**

This would serve as a “Development Corporation” to be the client for the Structure Plan review. It would provide leadership, secure and hold budgets, ensure inter-departmental co-operation, and maintain oversight and accountability to Parliament. We also recommended that it be advised by international experts. For a more detailed proposal, see: http://www.welltemperdcity.com/wp-content/uploads/2020/10/200523_Roadmap-to-delivery_Final.pdf

- **Implement ongoing capacity building strategy**

Strengthen the capacity of *Thromde* Planning Departments, particularly in the key areas of urban design, landscape, transport planning and GIS. Create new *Thromde* Parks Authority and Housing Department.

- **Empower a Conservation Officer**

The officer should have the expertise to review and enforce rules for protected areas in the regional plan, and to more rigorously enforce the conversion from wetlands to dry lands.

- **Establish a Royal Parks Agency**

An independent authority with the patronage of His Majesty the King, with a fiduciary responsibility for this precious realm. It will have the authority to capture value from adjacent development, to help finance its activities. Its territory should include all of the Kabesa Valley, reaching to the Cheri and Tango Monasteries. It would tie to the City Park system, including all of the river front, and both sides of the three tributaries. Towards the south, it should include cultural landscapes. It will also connect all historic/cultural elements