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PERFORMANCE AUDIT REPORT ON HOUSING DEVELOPMENT- ADEQUACY AND AFFORDABILITY



MARCH 2019

DISCLAIMER NOTE

The audit was conducted in accordance with the International Standards of Supreme Audit Institutions (ISSAIs). The audit was based on the audit objectives and criteria determined in the audit plan and programme prepared by the Royal Audit Authority and the findings are based on the information and documents made available by the MoWHS, NLC, NHDCL, NPPF, NSB and Thromdes of Thimphu & Phuntsholing.

This is also to certify that the auditors during the audit had neither yielded to pressure, nor dispensed any favour or resorted to any unethical means that would be considered as violation of the Royal Audit Authority's Oath of Good Conduct, Ethics and Secrecy.



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ROYAL AUDIT AUTHORITY
Bhutan Integrity House

Reporting on Economy, Efficiency & Effectiveness in the use of Public Resources



RAA/PSAD/2018-2019/

21 March, 2019

The Hon'ble Secretary
Ministry of Works and Human Settlements
Thimphu

Subject: Performance Audit Report on Housing Development – Adequacy and affordability

Sir,

Enclosed herewith please find the **Performance Audit Report on ‘Housing Development – adequacy and affordability’** covering the period 01.01.2013 to 31.12.2017. The Royal Audit Authority (RAA) conducted the audit under the mandate bestowed by the Constitution of Kingdom of Bhutan and the Audit Act of Bhutan 2018. The audit is conducted as per the International Standards of Supreme Audit Institutions on performance auditing (ISSAI 3000).

The overall objective of the audit was to ascertain the effectiveness of national housing development activity including home ownership programmes in providing adequate, affordable and livable housing in urban centers.

The audit sub-objectives are:

- I. To ascertain whether there are adequate and enabling legal, policy and institutional systems with clear mandates and strategic direction for housing development;
- II. To assess whether there are adequate number of housing units to meet the growing demand;
- III. To assess whether the current rate of rental expenditures are affordable to the tenants;
- IV. To ascertain whether the available housing structures are liveable; and
- V. To assess the effectiveness of home ownership programmes undertaken by specific agencies such as NHDCL and NPPF.

The report highlights significant accomplishments and initiatives as well as shortcomings and deficiencies observed by the RAA. Based on the audit findings and comments received from the stakeholders concerned (MoWHS, NHDCL, RMA, NLCS, NPPF, Phuntsholing Dungkhag, Thromdeys of Thimphu and Phuntsholing), the RAA has provided certain recommendations that may help improve and enhance efficient and effective implementation of plans and programs for housing development.

RAA would appreciate receiving an **Action Plan with definite timeframe for implementation of each audit recommendation on or before 21st June 2019**. In line with the directives of the Parliament, the RAA will be fixing accountability on the officials

responsible to implement recommendations provided in the report. **Therefore, we would request the agencies concerned to identify officials responsible for implementation of each recommendation and submit the duly signed Accountability Statement to the RAA along with the Action Plan (attached in Appendix II and III). The recommendation relevant for each agency is attached in appendices. In the event of non-submission of the Accountability Statement or responsible officials not identified, the RAA shall fix the responsibility for implementation of the recommendations on the Head of the Agency upon expiry of the deadline for submission of action plan stated herein.** The RAA will follow-up implementation of the recommendations based on the timeline identified in the Action Plan submitted by the stakeholders concerned. Failing to adhere to the timeframe for implementation of each recommendation may result in taking appropriate actions, which may include suspending audit clearances to the accountable officials.

RAA would once again like to acknowledge the officials of the MoWHS, NHDCL, RMA, NLCS, NPPF, Phuntsholing Dungkhag, Thromdeys of Thimphu and Phuntsholing for rendering necessary co-operation and support that had facilitated smooth completion of the audit assignment.

Yours sincerely,



(Tshering Kezang)

Auditor General of Bhutan

Copy to:

1. Hon'ble Lyonchhen, Royal Government of Bhutan, Thimphu;
2. Hon'ble Gyalpoi Zimpon, Office of Gyalpoi Zimpon, Tashichho Dzong, Thimphu;
3. Hon'ble Speaker, National Assembly, Thimphu;
4. Hon'ble Chairperson, National Council, Thimphu;
5. Hon'ble Opposition Leader, National Assembly, Thimphu;
6. Hon'ble Chairperson, Public Accounts Committee, National Assembly, Thimphu (enclosed five copies);
7. Hon'ble Secretary, Cabinet Secretariat, Thimphu;
8. Hon'ble Secretary, National Land Commission Secretariat, Thimphu;
9. Hon'ble Governor, Royal Monetary Authority of Bhutan, Thimphu;
10. Hon'ble Chairperson, Royal Civil Service Commission, Thimphu;
11. CEO, National Pension and Pension and Provident Fund, Thimphu;
12. CEO, National Housing Development Corporation Ltd., Thimphu;
13. Drungpa, Phuntsholing Drungkhag, Chukha;
14. Thrompon, Thimphu Thromde;
15. Thrompon, Phuntsholing Thromde;
16. Office copy; and
17. Guard file.

"Every individual must strive to be principled. And individuals in positions of responsibility must even strive harder."
- His Majesty the King Jigme Khesar Namgyel Wangchuck

TITLE SHEET

REPORT ON PERFORMANCE AUDIT OF HOUSING DEVELOPMENT - ADEQUACY AND AFFORDABILITY

AIN	:	15831
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Acronyms and Abbreviations

ADB	: Asian Development Bank
COBP	: Country Operation Business Plan
CPF	: Central Provident Fund
DUDH	: Department of Urban Development and Housing
EDP	: Economic Development Plan
GDP	: Gross Domestic Product
GNH	: Gross National Happiness
HDB	: Housing Development Board (Singapore)
ISSAI	: International Standard of Supreme Audit Institution
LG	: Local Government
MoAF	: Ministry of Agriculture and Forestry
MoWHS	: Ministry of Work and Human settlement
NEC	: National Environment Commission
NHDCL	: National Housing Development Corporation Limited
NLC	: National Land Commission
NPL	: Non-performing Loan
NPPF	: National Pension and Provident Fund
NSB	: National Statistics Bureau
RAA	: Royal Audit Authority
RCSC	: Royal Civil Service Commission
RMA	: Royal Monetary Authority
SDG	: Sustainable Development Goal
T-Bank	: Tashi Bank Limited
TSP	: Thimphu Structure Plan
UK	: United Kingdom
URA	: Urban Redevelopment Authority (Singapore)
US	: United States

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EXECUTIVE SUMMARY

The Royal Audit Authority conducted the “Performance Audit on Housing Development – Adequacy and Affordability” as mandated by the Article 25.1 of Constitution of the Kingdom of Bhutan and Sections 68(b) and 69 of Audit Act of Bhutan 2018.

The audit was conducted in accordance with International Standards of Supreme Audit Institutions (ISSAI 3000). The overall audit objective was to, ‘Ascertain the effectiveness of national housing development activity including home ownership programmes in providing adequate, affordable and livable housing in urban centers’.

The overall objective is bifurcated into the following audit sub-objectives:

- I. To ascertain whether there are adequate and enabling legal, policy and institutional systems with clear mandates and strategic direction for housing development;
- II. To assess whether there are adequate number of housing units to meet the growing demand;
- III. To assess whether the current rate of rental expenditures are affordable to the tenants;
- IV. To ascertain whether the available housing structures are liveable; and
- V. To assess the effectiveness of home ownership programmes undertaken by specific agencies such as NHDCL and NPPF.

RAA conducted the performance audit entailing visits to office of various stake holders such as MoWHS, RMA, NHDCL, NPPF, NSB, Thimphu and Phuntsholing Thromde. It also entailed site visits to informal settlements in 10 locations in Thimphu and one location in Phuntsholing. The performance audit covered the period 2013-2017 focusing on Thimphu and Phuntsholing thromdes.

Since the adoption of National Housing Policy 2002, MoWHS is the primary agency mandated with housing development in the country. Upon its creation NHDCL is mandated with construction and management of housing for civil servants as per its Articles of Association. NPPF is also involved with housing development as part of its investment function. Respective thromde administrations of Thimphu and Phuntsholing were directly involved in housing development since they are regulating agencies. After almost two decades of housing developments involving many entities, people in urban centers of Bhutan are facing affordable housing shortage. In Phuntsholing huge number of people were residing across the border in Jaigaon due to housing problems.

RAA undertook this audit to ascertain the nature & magnitude of housing issues and their causes.

The mandated institutions made significant progress by increasing the housing stock. This was achieved by way of housing construction by NHDCL, NPPF, private real estate developers and private individuals. It was in part attributable to huge financing from the banks. The NHDCL and NPPF also undertook home ownership pilot projects.

Notwithstanding, all the positive developments, RAA observed lapses, deficiencies and rooms for improvement in the whole spectrum of housing development. The significant ones are highlighted hereunder:

- Projected carrying capacity of Thimphu Structure Plan (2002-2027) exceeded by 6742 people;
- Phuntsholing reaches its carrying capacity in the year 2056;
- Data on number of housing structure and units incomplete;
- Housing needs assessment not carried out;
- Susceptibility to socio economic risks of large number of Bhutanese residing in neighboring Jaigaon;
- Rental expenditure unaffordable to majority of population in Thimphu and Phuntsholing
- Irregular increase of rents in Thimphu and Phuntsholing;
- Informal settlements impeding livability and aesthetics of the city; and
- Low proportion of owner occupied houses.

Deficiencies and room for improvements as presented above are caused by the prevailing situations as follows:

- Inadequacy of legal basis for housing development;
- Limited relevance of National Housing Development Policy 2002;
- Lack of a strategic focus on housing development at the policy level;
- Lack of a central agency responsible for coordinating housing development activities of the various entities;
- Legal and institutional preparedness for ownership of house;
- Undesirable impact of increase in Rural Urban Migration on housing development;
- Lack of land use and zoning plans for Thimphu and Phuntsholing thromdes;
- High and inconsistent valuation of land;
- High interest rates for home and housing loans; and
- Inadequate focus on domestic production of construction materials.

Based on the findings, RAA provided 15 recommendations. The recommendations are aimed at addressing various aspects of the almost entire spectrum of housing value chain. The recommendations are intended to strengthen the legal and policy environment for housing development. Some recommendations are also aimed at improving the high costs of housing finance and cost of construction materials.

In the long-run, if the issues at all levels are addressed, the environment shall become conducive for affordable rental housing development and home ownership. Easing the housing burden of the households shall serve as a panacea for most of the socio-economic insecurities. Ultimately allowing the middle and low-income urban householders to pursue greater individual goals and contribute in Nation's economic progress.

CHAPTER 1: ABOUT THE AUDIT

1.1. Mandate

The Royal Audit Authority conducted the “Performance Audit on Housing Development – Adequacy and Affordability” as mandated by the Constitution of the Kingdom of Bhutan and Audit Act of Bhutan 2018 under the following article and sections:

- I. Article 25 (1) of the Constitution of the Kingdom of Bhutan provide that “There shall be a Royal Audit Authority to audit and report on the economy, efficiency, and effectiveness in the use of public resources”;
- II. Section 68 (b) of the Audit Act of Bhutan 2018, under the ‘functions and jurisdiction of the Royal Audit Authority’ stipulates the Authority shall, “audit and report on the economy, efficiency and effectiveness in the use of public resources”; and
- III. Section 69 of the audit Act of Bhutan 2018, states that, the Authority shall, “carryout performance, financial, compliance and special audits and any other form of audits that the Auditor General may consider appropriate”.

1.2. Audit Standards

This audit was conducted in accordance with the International Standards of Supreme Audit Institutions on performance auditing (ISSAI 3000). The RAA followed audit procedures as prescribed under the RAA’s Performance Audit Guidelines to maintain uniformity and consistencies of approaches in auditing.

1.3. Audit objectives

The overall audit objective is to, ‘Ascertain the effectiveness of national housing development activity including home ownership programmes in providing adequate, affordable and livable housing in urban centers’.

The overall objective is bifurcated into the following audit sub-objectives:

- I. To ascertain whether there are adequate and enabling legal, policy and institutional systems with clear mandates and strategic direction for housing development;
- II. To assess whether there are adequate number of housing units to meet the growing demand;
- III. To assess whether the current rate of housing rental are affordable to the tenants;
- IV. To ascertain whether the available housing structures are liveable; and
- V. To assess the effectiveness of home ownership programmes undertaken by specific agencies such as NHDCL and NPPF.

1.4. Audit Scope

The performance audit of Housing Development is carried out for the period covering 01.01.2013 to 31.12.2017. It entailed visits to MoWS, NLC, NHDCL, NPPF, NSB, Thimphu Thromde and Phuntsholing Thromde. It also involved the site visits within the Thimphu Thromde and Phuntsholing thromde to study the situation of the informal settlements.

1.5. Limitations

This report was focused on establishing the problems of adequacy and affordability. To establish the problem of adequacy the data for accurate and reliable number of housing units was critical. There were no reliable data of housing units in the respective municipalities of Thimphu and Phuntsholing as well as Ministry of Works and Human Settlements.

It was also envisaged to establish the issue of rental affordability to the tenants and ownership affordability. To establish affordability, information on the household income and rental charges was important denominators. Rental information accessed from NSB was an aggregated value from the Bhutan Living Standard Survey Report 2017. Using this data had the risk of not considering the extreme values. There were no published information on household income. The review was undertaken based on the assumption of the income of the households as single earners. Civil Service pay scale was taken as baseline data for determining the household income.

1.6. Audit methodology

In carrying out the performance audit of Housing Development, following methodologies were adopted:

- I. Review of legal and regulatory frameworks of the government in terms of policies of housing , land, finance and export and import in relation to housing development;
- II. Review of legal provisions and preparedness for home ownership;
- III. Review of existing operations of NHDCL and NPPF in relation to its management of existing housing units;
- IV. Review of International good practices in housing development;
- V. Review of Thimphu Structure Plan 2002-2027;
- VI. Review of Phuntsholing Structure Plan 2013-2028
- VII. Review of housing finance especially housing loans and their respective rates and costs in various banks and financial institutions;
- VIII. Review of policies and programs of National Land Commission on land for housing development;
- IX. Visits to MoWHS, NLC, NHDCL, NPPF, Thimphu Thromde, Phuntsholing Thromde, RMA, Banks and Financial institutions, and RCSC and interview with relevant officials;
- X. Site visits to Informal settlements in Thimphu and Phuntsholing in collaboration with respective Municipalities;
- XI. Visits to regional offices in of NPPF and NHDCL in Phuntsholing
- XII. Review of records in NHDCL; and
- XIII. Interviewed the relevant stakeholders in MoWHS, NLC, NHDCL, NPPF, RMA, Thimphu Thromde and Phuntsholing Thromde.

CHAPTER 2: INTRODUCTION

2.1. International perspective on housing development:

Decent shelter is a fundamental human need alongside food and clothing. Lack of adequate and affordable housing can be causal factor to a number of social and economic issues. Only when this need is met, people tend to think about higher economic and social goals. An economy can be resilient when social and economic developments are well balanced. Development in housing is the key pillar of socio-economic development. Affordable housing development is not always self-sustaining economic venture, therefore, governments often subsidize housing development through special schemes.

Shortage of affordable housing is a global issue. It is more prevalent in developing countries than developed countries. Since housing is the most expensive asset for people in developing countries, it is more desirable.

For instance in a recent study it was revealed that in the UK, rents are not affordable for two third of the country's population. People in these areas ended up paying more than 30% of their incomes as rents (Kevin Peachey, 2018). In the US, the affordable housing shortage is prevalent even after the Subprime crisis which resulted in downward spiraling of the housing market and the cost of housing (Schuetz, 2017).

In Australia access to affordable housing market is identified as a challenge to the governments at various levels. The country had recognized the need to support and incentivize the construction of the affordable housing units to meet the increasing demand. It also had plans and targets to increase the supply of land. The government had also eased the tax burdens to increase the affordable housing supply (Housing Industry Association, Australia, 2017).

In Canada 70% of people own homes. The affordable housing means 'social housing' where people with lack of income reside. Housing affordability refers to houses people can buy and own. In Canadian context issues of rental affordability is less prominent. Residential constructions is the biggest contributor of the jobs in Canadian economy (Canadian Home Builders Association, 2017).

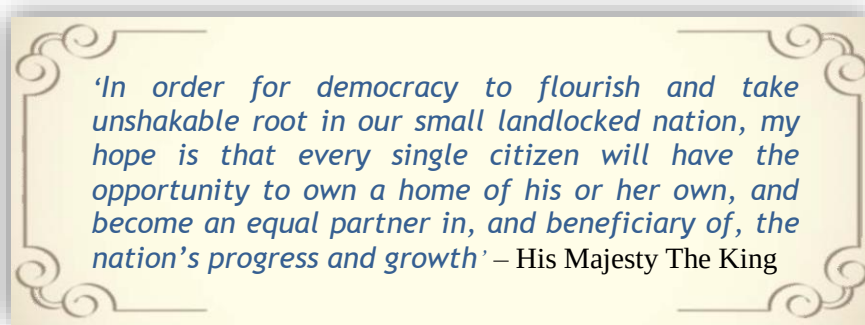
Singapore is one of the leaders in terms of housing development and home ownership. As of 2018, 90.7% (Department of Statistics Singapore, 2018) households are home owners. In 1980 their home ownership was only 58.8% but by 1990 it rose to 87%. Singapore made such a progress in so little time. It started off with properly laid out housing policy of providing home ownership for all. Housing Development Board (HDB) is the cornerstone of Singaporean housing development established in February 1960. It increased housing supply by up to 50% in about three decades. This was possible mainly due to integration and coordination of government, HDB and Central Provident Fund (CPF). HDB mobilized the domestic savings from the CPF for funding construction of homes. The HDB managed to provide homes with mortgage payments less than rental payments that the tenants might have to pay if they reside in rented apartments (ADBInstitute, 2016). Singapore also is known to have one of the well-functioning housing markets.

Housing shortage and affordability is an urban phenomenon. Due to rapid economic development, more and more people migrate to urban areas in search of better economic opportunities. Thereby putting pressures on the support infrastructure such as housing in urban centres.

2.2. Housing Development in Bhutan

Bhutan is also faced with the developmental issues of housing and shortage of affordable housing.

Housing for all is also a concern of His Majesty the King which is largely understood as home ownership, as can be read hereunder:



It is recognized under the Universal declaration of human rights as stipulated under article 25 (1) as:

*‘Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, **housing** and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control.’*

Ensuring access to adequate, safe and affordable housing is one of the goals of Agenda 2030, the Sustainable Development Goals (SDG). The Goal 11.1 of the SDG is to ensure access for all, to adequate, safe and affordable housing and basic services and upgrade slums by 2030.

The National Housing Policy was adopted in 2002. The policy objectives were to provide safe, basic and affordable housing, promote home ownership and create transparent & well-functioning housing market. Since then a lot has been achieved in terms of adding to the stock of housing both by the government and the private sector. However, almost two decades after adopting the housing policy, Bhutan is still facing shortage of decent and affordable housing.

The National Housing policy 2002 delineated the regulatory role to Department of Urban Development and Housing of the erstwhile Ministry of Communications. Some of its operational mandates are given to NHDCL upon its corporatization in 2006.

NHDCL was registered under the Companies Act of Kingdom of Bhutan 2000 on 7th September 2010. Its human resource function was officially delinked from RCSC in 2011.

Besides primary mandates, NHDCL was also responsible for:

- ▶ Management of all government residential accommodation, except institutional (office) buildings;
- ▶ Conduct need assessment for all government residential accommodation;
- ▶ Construction and management of all government residential accommodations;
- ▶ Develop appropriate system of allocation of accommodation to the civil servants and review system of rent determination; and

- ▶ Any other mandate as may be directed by the government.

As of today (August 2018) NHDCL has 2003 housing units as against 28,973 (Royal Civil Service Commission, Bhutan, 2017) civil servants across the country.

Besides NHDCL, National Pension and Provident fund (NPPF) is also undertaking housing development as part of its investment function although not primarily mandated with housing development. NPPF also has significantly added to the available housing stock.

Lump sum house rent allowance was approved for the civil servants in 2014 with maximum of 30% House Rent Allowance (HRA) to some sections. However, this is not able to cover the house rent expenses of staying in the private houses. Studies revealed that tenants in Thimphu spent around 42% of their household incomes on house rent (Dendup, 2016). It revealed that there is a general crisis in housing affordability.

Draft National Human Settlement Policy of Bhutan (2015) was introduced which specifically outlines the directives for settlement development in Bhutan. This policy has a section on housing which identifies inadequacy in National Housing Policy 2002. This policy specifies the principle agencies involved in the implementation of the policy as Ministry of Works and Human Settlement (MoWHS), Ministry of Agriculture and Forest (MoAF), National Land Commission (NLC), National Environment Commission (NEC) and Local Government (LG). The principle implementing agency identified is the MoWHS. But this policy is still at the draft stage and not adopted.

With the onset of Bhutan's economic progress, challenges such as rapid urbanization are inevitable. Migration from rural to urban centers in search of better economic opportunities has increased the pressure on urban infrastructure such as housing. More and more people in the urban areas are finding it difficult to get either affordable dwellings or housing at all. There are increase in social and economic concerns of people living in sub-standard settlements. There are also national concern of large number of people living across the border due to housing shortage in Phuntsholing.

As per the Population and Housing Census of Bhutan (PHCB), as of May 2017, almost 37.8% of Bhutanese population is living in urban areas. Almost 20% of the population is residing in two Thromdes of Thimphu and Phuntsholing.

The housing crisis in Phuntsholing is by far the most acute problem. It is reported that large number of Bhutanese people from various sections of the society are residing in the neighboring Jaigaon. NHDCL has started construction of 506 unit housing project costing 890 million ngultrums. The housing units under this project were allocated to the tenants but many people still reside across the borders. More needs to be done.

The second Pay Commission through its report recommended the government to provide subsidies in the form of low interest rates on loans and allocation of government land free of cost to 'society-type' groupings of low income civil servants. The commission also recommended the government to explore the opportunity for NPPF, NHDC and NLC to work together to increase supply of low income housing beginning with the areas where the shortage is most severe. For other groups, public-private-partnership is recommended in increasing housing stock and to promote home ownership.

Even with various policies in place, implementing agencies identified with mandates, we still face shortage of affordable housing. Therefore, there is a need to review and ascertain where and what is not working in terms of housing development. RAA intended

to audit and report as to why we are not able to deliver adequate, affordable and livable housing.

2.3. Legal and Institutional framework

The following is the legal and institutional framework governing housing development in Bhutan. Although there is no law as such, a broad framework is stipulated in the National Housing Policy 2002 and the Draft Human Settlement Policy 2015.

2.3.1. Legal framework:

The institutions and agencies engaged in housing development draw their mandates and functional responsibilities from the following set of laws, policies, rules and regulations.

1. National Housing Policy 2002;
2. Draft National Human Settlement Policy 2015;
3. Tenancy Act of Bhutan 2015;
4. Tenancy rules and regulations of Bhutan 2018;
5. Land Act of Bhutan 2007;
6. Allotment rules and regulations 2014 (NHDCL);
7. Maintenance policy rules and regulations 2014 (NHDCL); and
8. Bhutan Building rules 2002.

2.3.2. Institutional Framework

The National Housing Policy 2002 does not clearly specify the institutional framework for housing development. However in practice there are a number of players in the housing development activity such as MoWHS, NHDCL, NPPE, Thromdes, Financial Institutions and the private developers and individual home owners. The prominent institutional players in Housing Development are as follows;

2.3.2.1. Ministry of Works and Human Settlement

The National Housing policy 2002, recognizes DUDH of the erstwhile Ministry of Communications as the regulatory body. The Ministry of Communications was bifurcated into Ministry of Communications and Works and Human Settlements. The mandate of housing development by nature fell onto MoWHS.

Section 4 of Tenancy Act of Bhutan 2015, stipulates that, “The Ministry of Works and Human Settlement shall designate a Department or Agency under it to be a Tenancy Authority”.

The Draft National Human Settlement Policy 2015, identified Ministry of Works and Human Settlement as the principle implementing agency. The draft human settlement policy 2015 is submitted to the Cabinet and it is yet to be adopted.

2.3.2.2. National Housing Development Corporation Limited (NHDCL)

The objectives of NHDCL as per its Articles of Incorporation are as follows:

- i. Management of government residential accommodation in Thimphu, Phuntsholing and residential accommodation constructed by NHDC in other Dzongkhags and dungkhags initially;
- ii. Conduct need assessment for all Government residential accommodations;
- iii. Construction and management of government residential accommodations;

- iv. Development of appropriate system of allocation of accommodation to civil servants, review the system of rent determination and adopt appropriate methods;
- v. Promote/provide safe, efficient and affordable housing;
- vi. Create a transparent and well-functioning housing market;
- vii. Promote home ownership; and
- viii. To carry out any other mandates as may be directed by the government.

2.3.2.3. National Pension and Provident fund (NPPF)

NPPF do not have a specific mandate to construct buildings and provide housing. It was taken as an avenue for investments of its funds. Its Real Estate division is a part of investment department dedicated to land and buildings. It operates under the purview of its own policies, rules and regulations in force.

Its primary objectives of real estate are to ensure prudent investment in real estate and excel in construction and building management. Currently, NPPF owns around 52 acres of land of which 50% have been developed and 89 residential buildings and 3 commercial buildings worth Nu.714 m at book value.

NPPF has two residential buildings consisting of 56 units that are being constructed in Phuntsholing is completed 2018. Similarly, construction of one 16-unit residential building at Samdrup Jongkhar, and one commercial building in Thimphu are completed.

NPPF also has a Member Home Loan scheme in which real estate assists in designing and collaborating in building, to its potential members. NPPF also has plans for construction of commercial buildings in Thimphu and Phuntsholing and residential buildings in Gelephu commencing in 2017.

2.3.2.4. Thromdes

Thromde administrations are responsible to determine the land use and approval of building structures of private individuals and government institutions as per the legal and regulatory requirements. But they do not have explicit mandates in providing affordable housing.

CHAPTER 3: FINDINGS

This chapter is divided into two parts: Part A highlights the positive developments initiated and achieved by NHDCL and other stakeholders and Part B discusses the shortcomings and deficiencies in the Housing Development activity.

Part - A: Achievements and positive developments initiated and achieved by NHDCL and other players in Housing Development

During the course of the audit, RAA observed notable achievements made by NHDCL and other players in housing development. Some of the significant achievements made can be seen as follows:

National Housing Development Corporation Limited (NHDCL)

NHDCL has constructed 284 building (2,073 units) for all the civil servants across the country. It is mandated to provide safe and affordable homes to Bhutanese through innovations in constructions, facilitating a dynamic housing environment, championing the creation of community vitality, responding to the changing housing needs and leading research activities on housing in the country. The NHDCL had undertaken the following projects:

► Special Housing project in Phuntsholing

NHDCL carried out a special housing project in Phuntsholing by constructing 62 buildings (506 units) for people living across the border under the command of His Majesty the King. The subsidized rents ranging from 4500 to 6500 were made available to the middle and low income group in Phuntsholing to ease the housing pressure. The housing units are allotted to the tenants and some have already moved in. The housing project is expected to complete in all respects by February 2019.

► Home ownership project of NHDCL

The home ownership project was started with funding support from Danida under the Urban Sector Support Program in 2002. Under this project NHDCL had constructed 12 structures comprising of 32 units in 2004. 6 structures are constructed out of stabilized mud blocks and 6 out of hollow concrete cement blocks. According to NHDCL, the total cost of construction of 32 units was Nu.12.5 million.

The project is located in Changjiji. This project provided homes to 32 low-income households on a 30 year lease basis with automatic renewal up to 99 years.

The homes were sold on payment of installments ranging from Nu.1322 to Nu.2204 spread over a period ranging from 15 to 25 years.

National Pension and Provident Fund

Real Estate development and management has been one sustainable area of investment for NPPF. The agency possesses around 52 acres of land both in urban and rural areas, and has a total of 92 buildings with 829 residential, office and commercial flats. It focusses on financing home ownership to its members through its “Member Home Loan Scheme”. The scheme basically encourages public servants to own home to revitalize the tradition of family wealth creation and economic security particularly at old age at an affordable interest rate and also considering the shortage of residential quarters for the public servants.

At a nominal fee, NPPF provides supplementary services to its members which includes detailed architectural, structural and electrical design of building up to three storeys, basic cost estimations and material recommendation for construction of the houses. In October 2015 a proto-type designs for a bungalow on a flat site and a split duplex was built at Debsi, Thimphu to initiate a center of excellence in home ownership, combining expertise in designing, financing and building of affordable and comfortable homes as detailed hereunder:

► Pilot Housing project of NPPF

NPPF has started the housing pilot project in 2015. The main objective of this project was to promote social safety net by constructing affordable homes and encouraging civil servants to own homes. Through the pilot project, it constructed one 3BHK Bungalow and one 4BHK Duplex at a total cost of Nu.5.58 million at Debsi in Thimphu within the duration of 7 months in 2016.

This project has some commendable salient features such as;

- I. Use of locally available materials (ICE Blocks) and timber
- II. Employment of local vocational graduates from Chumey VTI
- III. Engagement of Business Incubation Unit as the builder

Currently the structures so constructed are rented out.

➤ **Construction of low income housing at Changangkha by Thimphu Thromde.**

The Engineering Division of Thimphu Thromde had constructed low income housing with the aim of improving the living standard of Thromde labourers who have been living in the informal settlement.

The structure is built under the guidance and supervision of Thrompon. To bring down the construction costs, the parts like doors, windows, CGI sheets and trusses of demolished structure of Chanbangdru School were reused.

The procurement of materials and machines were undertaken departmentally and the work was executed on labour contract basis. The housing structure consisting of 16 units was completed at a total cost of Nu. 9.24 million, within 12 months' time. The cost of construction were brought down to Nu. 7.13 million, as the materials were reused. The labour contract was awarded at the amount of Nu.2.29 million. There are 16 units in total and they collect Nu.500 per month as a rent from the tenants.

Part - B: Deficiencies and Lapses

Notwithstanding the achievements and contributions made by NHDCL and the key players in housing Development, the RAA while reviewing the legal and policy frameworks, institutional systems and records observed deficiencies and rooms for improvement.

The deficiencies are further divided into two parts. Part - B (1) highlighting the issues in housing development such as adequacy, affordability and livability. The Part- B (2) discusses the causes leading to issues in housing development.

The deficiencies and lapses observed by the RAA are as detailed hereunder:

Part – B (1): Issues in Housing Development

The issues in housing development are broadly classified under adequacy, affordability and livability as presented in details below:

1. Issues of inadequacy

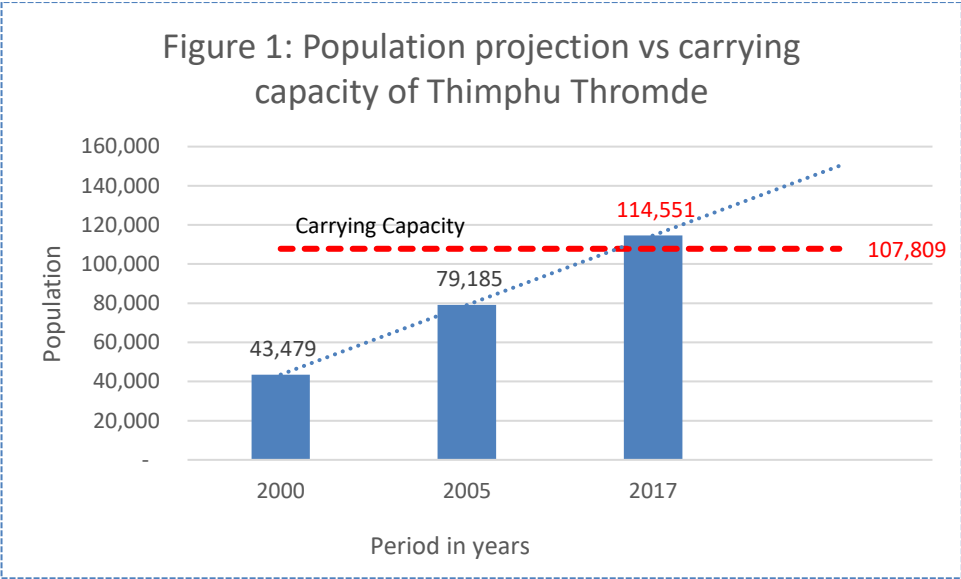
There are concerns of inadequacy of housing units and structures to meet the ever increasing demands for housing. The efforts to establish the problem of adequacy is severely limited by the lack of data for accurate number of housing structures and units in both Thimphu and Phuntsholing Thromdes.

The issues pertaining to adequacy of housing is discussed in detail as follows:

1.1 Projected carrying capacity of Thimphu Structure plan exceeded by 6742 people

Any city or town has its own carrying capacity depending on factors such as available land for development, terrain, geological conditions and water supply. Thimphu Structural plan 2000-2027 projected that Thimphu will be able to accommodate only 107,809 people. The projection was made by taking into account vacant government land, scrub land, horizontal and vertical densifications. Population accommodation capacity was determined by considering the optimum plot utilization of 50% and maximum number of floors as four including ground floor.

However, as of March 2017 Thimphu has exceeded its carrying capacity as can be seen in the figure 1 below:



Source: PHCB 2005 and 2017, Thimphu Structure Plan 2002-2027, RAA analysis

As per the population and housing census 2017 the population of Thimphu is 114,551 while the population accommodation capacity of Thimphu is 107,809 people. The carrying capacity of Thimphu thromde was exceeded by 6,742 people by 2017. Thimphu already looks crowded with narrow streets and lack of green spaces as provisioned in the Thimphu Structure Plan (TSP) 2002-2027.

The carrying capacity (107,809) of Thimphu thromde was exceeded by 6,742 people by 2017.

The thromde administration is not prepared as to how it could respond to the increasing pressure on the carrying capacity of the city. Thimphu thromde has not conducted any review of the Thimphu Structural Plan 2000-2027. There is no preparedness in terms of strategies and funds to respond to overcrowding.

In November 2018, RIGSS in collaboration with Bhutan Foundation, organized a 4 day session on the theme ‘A well-tempered Bhutan- creating GNH cities and villages’. The program started on 6th November and ended on 9th November 2018. It was conducted in presence of Jonathan F.P. Rose the author of the book ‘The well-tempered city’ and Jonathan Rose from UK. Over the course of 4 days, the experts met with stakeholders such as MoWHS, NHDCL and Thimphu thromde and discussed on issues such as participatory planning, affordable housing development in Bhutan and design workshop for a city (Thimphu). One of the prominent take away from the session was that Thimphu thromde was overcrowded and there is a need to ‘impose moratorium’ on constructions within the thromde. Jonathan F.P. Rose also commented that Thimphu cannot go for high rise building owing to narrow streets.

The situation is only getting worse with increase in rural-urban migration. There is impending risk of overcrowding, should the thromde and relevant stakeholders not come up with strategies and action plans to mitigate in a timely manner.

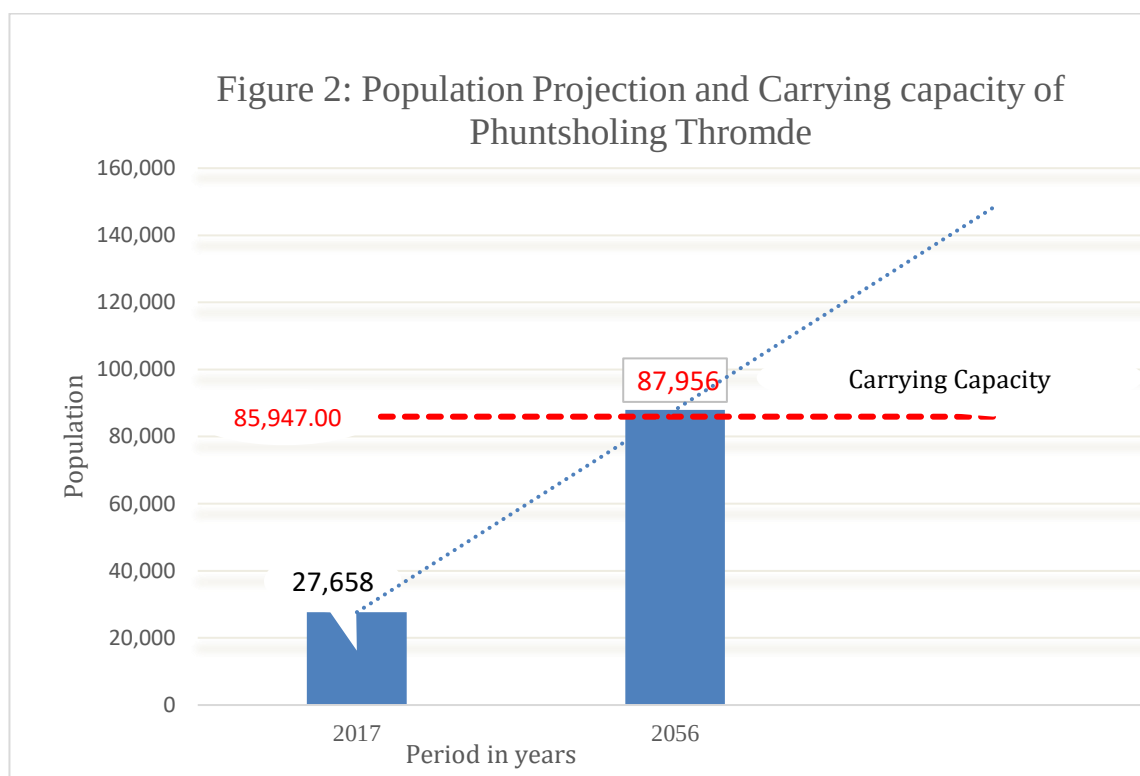
1.2 Phuntsholing reaches its carrying capacity in 2056

The Phuntsholing Structure Plan 2013-2028 has projected that the Phuntsholing city can accommodate 85,947 people in its 11 Local Area Plans (LAP) known as Urban Villages. This was determined based on medium-rise development with built structures not more

than six floors high in core areas and two floors in the peripheral areas. Like Thimphu it has also taken into consideration both the horizontal and vertical densification.

The population of Phuntsholing city has grown at the rate of 3% from 2005 to 2017 based on data from Population and Housing Census reports. At this rate (3% compounded) Phuntsholing city is projected to reach its carrying capacity in 38 years from now (2019). In 2056 Phuntsholing city is going to be saturated under the current socio-economic and policy environment.

The scenario is depicted in the figure 2 below;



Source: PHCB 2005 and 2017, Phuntsholing Structure plan 2013-2028, RAA analysis

The Phuntsholing Structure Plan 2013-2028 recognized the importance of housing within the municipality premises to respond to the needs of the common people. The structure plan dedicated a separate section for housing strategy outlining 16 strategies covering various aspects of housing development including amongst others the need to promote home ownership.

Despite a construction of 506 low income housing units, shortage remains to be the main problem in Phuntsholing.

Further, if appropriate measure are not taken at the policy level, Phuntsholing's population could implode beyond its carrying capacity earlier than expected.

1.3 Incomplete data on number of housing structure and units

For policy formulation and decision making, baseline data such as number of housing structures and units within the municipality jurisdiction is minimum requirement. This data is of paramount importance for municipal planning and strategy formulation.

According to the section 4 of the Tenancy Act 2015, the Ministry of Works and Human Settlement (MoWHS) is responsible to designate a Department or Agency under it to be a Tenancy Authority.

Further, section 6 (j) of the Act requires the tenancy authority to maintain a database of all residential and commercial units.

On review of Tenancy Rules and Regulations 2018, it was revealed that MoWHS had designated Department of Human Settlements as tenancy authority but had not maintained a database of the housing units. In fact Department of Human Settlement do not have dedicated division or section to oversee the implementation of Tenancy Act, Rules and Regulations.

Further, the audit team approached respective thromde administrations of Thimphu and Phuntsholing for the data on housing structures and units. The data maintained by both Thimphu and Phuntsholing Thromdes are incomplete. The thromde administrations were in the process of building the inventories of the housing units and structures. The database on housing units and structures within the thromde jurisdiction could also serve as a strong basis for revenue collection. While the NHDCL and NPPF had maintained accurate data of housing in Thimphu and Phuntsholing, the data on private housing structures and units within the municipal jurisdictions were incomplete as shown in the table below:

Table 1: Number of housing structures and units

Thimphu			
Agency	No. of buildings	No. of units	Remarks
NPPF	44	353	Complete
NHDCL	277	1107	Complete
Thromde	5734	7389	Incomplete
Total	6055	8849	
Phuntsholing			
NPPF	36	290	Complete
NHDCL	24	158	Complete
Thromde	1899	7960	Incomplete
Total	1959	8408	

Source: NHDCL, NPPF, Thimphu and Phuntsholing Thromdes

The table above presents the total number of housing structures and units as provided by NHDCL, NPPF and respective thromdes of Thimphu and Phuntsholing. The thromdes were in the process of updating the number of housing units as on date of audit (November 2018). It was given to understand that the data from the thromdes are incomplete.

The lack of complete data is due to non-implementation of the provisions of the Tenancy Act of Bhutan 2015 and Tenancy Rules and Regulations 2018 by MoWHS.

Stakeholder's responses:

NLCS: The NLCS has responded that it fully agrees with the observation that there is no dedicated agency to maintain a comprehensive database on housing. It said that just like NLCS has a comprehensive database related to land ownership, acreage, census and cadastral information there is dire need to housing database. It stated that as mandated by Tenancy Act 2015 and Tenancy rules and regulations 2018, NLCS felt that Department of Human Settlement under MoWHS should take up the task seriously.

1.4 Housing needs assessment not carried out

Complete and accurate data on housing units and structures is an important building block for policy making. Detailed study of increase in population vis-à-vis the housing stock is critical in assessing the future housing needs. There are no records, if any of housing needs being assessed at the national level either with the MoWHS or the Thromdes of Thimphu and Phuntsholing.



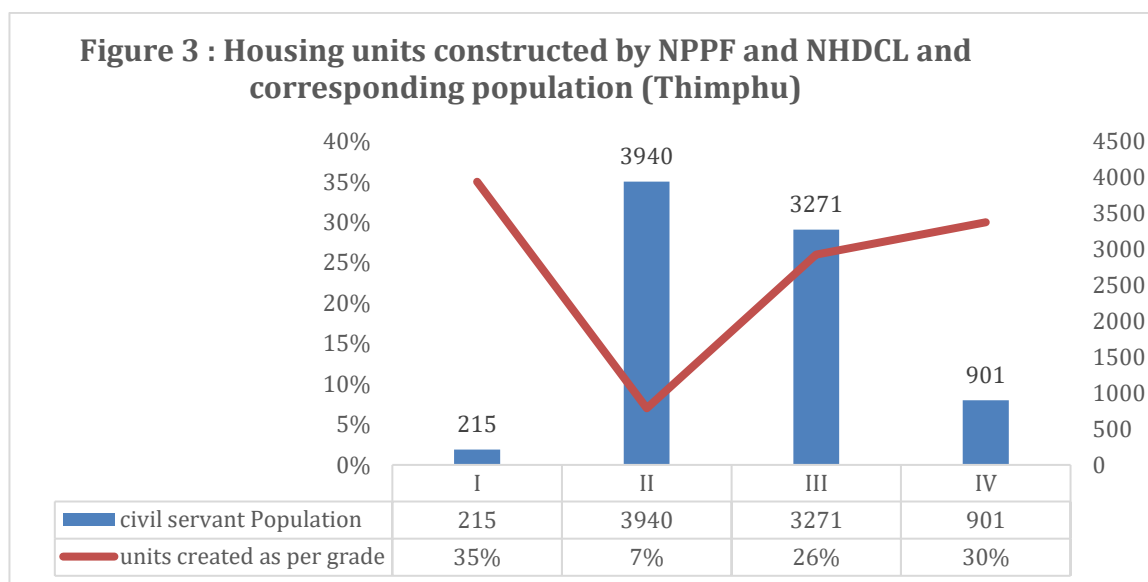
There are no records, if any of housing needs being assessed at the national level

NHDCL has a needs assessment division within the organizational chart but has not carried out any needs assessment except for the Special housing project in Phuntsholing for which a study had been conducted at the height of the housing crisis.

There is no clarity as to which agency is responsible for the assessment of the housing needs at the National level. At least the housing needs of the civil servants is captured in the Articles of Association of the NHDCL. For this they have no records if any of such assessments being carried out. Understanding the need is the first step towards any housing development projects. The assessment of housing need must precede any policy making and strategy formulation.

Further, lack of needs assessment is evident from the mismatch between the affordable housing stock and corresponding population. Currently there is a mismatch between the civil servant population and stock of affordable housing built by NHDCL and NPPF.

Figure 6 shows housing units created (class wise) by NPPF and NHDCL as against the corresponding population. As of June 2018, in Thimphu the highest population in civil service is P level (P1- P5) with the total population of 3940, and the lowest population of 215 from EX3 and above.



Source: NHDCL, NPPF and RCSC, RAA analysis

The mismatch between housing stock and resident population is clear from the graph above. For instance at Class I, there are housing units for 35% for a population of 215, whereas at Class II, there are housing units only for 7% of corresponding population of 3940. Similarly at Class IV, there are housing units for 30% of the population of 901. The

distribution of different classes of housing units are inequitable in relation their resident population. The mismatch had apparently arisen due to lack of needs assessment.

As per corporate plan, NHDCL has plans to construct 1,150 units from 2019 to 2023. In order to make a necessary impact, NHDCL should conduct need analysis of each class of population and then execute the works.

Stakeholder's responses:

NPPF: NPPF responded that it is not mandated to provide affordable housing to civil servant and therefore to quote NPPF in the aforementioned sentence may not be correct. Second, the new residential buildings built by NPPF in Phuentsholing are now leased to members at prevailing market rates.

1.5 Socio-economic risks of large number of Bhutanese residing in neighboring Jaigaon

Bhutanese people living across the border in the neighboring areas of Jaigaon has become a matter of serious concern. Attempts had been made by various agencies such as the Phuntsholing Dungkhag, Royal Bhutan Police, NHDCL and NSB to collect data on the situation to study. According to the Phuntsholing Dungkhag administration there are a total of 3955 people comprising of 1228 families mostly from the low income level of the population as of November 2018. There are people from various occupational groups and employment statuses as can be witnessed in the table 1 below:

Table 2: Summary of people living in Jaigaon

Dzongkhag/Occupation	Corporation	Civil Service	Private sector	House Wife	Others	Grand Total
Bumthang			5		2	7
Chhukha	42	19	311	23	104	499
Dagana	29	7	138	23	59	256
Haa	3	4	13	6	6	32
Lhuentse	11	7	35	6	10	69
Mongar	39	24	165	37	19	284
Paro	8	3	35			46
Pemagatshel	24	15	182	47	33	301
Punakha	6		12		7	25
Samdrupjongkhar	14	9	131	19	32	205
Samtse	75	29	498	47	102	751
Sarpang	43	17	224	19	46	349
Thimphu	8	1	49	7	5	70
Trashigang	35	11	287	73	52	453
Trashiyangtse	9	6	50	27	22	110
Trongsa		11	29	6		46
Tsirang	10	14	210	9	34	277
Wangdiphodrang			17	8	29	54
Zhemgang	17		75		20	112
Grand Total	373	177	2466	357	582	3955

Source : Phuntsholing Dungkhag

As can be seen in the table, maximum number of people are from vulnerable sections of the society like employees in the private sector and house wives. There are a lot of risks

associated with such a demographic scenario. There are risks of social and cultural disintegration due to cross marriage.

On the contrary, there are large number of non-Bhutanese residing in Phuntsholing. There are 573 non-Bhutanese families, living in Phuntsholing according to PHCB 2017. Out of an informal review it was revealed that these people are mostly traders who can afford to pay any amount of rent given the assured security of Phuntsholing. The core area of Phuntsholing is mostly occupied by the traders from across the borders.

Upon enquiry it was revealed that the Phuntsholing Thromde is aware of the situation, however there are no formal records pertaining to the situation. There is a need to strategically manage the situation and reverse this undesirable demographic trend.

2. Issues of affordability

A widely accepted general rule of thumb is that house rent expenses should not exceed 30% of household income. This rule dates back to the U. S housing Act of 1937, under which federal government provides subsidies to public housing agencies to provide low-income families with housing. Amongst others this Act provided that families whose monthly rental payments, including utilities, constitute more than 30% of the monthly household income were considered cost burdened.

Draft National Human Settlement Policy 2015 of Bhutan requires rental cost to be below 35% of average household income of residents in any particular settlement or urban centre.

Thimphu and Phuntsholing has been growing at a rapid pace. At the same time, there has been an overall slower growth in the housing stock, with growth involving more expensive homes and apartments. These trends have caused mismatch between conditions, the cities are facing significant challenges and plays a key role in addressing the need for affordable housing. In this section, 'Affordability' means rental affordability.

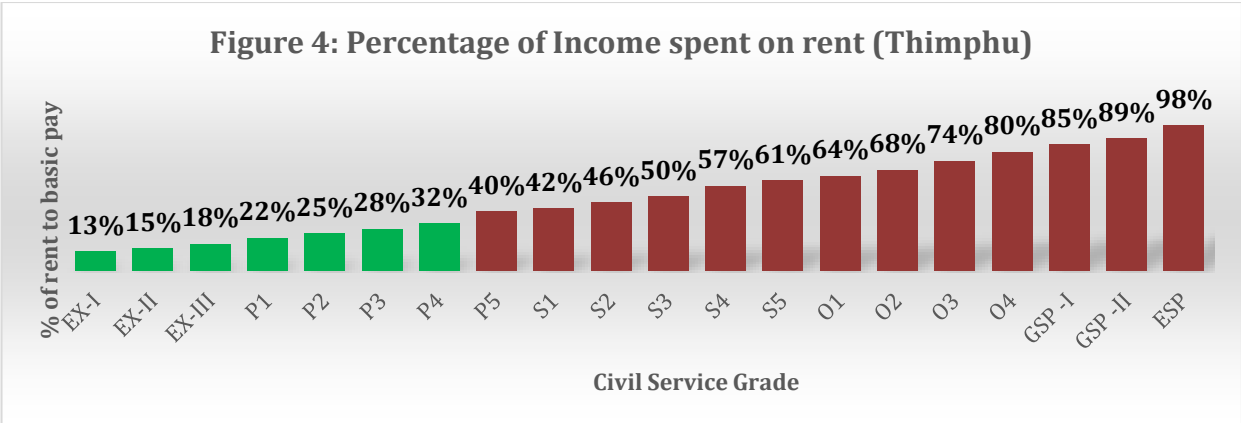
Review and analysis of the available documents and information revealed various deficiencies as discussed below;

2.1 Rental expenditure unaffordable to majority of population in Thimphu and Phuntsholing Thromdes

Although rental affordability generally is a contentious issue, for our analysis Draft Human Settlement Policy provision is taken as a benchmark to determine the rental affordability.

Draft National Human Settlement Policy 2015 of Bhutan requires rental cost to be below 35% of average household income of residents in any particular settlement or urban centre.

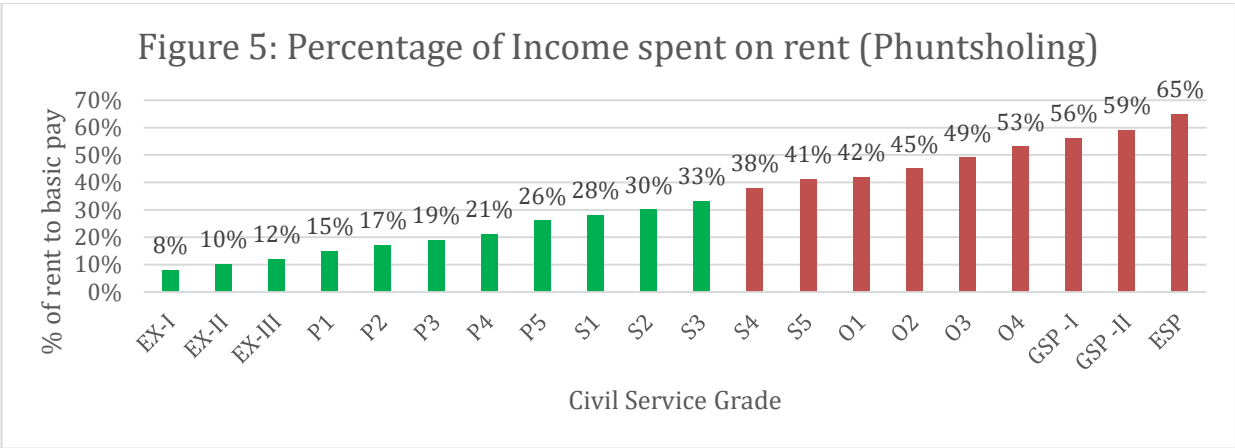
In most of the cases, rental affordability is measured as a ratio of rental expense over household income. Due to general lack of data on household income and rental expense, our analysis is limited to Civil Service Pay scale (taken as income) and average rental expense of Thimphu (Nu.6, 835) and Phuntsholing (Nu.4, 518) based on Bhutan Living Standard Survey 2017 (BLSS) of National Statistics Bureau (NSB). This may not be reflective of the actual rental burden at the extreme ends. The analysis is presented in the figure 4;



Source: BLSS 2017, MoF for civil service basic pay, RAA Analysis

As can be seen in the figure 4, civil servants below P5 are paying more than 40% to as high as 98% of their basic pay towards rental expenditure. There is a clear indication that distress due to rental burden is more skewed towards the lower income section of the population.

Similarly, the rental affordability in Phuntsholing is also unfavorable to low income people. The average rental expense of Phuntsholing as per the BLSS 2017 (Nu.4,518) is taken as the ratio of Civil service pay scale. The scenario of presented in the graph below:



Source: BLSS 2017, MoF for service basic pay, RAA Analysis

From the figures 4 & 5 above, it can be seen that the majority of the bars are red in colour representing distress due to rental expense.

One third (10487) of total civil servant population live in Thimphu and Phuntsholing combined, out of that majority (59%) falls in P5 and below. Therefore rental expenses are unaffordable to the majority of civil servant population living in Thimphu and Phuntsholing.

Rental expenses are unaffordable to the majority of civil servant population living in Thimphu and Phuntsholing

Since the population is growing every year, the demand for affordable houses are much higher especially in Thimphu and Phuntsholing. The growing population puts pressure on demand for more homes which means more people compete for the houses that are available and the renters could charge more.

Further, on comparison of the house rent allowances (HRA) received by the civil servants in Thimphu and Phuntsholing vis-à-vis average rental expense, it revealed that HRA barely

covers the rental expenditures for majority of the civil servant population. It is captured in the table 3 below:

Table 3: HRA vs Rental expenditure in Thimphu and Phuntsholing

Sl. No	Position level	HRA (a)	Thimphu avg. Rental expenditure (b)	Difference (a)-(b)	Phuntsholing (c)	Difference (a)-(c)
1	Cabinet Secretary	15,030	6835	8,195	4518	10,512
2	Government Secretaries	13,185	6835	6,350	4518	8,667
3	EX/ES-I	10,915	6835	4,080	4518	6,397
4	EX/ES-II	9,155	6835	2,320	4518	4,637
5	EX/ES-III	7,740	6835	905	4518	3,222
6	P1	6,200	6835	-635	4518	1,682
7	P2	5,475	6835	-1,360	4518	957
8	P3	4,800	6835	-2,035	4518	282
9	P4	4,275	6835	-2,560	4518	-243
10	P5	3,500	6835	-3,335	4518	-1,018
11	S1	3,275	6835	-3,560	4518	-1,243
12	S2	2,965	6835	-3,870	4518	-1,553
13	S3	2,710	6835	-4,125	4518	-1,808
14	S4	2,405	6835	-4,430	4518	-2,113
15	S5	2,225	6835	-4,610	4518	-2,293
16	O1	2,145	6835	-4,690	4518	-2,373
17	O2	2,015	6835	-4,820	4518	-2,503
18	O3	1,830	6835	-5,005	4518	-2,688
19	O4	1,700	6835	-5,135	4518	-2,818
20	GSP-I	1,615	6835	-5,220	4518	-2,903

Source: BLSS 2017, MoF for service basic pay, RAA Analysis

It revealed that the house rent allowances received by the civil servants are sufficient for EX/ES-III and above in Thimphu and P3 and above in Phuntsholing. Most of the employees of Corporations and Private organizations do not provide house rent allowances to the employees and have to meet it through their monthly salary.

Although the analysis is limited due to lack of data, nonetheless it is intended to indicate the rental affordability scenario in Thimphu and Phuntsholing. Based on the analysis, the ground reality of rental affordability is a far cry from the desired benchmark of 35% of household income. More needs to be done on the both the supply side and demand side of the housing market in order to meet the affordable housing needs of the growing population.

2.2 Irregular increase of rents in Thimphu and Phuntsholing

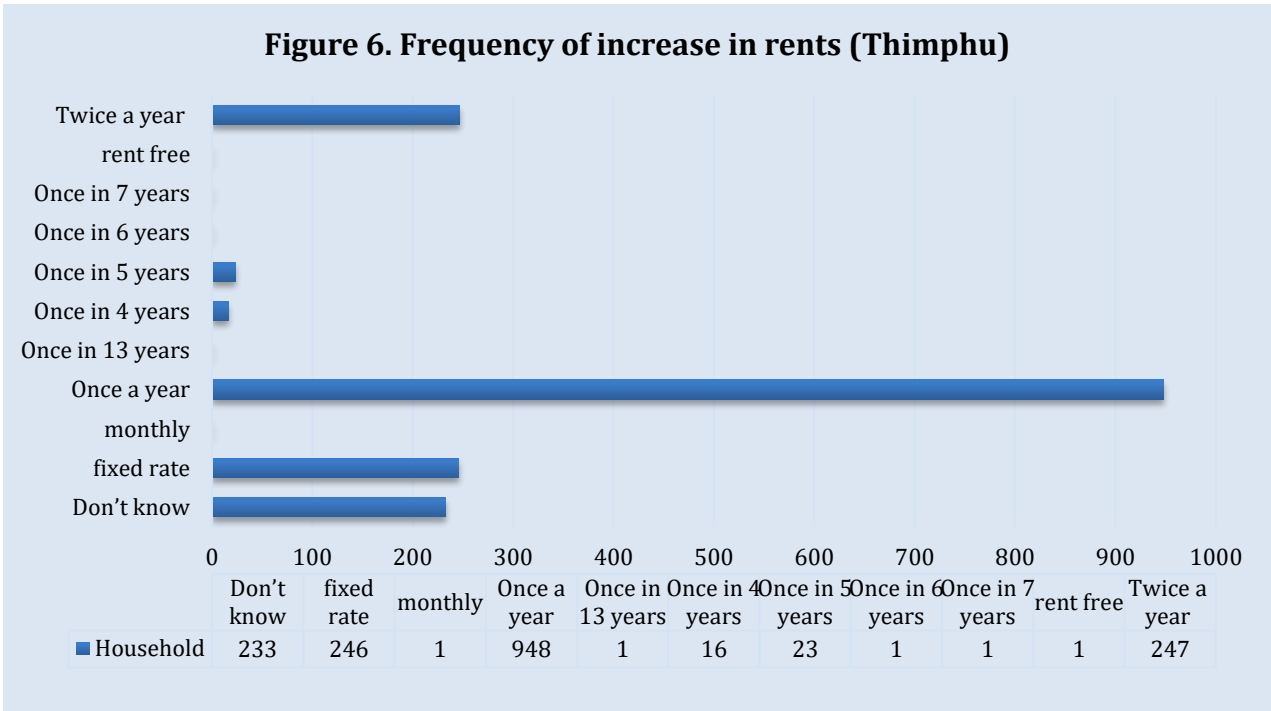
Rental housing is very common phenomenon in urban Bhutan and it is mostly dominated by the private sector. About 84% in Thimphu and 69% in Phuntsholing houses/units are provided by the private sectors and remaining by the public corporations and others according to Bhutan Living Standard Survey (BLSS) 2017. The access to private houses are allocated by ability to pay and the rent levels are determined by the market forces. Rent

revision is regulated by the Tenancy Act of Bhutan 2015 and Tenancy Rules and regulations 2018 as follows:

Section 25 of the Tenancy Act of Bhutan 2015 stipulates that, “The owner shall not increase the rent before two years from the day on which a tenant occupies the house.”

As per the Tenancy Rules and Regulation 2018, Revision of rent, requires 2 years from the date of last rent increment or from the day of which a tenant occupies the house to increase the rents and the increment shall not exceed 10% of the monthly rent.

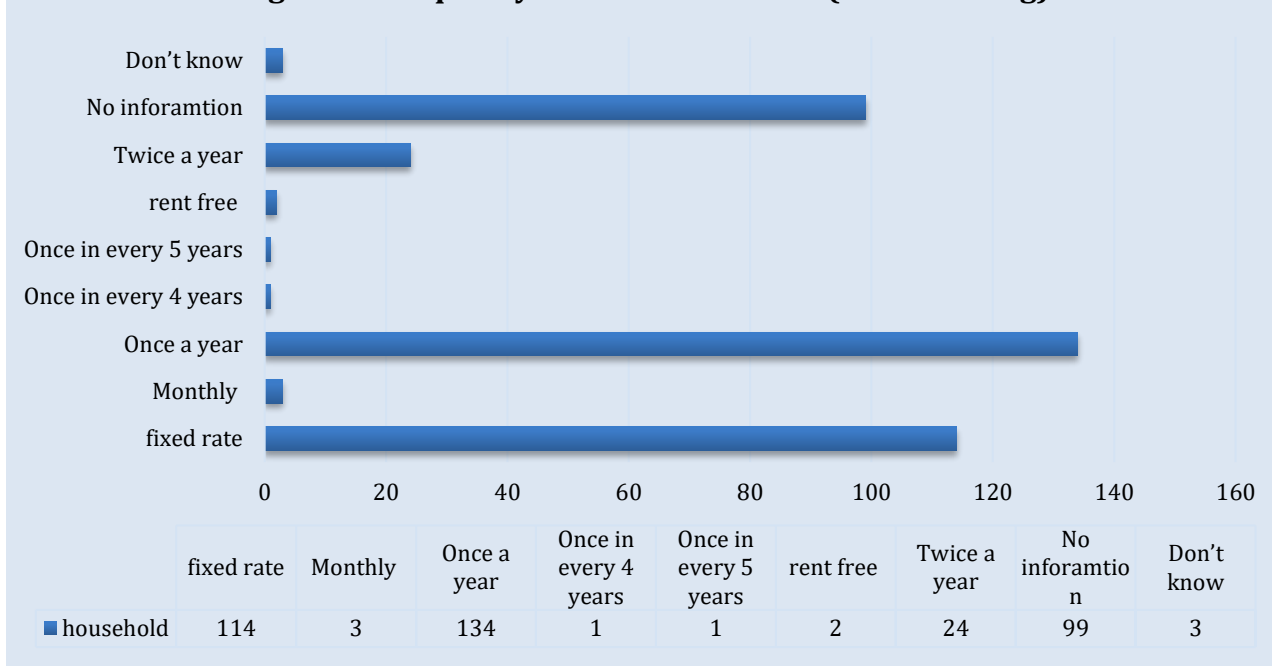
On the contrary the rents tend to increase irregularly as per BLSS 2017. From the total 1485 active respondents, 948 responded that their rents usually increases once a year, of which 84% are private renters. The details are shown in figure 6 below.



Source: BLSS 2017, NSB

From the figure above it can be deduced that majority of tenants experienced irregular increase of rents of once and twice every year as against the stipulation of only once in two years.

Similarly, in Phuntsholing, from the total 279 active respondents, 134 responded that their rents increases once in a year as shown in figure 7.

Figure 7: Frequency of increase in rents (Phuntsholing)

Source: BLSS 2017, NSB

The public and semi-public house rents are usually increased as per the tenancy rules and regulations. As for the private houses the rents are not controlled and do not follow the tenancy rules and regulations.

This apparently could have been caused by not monitoring the implementation of the Tenancy Act, Rules and Regulations.

Section 138 of the Tenancy Rules and Regulations 2018 states:

‘The Tenancy Authority shall monitor the implementation of the Act, the Rules and Regulations and Tenancy Services System’

The Tenancy Rules and Regulations states that the Department of Human Settlements is the tenancy authority. The irregular increase in rents is neither monitored nor acted upon and there were no records of monitoring if any.

Irregular increase in rents would have negative economic implications on the tenants and if not acted upon in a timely manner, it would further aggravate the rental affordability.

3. Issues of livability

Livability in general is a pre-condition for healthy living, improved quality of life and critical to economic and social survival. It also encompasses various aspects of economic, social, cultural and environmental conditions within the locality. In towns the quality of life and the characteristics of cities make it livable. The way we shape our cities have profound impact on the quality of life - our physical and mental health, our opportunities for having friends and neighbors, and even how likely we are to find, and hold a job.

Since livability is not defined in any of our policy documents as may be termed as livability index for Bhutan, in our study we confined to livability in terms of following four parameters:

- ▶ Access to drinking water supply;
- ▶ Proper sanitation ;
- ▶ Quality and safety of material used for construction (wall, roof and floor); and
- ▶ No. of rooms occupied by household.

Based on data from PHCB 2017, it was revealed that most of the formal settlements within the respective thromde jurisdictions were generally livable with few exceptions. However the livability is a real concern in the so called informal settlements within the thromde Jurisdiction. The informal settlement exists in both the Thromdes.

The issues of livability discussed based on the aforementioned parameters are presented below;

3.1 Informal settlements impeding livability and aesthetics of the city

Thromde administrations are the regulators and supposed to prevent establishment of such informal settlements. In Thimphu Thromde, there are informal settlements in 10 different locations and in Phuntsholing there is only one site called Bhalujora in Pasakha.

The people living in the informal settlement were mostly migrants from rural areas and also the urban households who couldn't afford the rented housing in better parts of the city. The list is presented in the table below:

Table 4: Informal settlements of Thimphu and Phuntsholing

Sl. No	Location	Ownership of Land	Occupants	No of Households	Total population
1	Above YHS	Thromde	Thromde Supporting Staff	3	17
2	Olakha City labour camp (below Lungtenphu Highway)	Thromde	Thromde Supporting Staff	1	5
3	Babesa city labour camp(Below Babesa Express way)	Thromde	Thromde labours	6	32
4	Proposed Bus terminal (Olakha)	Private	Private Individuals	NA	NA
5	Changjiji city labour camp	Thromde	Thromde labours	3	7
6	Kala Bazar city labour camp and others (Changedaphu)	Thromde	Thromde labours	65	263
7	Changangkha city labour camp (Above NPPF colony)	Thromde	Thromde labours	6	15
8	Motithang city labour camp(Minister enclave)	Thromde	Thromde labours	2	7
9	Motithang city labour camp(Below BoD)	Thromde	Thromde labours	38	191
10	Changangkha city labour camp (near changangkha School)	Thromde	Thromde labours	14	56
Total				138	593

11	Bhalujhora, Phuentsholing	Conflict between Thromde and Private Individuals	Industrial labours and landlords	38	115
Total					708
<i>Source: Thimphu and Phuntsholing Thromdes</i>					

In the 11 informal settlements there are 172 households comprising of 708 people. Households in this category have shelters of substandard quality, unsafe and unhygienic neighborhood environment.

The informal settlements under Thimphu Thromde are located in city non-development land with inadequate infrastructure. The one in Pasakha have land disputes among private individuals and Phuntsholing Thromde.



Vantage point of Changidaphu (Kalabazaar)

The respective thromde administrations are aware of situation and yet did not have any strategies to improve the situation. Thimphu thromde enabled the establishment of such settlements without any definite deadlines to dismantle. If these continues to exist it will exacerbate wellbeing of habitants and aesthetics of the city in long run.

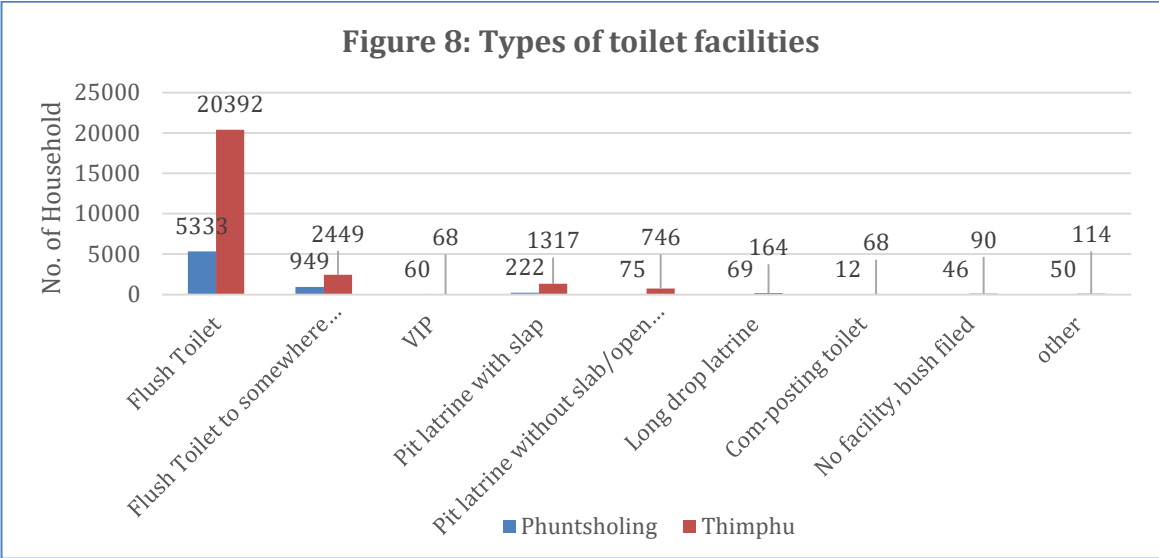
Stakeholder's response:

Thimphu Thromde: *The Thimphu Thromde responded that it has plans to build low income housing to ease out informal settlements stated herein with a budget of Nu.21 million in the 12th FYP. It also stated that a detailed study was imperative before decisions to dismantle these settlements and such a report shall be intimated to RAA as soon as possible.*

3.2 Lack of proper toilet facility in informal settlements

As per the UN Habitat report, one of the criteria for slum is to have access to adequate sanitation in the form of a private or public toilet shared by reasonable number of people. In general, access to safe sanitation facilities is very important for human health and hygiene.

The toilet facilities are generally present in the formal structures as evident from, the data from PHCB 2017 as shown below:



Source: PHCB 2017, NSB

As can be seen above, in both the Thromdes majority of households have flush toilet facilities. However, in both Thimphu and Phuntsholing Thromdes there are instances of households without proper toilet facilities. For instance in Thimphu 1068 households (4.16%) of total households and in Phuntsholing Thromde, 202 (2.96%) of total household have pit latrine without slab, long drop latrine, composting toilet and in some cases no facilities. The majority of the households having such kind of toilet facilities are of low income ones. In both the Thromdes, the sanitation of informal settlements are made of waste bitumen barrels in open areas as can be seen in the pictures below:

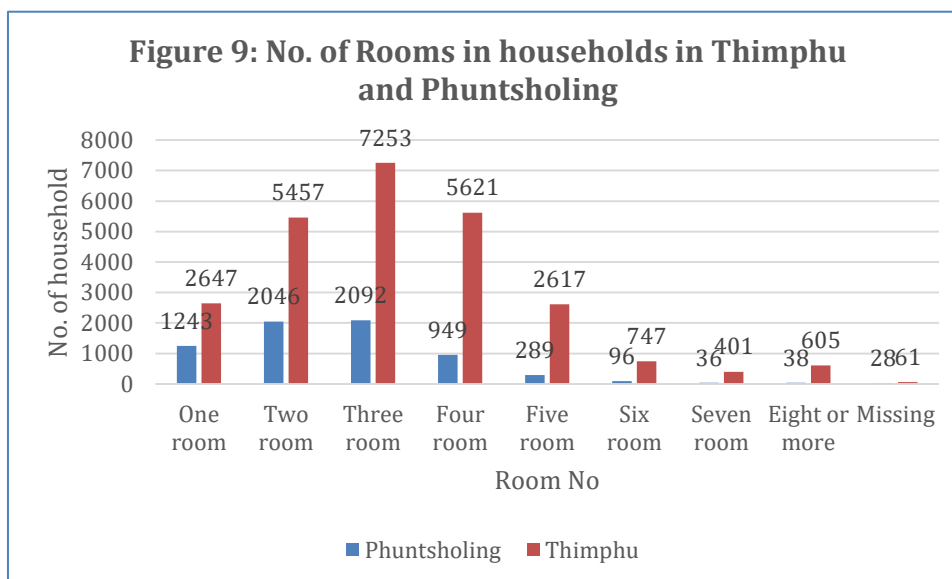


During site visit to the respective sites and interview with people living in the locality of informal settlements in Phuntsholing and Thimphu, it was found that there is inadequate toilet facility and was even observed that the available toilets are long drop latrine being built in open area and shared among number of households and there is no separate bathroom as such.

Such toilet facilities cause unhygienic living conditions leading to public health risks in the long term.

3.3 Dearth of adequate living Space and decent standard of accommodation

One of the criteria even for slum as per the UN Habitat is living space sufficient for not more than three people. There are significant number of households who share rooms as can be understood from the figure 9 below:



Source: PHCB 2017

From figure 9 it is evident that, on an average in Phuntsholing Thromde, 4.01 people have to share a room and similarly in Thimphu 4.51 people have to share a room, which, is in breach of UN habitats norm of *not more than three people per room*.

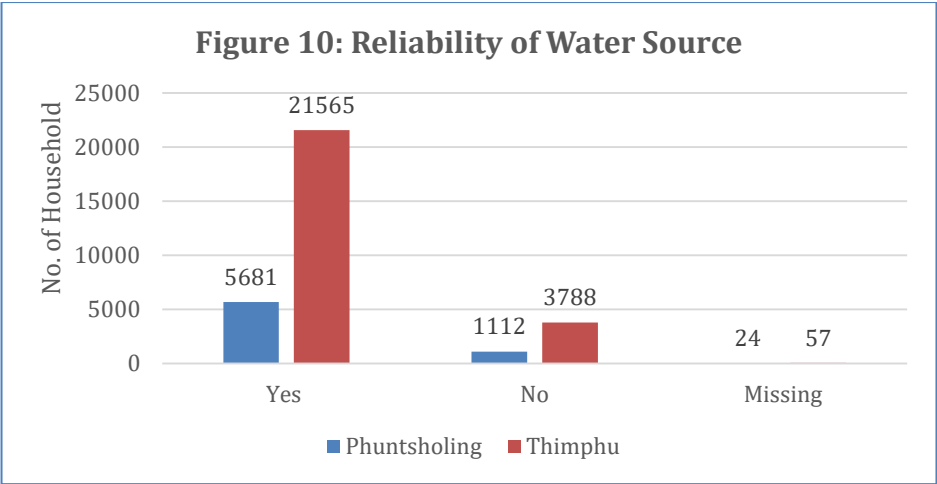
It can be clearly seen that significant number of households in Thimphu (2647) and Phuntsholing (1243) live in one room housing units. The lack of adequate social and private space have impact on privacy and social expressions. Therefore, the scenario if not acted upon is a cause for concern in the long run.

3.4 Inadequate drinking water supply in informal settlements

Adequate water supply is essential to live a hygienic life. The inhabitants of informal settlement are provided water for fixed durations of the day.

The Bhutan water policy states that, *water is essential for human survival and health. Therefore every individual has the right to safe, affordable and sufficient quantity of water for personal consumption and sanitation*. However, during site visits it was revealed that water supply was only for a fixed duration during the day and the quantity is not adequate.

As per data from the PHCB 2017, the water source is reliable in general but there are certain sections of the population that do not have reliable water supply. The reliability of water sources in both the Thromdes as per the PHCB 2017 are presented in figure 10:



Source: PHCB 2017, NSB

Figure 10 depicts the reliability of water sources in Thimphu and Phuntsholing thromde. It shows that in Thimphu thromde 3788 (17.9%) household and 1112 (16.31%) household in Phuntsholing Thromde doesn't have reliable water source.

The performance audit of “Drinking Water in Thimphu Municipality” undertaken by RAA in July 2017, have also highlighted that there was inadequate water supply in most of the area under Thimphu Thromde and the distribution was also inequitable.

Similarly, water supply was inadequate in the informal settlement in Bhalujora, Phuntsholing. The situations are depicted in the pictures below:



Since water is essential for life and hygienic living, all people require access to adequate, reliable and safe water irrespective of where they live. In the long run, inadequate access to reliable and safe water may also pose public health risks and undesirable outcomes.

3.5 Low quality material used for wall, roof and floor construction in informal settlement.

Basic purpose of a shelter is to protect the inmates from the risks of unfavourable natural elements and disasters. Quality and durability of the structures are critical to the life and safety of inhabitants. While most of the structures within the respective thromde jurisdictions are safe and sound complying with the regulatory requirements such as

building rules, the structures in the informal settlements are a cause for concern as discussed hereunder:

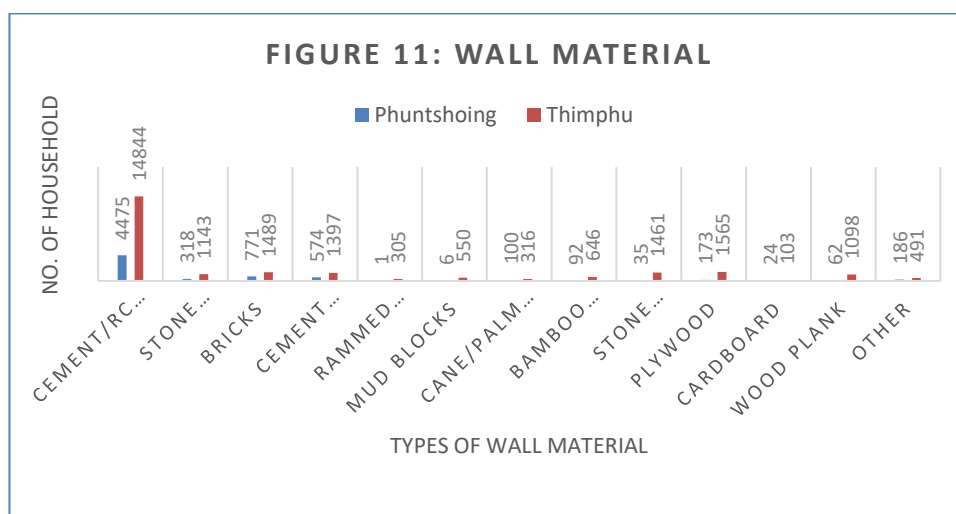
- Wall material

While the wall materials within the formal sections of the respective thromde areas were resilient, the wall materials of informal settlements are not as safe and strong.

Bhutan Building Rules 2002 requires that:

‘The floor and walls of the basement floors shall be provided with damp proofing treatment’

Wall material of the structures in Thimphu and Phuntsholing Thromdes as per PHCB 2017, are presented below:



Source: PHCB 2017, NSB

As can be seen in the figure 11, in Phuntsholing 486 (7.13%) households have unsafe wall material and similarly in Thimphu Thromde, 5189 (20.42%) household have unsafe kind of wall materials consisting of cane, bamboo, stone, plywood, card board and wood planks. These unsafe wall materials are observed in informal settlements.

During site visits, it was observed that the wall material of those settlements are made from bitumen barrels, CGI sheet, bamboo and ply board for external wall and thin wood and waste cardboard boxes are used as an internal wall partition.

The pictures below gives a glimpse into the wall materials of the informal settlements of both Thimphu and Phuntsholing:



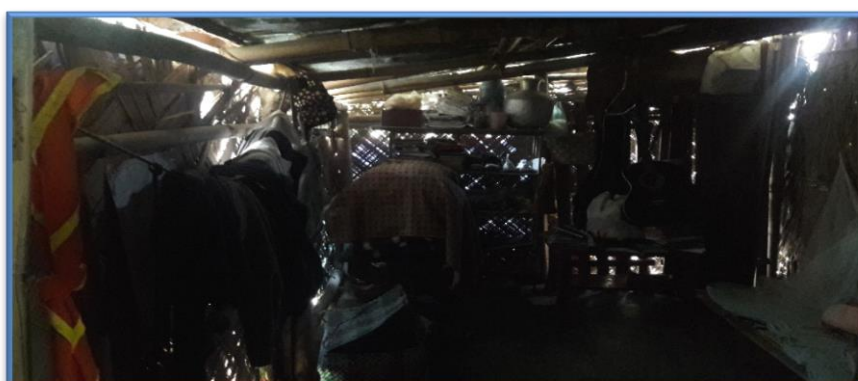
Bitumen Barrel Walls



Open electricity meter box



Bamboo Wall



Wall material (Bamboo) for living room to one of girl student who lives with her parents at Bhalujora in Phuntsholing.

These kinds of wall materials poses security risks. They are prone to fire hazards due to electric short circuit because electricity meter boxes are fixed on the walls without any

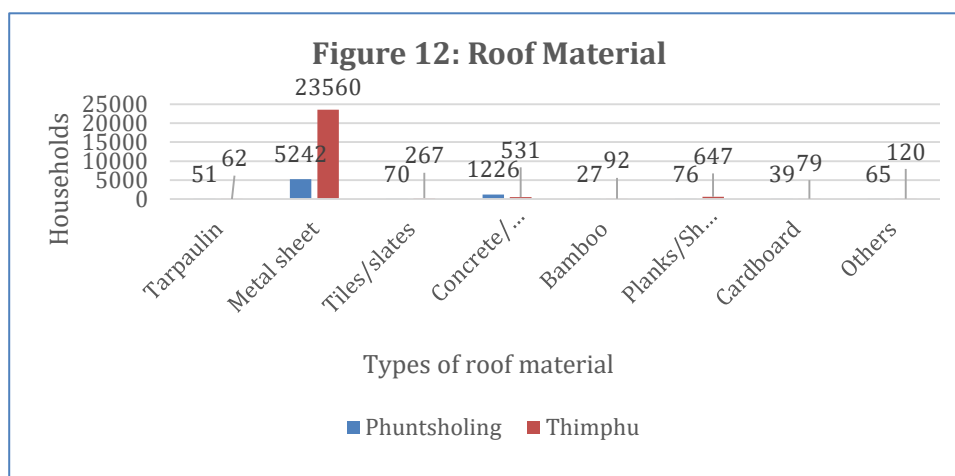
safety measures. If not acted upon in a timely manner, it could aggravate safety, privacy and hosts of undesirable social issues.

- Roof material

Similar to the wall, roof materials are also critical for safety and structural resilience of the houses. The roof materials of formal sections of the thromde apparently are sound with the use mostly of CGI sheets. The roof material of the informal settlements are not proper.

Bhutan Building rules 2002 states that the *roof pitches should be between 12 degree and 15 degree for profiled metal sheeting or in accordance with technical requirements for other materials.*

The types of roof material as per the PHCB 2017 are depict as below:



Source: PHCB 2017, NSB

As can be seen above, most of the households have proper roofing, however, in Phuntsholing Thromde 2.08% households and in Thimphu Thromde 3.23% household have roofs made out of materials such as Bamboo, Planks, Tarpaulin and waste cardboard boxes.

During the site visits, most of the informal settlement in Phuntsholing and Thimphu have temporary roofing made of CGI sheet supported by planks and stone, while in other settlements it is shroud with tarpaulin and waste cardboard boxes.

The following pictures offers an insight into the situation of the informal settlements roofing:



Roof material, below Babesa High way



Ceiling made of waste cardboard boxes



Roof material of Chang jiji



Temporary roofing in Changidphu

Improper and unsafe roofing in informal settlements pose risks to the inhabitants. During the summers the hutments can get extremely hot and in winter can get too cold.

3.6 Lack of sewerage at informal settlement sites.

The requirement of proper sewerage system for any kind of settlement is a basic requirement. The Bhutan building rules 2002 requires '*Drainage layout plan connecting to the nearest storm water drain.*'

However, during the site visit it was observed that the informal settlement have no proper drainage system. The waste water and water from the settlements flows in open spaces. The lack of sewage system can deteriorate surrounding hygiene.

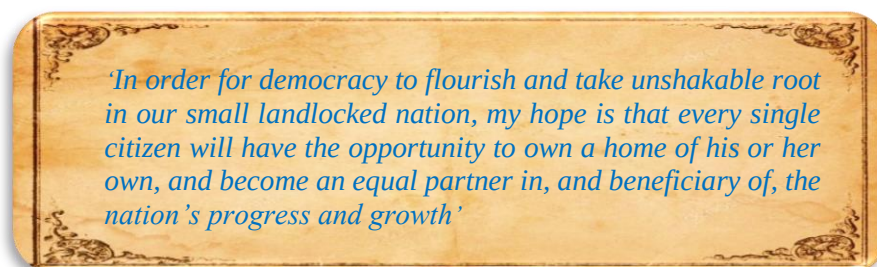
Waste water flowing in open space



4. Home Ownership

Owning a home is the most satisfying experience of a family. The pride and happiness of living in an owned home cannot be underscored especially for middle and low income families in urban areas. Home ownership is the springboard for wellbeing, security and economic opportunities.

Home ownership is an important vision of His Majesty the King as quoted in the excerpt below:



Similarly, home ownership was envisioned as one of the main policy objectives of National Housing Policy 2002 as well as the Draft National Human Settlement Policy 2015. Upon review of current situations on home ownership, it is not so encouraging. There is a need to make conducive legal and policy environment for home ownership. There are also need to address the factors along the whole supply chain of housing development to reduce the overall costs and make ownership affordable.

The issues in home ownership are discussed in details below:

4.1 Low proportion of owner occupied houses

The objectives of the National Housing Policy 2002 and Draft Human Settlement Policy 2015 are to promote home ownership. The policy objectives are excerpted as follows:

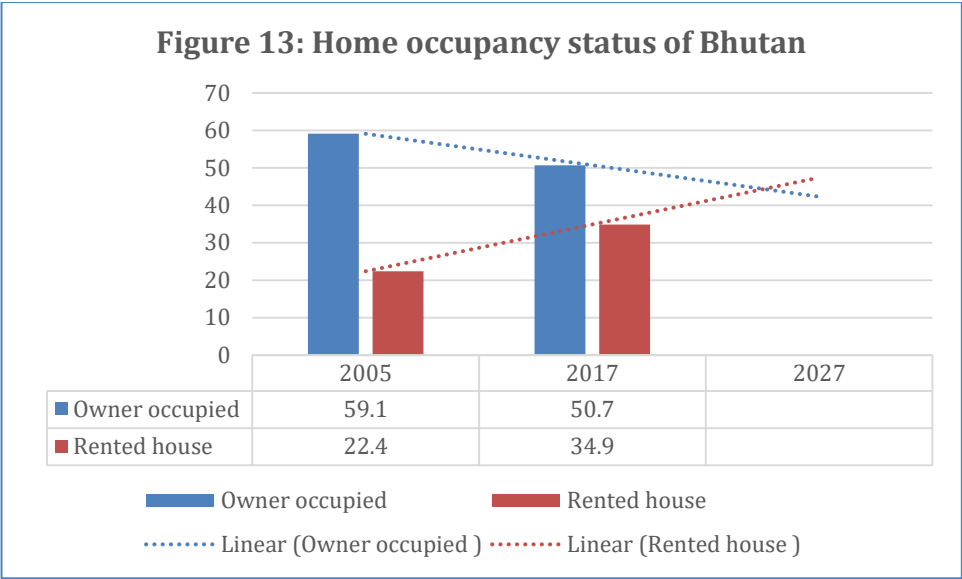
1. National Housing Policy 2002:

- to promote home ownership

2. Draft National Human Settlement Policy 2015:

- to promote and create an enabling environment for home ownership

Review of data from Population and Housing Census of Bhutan 2005 and 2017 revealed that proportion of owner occupied houses is actually decreasing. Similarly the proportion of rental housing is increasing over the same period. The situation is presented graphically in figure 13:



Source: PHCB 2005, 2017, NSB

From figure 13 above, it can be clearly seen that, during the period from 2005 to 2017 the owner occupied homes showed a decrease (indicated by Blue bar/line) and rental tenure had increased (indicated by red bar/line). In 2005, 59.1% the households were owners of homes they were living in but by 2017 the figure has decreased to 50.7%. On the other hand, the household living in rented homes increased from 22.4% in 2005 to 34.9% in 2017. However, in absolute terms there were actual increase in housing stocks.

Apart from the statement of intend in the respective policies, nothing concrete has been achieved in terms of promotion of home ownership. It was revealed that there were neither specific strategies focused on home ownership nor financial resources allocated at the government level.

As can be seen in the graph, a simple linear projection (dotted lines) shows that before 2027, the proportion of owner occupied houses would continue to decrease and be outstripped by the occupancy on rental basis under the current circumstances. There is a need to strategize and initiate interventions that would favorably reverse the current trend and promote home ownership.

Part – B (2): Causes

The issues of inadequacy, affordability and livability in housing development are caused by multiple factors. Deficiencies in laws and policies and their implementations impeded housing development in general. Rapid urbanization, rural-urban migration and scarcity of land led to inadequacy of housing. Similarly, high cost of housing finance and cost of construction materials had caused the increase in rental expenses amongst others. The causes of issues in housing development are discussed in detail as follows:

1. Rapid urbanization

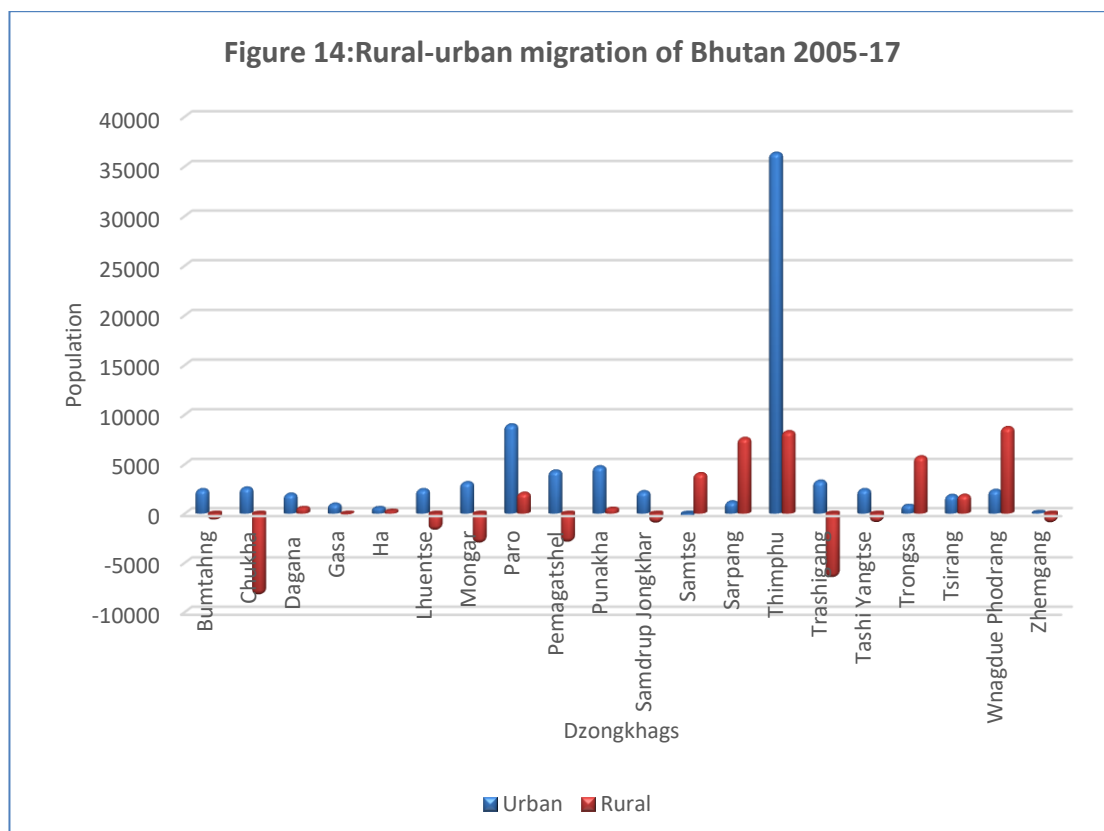
Rapid urbanization is one of the main contributing factors to housing adequacy and affordability. Urbanization is one of the unstoppable global megatrends of the century. It is predicted that majority of humanity will live in cities by 2050 (Yonge, 2018). Similarly, the trend is also catching up in urban centers like Thimphu, Phuntsholing and other urban areas of Bhutan. NSB recently projected that 56.8% (National Statistics Bureau, 2019) of the population will live in urban areas by 2047. Huge convergence of people from different regions to these cities increase pressure on infrastructures and amenities like housing.

Issues of rapid urbanization are discussed below;

1.1 Undesirable impact of increase in rural-urban migration on housing development

Scarcity and high cost of rental housing are in part triggered by increase in urban population. Rural-urban migration is one of the main factors attributable to increase in population in urban centers like Thimphu and Phuntsholing.

As can be seen from the figure below increase in rural-urban migration is quite alarming with the general population growth rate being meagre at 1.3% as of March 2017.



The figure given above is determined based on the change in population between 2005 and 2017 as reported in the Population and Housing Census of Bhutan 2005 and 2017.

From the figure above it can be deduced that the urban centers are experiencing a huge influx of population. Thimphu by far has seen the biggest increase in population.

Rapid urbanization is compounded by the trend of increasing empty households in the rural areas. The empty households has become a cause for concern and important topic of policy discourse.

The situation of Gungtong (empty households) can be seen from figure 15 below.

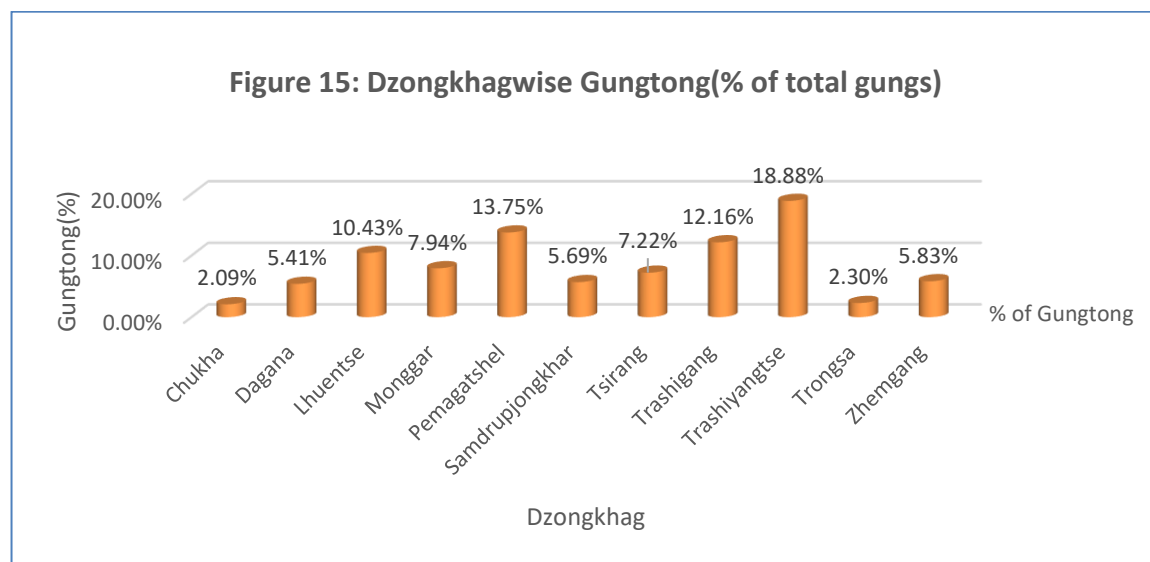


Figure 15 contains data of Gungtong from 11 dzongkhags which has more than 2% of total households. As can be seen above the Gungtong displays a pattern. The figures above shows that people have migrated from the east and south to west and central dzongkhags.

For various reasons such as better economic opportunities, old age, better facilities etc, people have migrated from these rural areas to the urban places such as Thimphu, Phuntsholing and other towns.

This demographic changes has acted as double edged sword. It has let to increasing pressure on infrastructures such as housing in the urban areas and underutilization of the houses and land in rural areas.

2. Land for housing development

Bhutan is largely a landlocked country located in the Himalayan mountain range. With the increase in demand for various developmental needs, land is becoming a prized asset and a scarce resource under the current circumstances. The overall land area is as depicted in the table below:

Table 5: Summary of Bhutan's land cover

Land Cover	Area (Ha)	Area (%)
Alpine Scrubs	130,097.72	3.39%
Built Up	7,457.03	0.19%
Cultivated Agriculture	105,682.43	2.75%
Forests	2,717,161.64	70.77%
landslides	3,730.22	0.10%

Meadows	96,273.61	2.51%
Moraines	14,393.94	0.37%
Non Built up	595.89	0.02%
Rocky Outcrops	159,455.55	4.15%
Shrubs	374,032.56	9.74%
Snow and Glacier	205,343.63	5.35%
Water Bodies	25,175.78	0.66%
Grand Total	3,839,400.00	100.00%
<i>Source: MoAF, Forest resources Management Division</i>		

It can be seen in the table above that about 70.77% is under forest cover. Farming and built-up areas have only occupied about 3% of the total land area. Meadows (2.51%) and Shrubs (9.74%) account for significant area.

The agriculture and built-up area translates to 468,992.77 acres in total as can be seen below:

Table 6: Details of land categories

Land categories	Area (acres)	Percentage %
Kamzhing	336,307.00	71.71
Chhuzhing	74,750.03	15.94
Orchard	22,761.54	4.85
Khimsa	13,094.85	2.79
Others	22,079.35	4.71
TOTAL	468,992.77	100

Source: National Land Commission

When it comes to housing development, land is one of the factors contributing towards the cost of housing development. The particulars of land related issues are discussed in detail hereunder:

2.1 Lack of land use and zoning plans for Thimphu and Phuntsholing thromdes

According to the National Housing Policy 2002, the DUDH, Ministry of Communications, on behalf of the government, shall be responsible for Preparation of land use/zoning plan for all urban centers, with particular reference to residential and housing districts.

However, upon review it was revealed that there is no use based zoning plan being formulated. The Thimphu Structure Plan 2002-2027, categorically negates the idea of western style land use zoning as being monotonous. It proposes the concept of ‘urban villages’ as ‘precincts’ envisioning mixed use of the available land. The idea of precincts are presented vaguely without details of the area required for various functionalities within the identified urban villages. The structure plan does not detail the land use within the precincts for various functions such as residential, commercial and institutional uses. The proper implementations and monitoring of the structure plan is generally lacking in Thimphu thromde.

Similarly, the structure plan of Phuntsholing 2013-2028 follows the same concepts of precincts and mixed use of land. One of the main rational for the mixed use precincts is to make the cities walkable and reduce vehicular use for commuting. But this rationale apparently is unrealistic since the cities are spread horizontally.

It was also given to understand that the plans for zoning are in pipeline to be undertaken by NLC along with the respective thromdes. Therefore there is a strong case for zoning the available land for major uses such as residential and commercial activities so as to have focused development in housing.

Stakeholder's Responses:

NLCS: *The NLCS responded that the aforementioned observation needs to be revisited. It stated that NLCS is aware that both the thromdes have Structure and LAP's that define zones within their jurisdiction and the implementation & monitoring were questionable. It stated that the concept of precincts in the structure plans could be revisited to get a better perspective about its usages.*

2.2 High and inconsistent valuation of land

Cost of land acquisition is one of the main factors aggravating the affordability of housing in the towns of Thimphu and Phuntsholing. The value of land in these towns are substantially higher than other places in Bhutan. When it is factored into the housing costs it drives the overall costs further up.



When cost of land is factored into the housing costs it drives the overall costs further up

Value of land in urban areas are apparently determined by proximity to the infrastructures such as road, water supply and more importantly institutions such as schools and hospitals amongst others. But when it comes to actual transaction it is usually based on speculative valuations. The valuation of land by different financial institutions and Property Assessment and Valuation Agency (PAVA) can be seen below;

Table 7: Land valuation by different institutions

Valuation of land (in sq. ft)	RICBL	BNB	BoB	T-Bank	BDBL	PAVA
Thimphu(core)	5000	4675	5000	8000	3000	2734
Thimphu(Outskirts)	1750	900	2050	900	1000	388
Phuntsholing(core)	2500	4675	3000	6500	3000	2570
Phuntsholing(outskirts)	750	700	750	700	300	565

Source: Banks and PAVA

As can be seen from the table above, the value of land is different in different financial institution. The variation is high even between various financial institutions. The rates determined by PAVA is lower but different from the values assigned by the banks. Although the purposes of PAVA and Banks are different in valuation of land, the difference is huge for the same area.

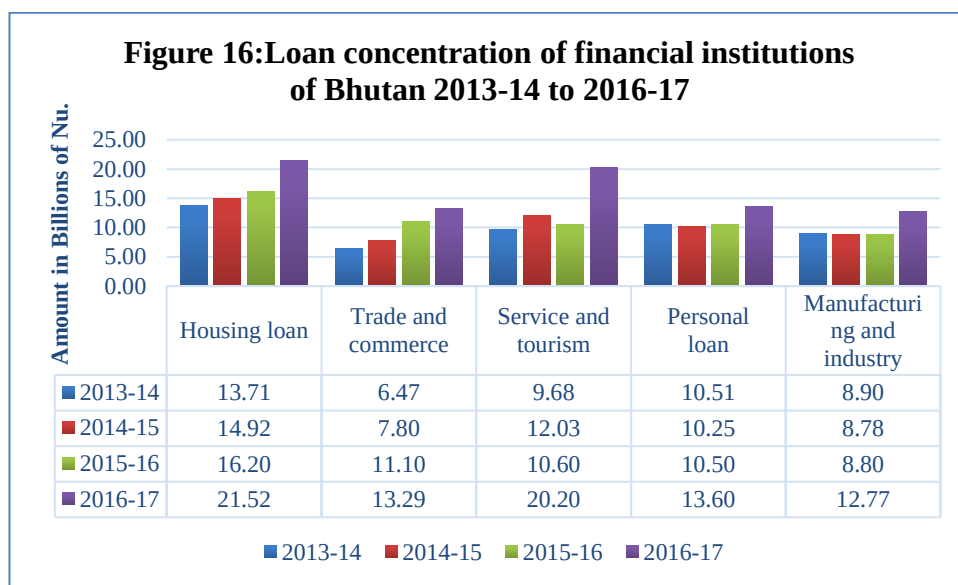
There is no guiding standard for valuation of land and property. These values are mostly determined based on forces of the market.

The values are pushed forward by the forces of market. Market economy as ideal mechanism to deliver economic benefits must have a symmetry of information. But the current land market is skewed towards landlords who hold land in speculation and prospective buyers have limited access to these market rates.

There is a strong case for establishment of functioning property market where buyers and sellers are on the same platform. The market can stabilize the valuation concerns by applying standardization..

3. Housing Finance

Cost of housing finance is considered to be one of the main factors aggravating the issue of housing affordability both rental and home ownership. While there is serious concern of housing adequacy and affordability, housing loans remain as the top lending avenue for the banks as can be seen in figure 17:



Source: RMA Annual Reports 2013-14 to 2016-17

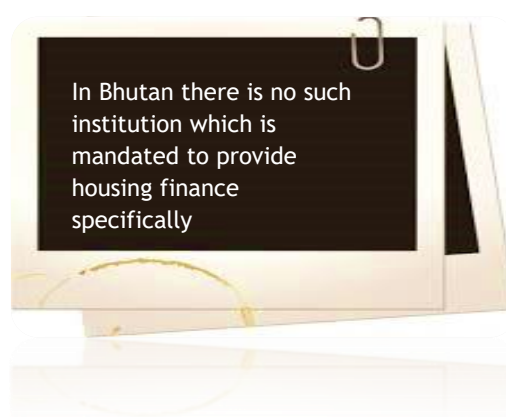
From the above figure 17, it can be seen that the housing loan is taking the largest share of the loan portfolios of total credits. Housing loan is also showing an increasing trend over the period. With relatively lesser non-performing loan (NPL), it is indicating that housing loans are lucrative loan product for the banks.

Despite providing the largest share of credit to housing there are issues related to financing that contributed to housing adequacy and affordability as discussed below:

3.1 Lack of dedicated housing financial institution

Many developing countries in Asia have dedicated housing financial institutions. These financial institutions had positive impact on the overall low cost housing development and housing market. For instance, Singapore, Japan, Hong Kong, Thailand and India all have dedicated housing financial institutions with different forms of government support such as guarantees to loan and losses.

For instance, Singapore's success story in housing is mainly attributable to its financing arrangement. The Housing Development Board (HDB) has a funding arrangement with Central Provident Fund (CPF), whereby CPF funds were used as a vehicle for housing finance. But in Bhutan there is no such institution which is mandated to provide housing finance specifically. Since housing requires huge chunk of low cost financing, there is a need for a dedicated housing financial institution. NPPF and NHDCL has the potential to replicate the Singapore story.



The RMA in collaboration with ADB had undertaken a feasibility study (ADB , 2017) for establishment of a Housing Finance Entity. This entity if established, is expected to catalyze the development of a housing market that is expected to meet the housing needs of various income groups especially the middle and low income families in the urban areas.

The report was aimed at understanding the housing scenario in order to propose for a feasibility of establishment of an institution particularly focused on provision of low cost housing finance. The report presented a number of recommendations intended to improve issues in both the supply and demand side of the housing situation in Bhutan. Subsequently, a proposal has been submitted by the RMA to the government which is still with the Cabinet.

The ADB seriously intends to support the housing development and finance. This is evident from its Country Operations Business Plan (COBP) for 2018-2020, in which about \$37 million is earmarked for the purpose of housing finance program for Bhutan. These funds are coming through concessionary windows wherein the rates of interest ranges from 0-2% with longer maturity.

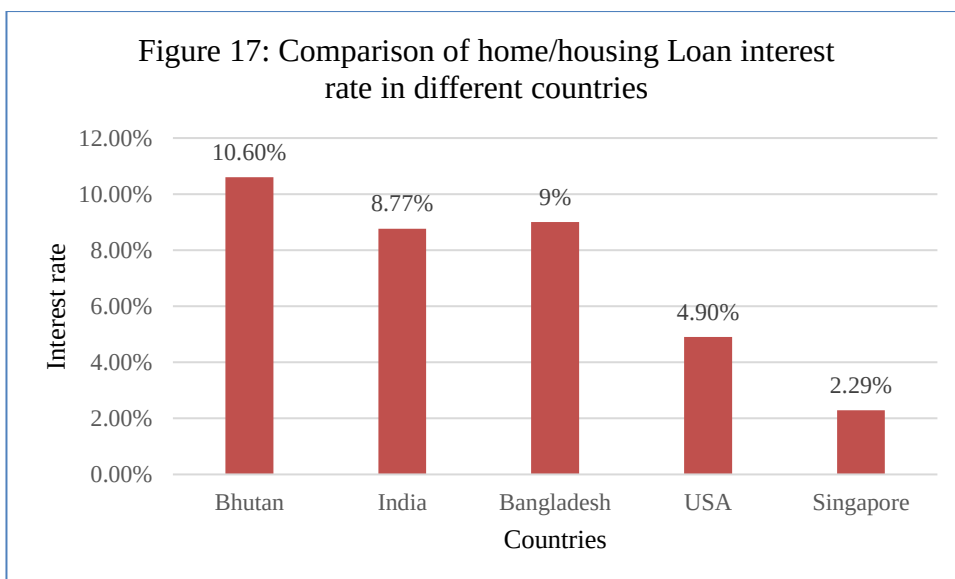
While NHDCL is faced with dearth of funding for housing development, there is no institution that is mandated with provision of affordable housing finance. There is a strong case to consider the proposal made by RMA with funding arrangements from external sources.

Stakeholder's Responses:

NLCS: *The NLCS has responded that the highlight on the need for a dedicated housing financial institution is commendable could have considered to recommend the agency to take the lead role.*

3.2 High interest rates for home and housing loans

It was revealed that one of the factors affecting housing affordability is the high cost of finance in terms of interest rate of housing and home loans. The comparison of housing loan interest rates of select countries is presented in figure 17:



As can be seen in the figure 17 above the home/housing loan interest rate is higher in Bhutan compared to select regional countries such as India and Bangladesh. The rates of interest are significantly higher than (United States of America) USA and Singapore where housing provisions are one of the best in the world. It may be underscored that rate of interests in different countries are bound to be different due to various reasons. Therefore it may not be appropriate to arrive at conclusions, however, such comparisons will throw a perspective as to where we are in terms of our housing finance and learn from the good practice.

There can be a host of reasons as to why the loan interests are higher. The rates of interest can be controlled through interventions such as measured fiscal and monetary tools. For instance, in Singapore, there are targeted housing grants and schemes made to low, middle income and ageing households to address the affordability of housing finance from the conventional loan channels.

Should the proposal of the proposed housing finance entity made by RMA be implemented, it can be a harbinger of progress in housing finance by reducing the cost of housing finance. There is also potential of NPPF-NHDCL collaboration in housing finance, drawing from the good practice of HDB-CPF arrangement of Singapore. There is a need to carefully craft macro-prudential policies in housing finance and channelize efforts to make housing finance affordable and reduce the rate of interest on home loans.

4. Construction of Houses

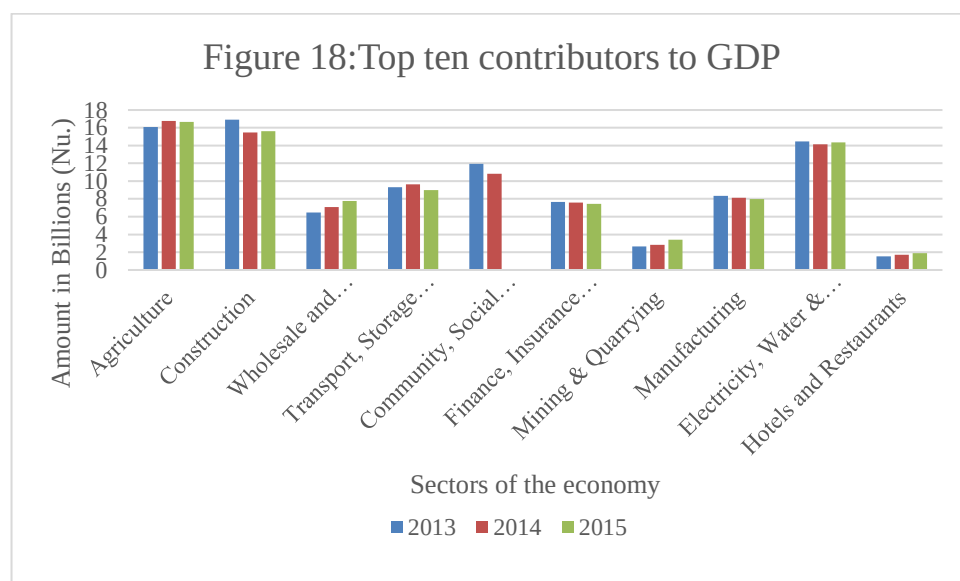
Construction materials are an important component of the cost of housing construction. It is one of the major determinants of affordability of housing structures and units.

Most of the construction materials such as steel, electrical and plumbing items are all imported, resulting in negative balance of trade. At the national level there are no strategic focus on import substitution and domestic production of construction materials. There is also a need to assess and aggregate demand for construction materials so that there is reduction of costs due to scale. The issues are discussed in details hereunder;

4.1 Inadequate strategic focus on construction industry

Construction industry has the potential to support the goal of housing provisions. Housing development and development in construction industry goes hand in hand. Development

in construction industry will help expedite housing development. The construction industry is second highest contributor to GDP as can be seen in the graph below:



Source: EDP, 2016

Although it is one of the top ten sectors of the economy, currently the construction industry does not seem to have a clear sense of strategic direction. Improvement in the construction shall significantly contribute to economy through employment generation and improved infrastructures. The Ministry of works and Human settlement came up with Draft Construction Industry Policy only in 2018. It is not yet enforced. Amongst others construction industry needs to focus on the following which shall have direct impact on housing development:

- II. Mechanization: The industry is currently labour intensive. The cost of labor is seen to be manageable through the import of labour across the border from Indian towns. However the number is increasing due to the boom in the construction sector. As of 2017(PHCB 2017) there are about 42,425 non-Bhutanese which is mostly composed of migrant labourers. This trend is undesirable and not sustainable for economy in the long term. The EDP 2016 and draft Construction Industry Policy 2018 has outlined the need to study the opportunities of mechanization in the industry. Given the small population and shortage of skilled labour, mechanization could be the solution. Mechanization shall reduce the costs and dependency on imported labour and to that extent avoid economic and social costs.
- III. Innovation: There is a need to encourage innovation in the areas of construction materials, methods and technologies. The innovations in domestic production of construction materials shall result in reduction of costs and improvements in quality of infrastructures. New methods and technologies shall also result in improved efficiency in constructions. The Draft National Construction Industry Policy 2018 outlines the need for research and development in the industry.
- IV. Promotion of quality control and assurance mechanisms: Currently a lot of public infrastructures get dilapidated due to substandard quality of materials and workmanships. Government appropriations reveal that more than 60%

of the total outlay is allocated for procurement, of which about 80% accounts for procurement of construction works. There is need to upscale the quality control and assurance mechanisms. The draft construction industry policy has set quality assurance as one of the policy objectives.

Approaching the construction industry strategically could yield long term benefits to the national economy. First step towards realizing the goals of the construction industry is setting a strategic direction. There is an immediate need to adopt and implement the National construction industry policy. This way it could not only lead to quality housing but also all public infrastructures.

4.2 Inadequate focus on domestic production of construction materials

Currently, Bhutan is heavily dependent on imports for a lot of items of construction materials often paying high prices. As of 2017 Bhutan is importing virtually every construction material. The details of import of construction related materials are presented below:

Table 8: Import of construction materials as of 2017

Import of materials related to Construction	Amount (Nu. In millions)
Plastics and articles thereof	1,841.62
Rubber and articles thereof	994.86
Wood and articles of wood	1,606.18
Articles of stone, plaster, cement, asbestos, mica or similar materials	400.75
Ceramic products	362.88
Glass and glassware	424.42
Iron and steel.	3,963.97
Articles of iron or steel	2,750.24
Copper and articles thereof.	127.85
Aluminium and articles thereof	457.06
Lead and articles thereof.	5
Zinc and articles thereof.	0.7
Tin and articles thereof.	0.12
Other base metals; cermet's; articles thereof.	30
Tools, implements, of base metal parts thereof of base metal.	183.02
Miscellaneous articles of base metal.	197
Electrical machinery and equipment; and parts thereof;	8,453.00
Total	21,798.11
Import of materials related to construction as % of total imports	32.54%
<i>Source: Bhutan Trade Statistics 2017, MoF</i>	

As can be seen above, according to the Bhutan trade statistics 2017, the import of construction related materials accounted to as high as **32.54%** of the total imports. In absolute terms Bhutan imported construction related materials worth Nu.21.80 billion in 2017 alone.

The data was presented in details as per Bhutan Trade Classification codes, 2017, which might include items which may not be directly related to housing construction. However it

is clearly indicative that import of construction materials consumes a huge amount of resources.

Review of Economic Development Policy 2016, revealed that government is cognizant that construction sector is the number one contributor to GDP. It had also outlined the need to incentivize domestic production.

The EDP 2016 broadly outlined that *‘the Royal Government shall adopt Industrialized Building Systems and encourage the manufacture of prefabricated and standardized components. The use of local construction materials shall be incentivized.’* Until today nothing concrete has been achieved in promoting domestic production of construction materials.

Further, the Draft National Construction Industry Policy 2018, states that:

- *The Government shall promote construction material manufacturing industry and provide incentives to the local manufacturers;*
- *The Government shall explore the possibility of manufacturing of Construction Materials by local manufacturers and shall prioritize import substitution.*

As recognized, the domestic production of construction materials need focused approach. Creating an industry for all construction materials could be a long term endeavor but with strategic focus and meticulous planning it can be achieved. There is a need to initiate programs for domestic production of construction materials of items, based on strategic economic advantage. In the long term this shall positively contribute to economic self-reliance and resilience. The immediate action towards domestic production of construction materials is adoption and implementation of the Draft National Construction Industry policy 2018.

Stakeholder’s Reponses:

NLCS: *The NLCS has responded that it wonders whether it is appropriate to refer to Draft policies such as Construction Industry policy and Human Settlement Policy because the fact that is a draft indicated that there could be some problems. It stated that review of the draft policies would have added a lot of value.*

5. Legal and policy framework

Legislations and policies are the sources of strategic intentions. Most of the issues relating to housing development has roots in legal and policy inadequacies. The specific deficiencies and lapses in policy implementations are detailed hereunder:

5.1 Inadequacy of legal basis for housing development

Any developmental agenda draws its mandate from a legal statute. Once the legal mandate is clearly defined, institutions have a strategic focus in terms of implementing intends of the law.

There is positive correlation between countries having legislation on housing development and progress in housing provision. For instance Singapore has Housing and Development Act 2004, which clearly defines the objectives, mandates and functions of institutions for housing development. Housing Development Board was established with clear mandates under the Housing and Development Act 2004 (latest version of the Act passed in 1960). Today 90.7% (Department of Statistics of Singapore, 2018) of Singaporeans are home owners and it is one of the main reasons for the unprecedented developmental outcomes for Singapore.

Similarly Canada has National Housing Act of Canada 2007, which specifically designated Mortgage and Housing Corporation as the implementing agency for housing development, clearly defining its mandates. Today 70% (Canadian Home Owners Association, 2018) of Canadians own homes. Residential Construction is the largest industry in Canada creating most number of jobs and economic impact in the country.

In case of Bhutan, it does not have a legislation specifically for housing development. Only document that is in force is the National Housing Development Policy 2002, which at best, do not have legal teeth. In absence of a legal handle, it is less likely to be implemented. The draft National Human Settlement Policy 2015 recognized the absence of legislation in human settlement planning and proposes for a ‘Spatial Planning Act’. If enacted Spatial planning Act shall govern the overall human settlement planning and housing could be only a small component, whereas housing development merits a separate legislation given the current situation of housing especially in the urban centers. Therefore, there is a need for a legislation separately for housing development in order to create necessary impact on housing development.

5.2 Limited relevance of National Housing Development Policy 2002

National Housing Development policy came into force in 2002. Since then a flurry of changes took place in the country in terms of institutional systems. Today the policy is out of date with the changed institutional arrangements, their respective functions and mandates.

The policy was brought about by the erstwhile Ministry of Communications. The Ministry got split in 2003 into two Ministries of Information and Communications and Works and Human Settlements. The functions of the housing development by nature fell within the jurisdiction of Ministry of Works and Human Settlements.

According to National Housing Policy 2002, the functions of housing development was vested with the Department of Urban Development and Housing (DUDH) of the erstwhile Ministry of Communications. After the bifurcation of the Ministry of Communications the regulating and implementing functions of housing development was morphed.

NHDCL was created in 2006 out of the Department of Urban Development and Housing (DUDH) of the erstwhile Ministry of Communications.

The MoWHS drafted a National Human Settlements policy in 2015 and submitted to the Cabinet. The policy could not get adopted as on date of audit (January 2019). Similarly, MoWHS has initiated review of National Housing Policy 2002, which the ministry says shall be completed soon.

Since the Human Settlements Policy is not adopted and review of National Housing Policy is not complete, National Housing Policy 2002 is in force. The various provisions of the policy in force is outdated including the mandates and responsibilities of regulating and implementing agencies. There is an impending need to expedite the review of National Housing Policy 2002 and adopt the Draft National Human Settlement Policy 2015.

Stakeholder’s response:

NLCS: *NLCS responded that the discussion on ‘National Housing Policy 2002’ should have been linked to the recent initiative of MoWHS to review the same. It stated that in doing so the report could have looked at gamut of issues that should best address the challenges Bhutan is facing.*

5.3 Lack of a strategic focus on housing development at the policy level

Housing development is one of the most resource intensive and long term endeavor for any government or state. Housing development is usually undertaken as mega-projects often taking decades on end. Such humongous interventions must have a strategic focus at the macro-economic level in order to achieve the intended outcomes.

Housing development example of Singapore is widely cited. Singapore had well-crafted strategic focus since the 1960s. Housing Development Board (HDB) of Singapore is the main agency mandated with housing development. It had its strategic plans that developed housing schemes according to the needs of various income groups of people. The HDB in turn is guided by the annual masterplans for land use developed by the Urban Redevelopment Authority (URA).

In Bhutanese context, NHDCL's mandate is to take care of the residential housing needs of the civil servants. There is no agency mandated to come-up with housing for the rest of the population comprising of the employees of the corporate and the private sector. Therefore there is a need for a National level strategic plan for housing development with clear mandates and goals.

5.4 Lack of a central agency responsible for coordinating housing development activities of the various entities

Housing development is huge mandate and it requires the coordinated efforts of the many agencies over a long period of time. The second pay commission recommended the government to explore the opportunity for NPPF, NHDCL and NLC to work together to increase the supply of low income housing.



Currently there lacks a coordinating nodal agency at the national level to coordinate the functions of the different institutions and gear towards the National goal of housing development.

There are many entities, contributing to housing development in Bhutan but they work in silos. The functions are all scattered over different institutions without a sense of collective directions in terms of housing development of the country.

The NHDCL is concerned with its mandate of management of residential housing of the civil servants. NPPF is taking housing development as its investment avenue. The financial institutions provide housing loans as a lucrative credit option to increase returns. The private real estate developers are also concerned about their bottom-line. The individual home builders are at best small and cannot construct at scale. Most of the construction materials are imported except for timber, sand and cement to a certain extent.

From a macro-economic perspective, this looks haphazard. There is no collective sense of direction. All the institutions concerned moved within their silo-based directions. There is no common goal for housing development. The National Housing Policy 2002 and the Draft Human Settlement Policies neither designate nor define a clear direction as to the roles each institution need to play in order to achieve a common goal of housing development.

The Draft Human Settlement Policy 2015 generally identified Ministry of Works and Human Settlement as the principle implementing agency but in practice MoWHS does not

have a dedicated division for housing development. The draft policy iterated the establishment of an independent agency for human settlement planning and development as one of its objectives while housing development alone merit a nodal agency at the national level.

Currently there lacks a coordinating nodal agency at the national level to coordinate the functions of the different institutions and gear towards the National goal of housing development.

5.5 Legal and institutional preparedness for ownership of house

In the rural context, farm houses are mostly owned by single family units and the issues of sharing and rights is almost non-existent. But with urbanization, there are bigger and higher multi-unit buildings. With multiple units and multiple owners within the same building and the property, there are issues of sharing of the title, expenses and related obligations.



In order to promote home ownership in the urban areas, it is prerequisite to create conducive environment. One of the most important enabling factor is the legal aspects of owning a condominium.

Currently, there is uncertainty around the legal aspect of flat ownership in urban areas. Apart from general legal provisions for dispute resolution and property rights, there is no law or legal provision which serves the needs of ownership of a condo. There is a need for clear legal provisions not limited to but including the following:

- i. Ownership right and title for condos and land;
- ii. Sharing of common spaces such as stairs, parking and their up-keeping;
- iii. Obligations on repairs, maintenance and up keep of common spaces;
- iv. Security arrangements within the building and sharing of costs; and
- v. Rights and obligations during disasters.

Further, there is no institution recognized and empowered to regulate and address issues related to such homes. There is an imminent need to have clear legal provisions covering the rights and responsibilities of the owners of units within a given building. Moreover there is also need to establish institutions to resolve disputes arising out of such homes.

Stakeholder's response:

NLCS: *NLCS responded that with regard to legal and institutional preparedness for ownership of house, there should not be any concern for some time to come. It is because the NLCS took the initiative to draft and approve the "Strata Transaction Guidelines". It stated that the same was launched on 8th January 2019 and is rigorously under implementation.*

CHAPTER 4: RECOMMENDATIONS

Based on the deficiencies and causes identified under Chapter 3, the RAA has formulated series of recommendations aimed at addressing the issues of housing development. The recommendations are primarily drawn on the basis of inadequacies in the policies, regulations, institutional arrangements and overall housing scenario in the urban centres. The recommendations are presented in six broad categories as under:

1. Legal, policy and institutional systems

Any developmental agenda is guided by properly laid legal, policy and institutional systems. Although there is policy and institutions responsible for housing development, there are number of deficiencies with regard to legal, policy and institutional systems. In the hope of effecting necessary changes RAA makes the following recommendations:

1.1. Enactment of housing development Act

There is positive correlation between countries having legislation on housing development and outcomes in housing provision. For instance Singapore is one of the pioneers in terms of housing development and home ownership. Similarly Canada is also one of the countries making good progress in housing development. Both of these countries have legislations specific to housing development.

There is no legislation specifically for housing development in Bhutan. National Housing Development Policy 2002, do not have legal teeth. Given the grim situation of housing in urban centers, a separate legislation may be desirable in order to generate adequate focus and outcomes. Therefore, MoWHS must propose for the enactment of a housing development act for Bhutan.

1.2. Need to revise and implement National Housing Policy

Most of the provisions of National Housing Development Policy 2002 are obsolete and outdated due to changes in institutional set-up. The process of review of National Housing policy was said to be initiated by MoWHS. There is an imminent need to adopt and implement it.

Therefore, MoWHS should expedite revision and implement the revised National Housing Policy 2002.

1.3. Need to review, adopt and implement draft Human Settlement Policy 2015

The draft Human Settlement Policy of Bhutan 2015 is submitted by the MoWHS to the Cabinet but it is not yet adopted. The draft policy amongst others contains many important provisions such as:

- Creating enabling environment for Home-ownership
- Preservation and promotion of indigenous architecture and heritage sites
- Environment protection through, water resource management, waste management and disaster risk reduction

The draft National Human Settlement Policy 2015 must also be harmonized with respect to provisions of other policies such as revised draft of National Housing Policy. For instance the rental affordability benchmark as per 30% as per National Housing Policy whereas it is 35% of household income as per Draft National Human Settlement Policy.

It is therefore recommended that the draft Human Settlement Policy of Bhutan 2015 be not only adopted and implemented but also harmonized with extant policies, since the current housing situation has imminent need for policy intervention.

1.4. Need to develop livability index

As it was discussed in the preceding sections of this report, though the policies highlight the need to develop livable houses, nowhere it was defined what livability means. There is a need for a clear set of dimensions that define livability. Without a defined benchmark it is not measurable and difficult to monitor and regulate livability of houses.

There are pockets of informal settlements both in Phuntsholing and Thimphu Thromde's where livability is compromised in terms of basic amenities such as water supply, sanitation, living space and safety of structures. The authorities concerned must either improve the living conditions of the informal settlements or eliminate the informal settlements in a phased manner. The RAA recommends development of a comprehensive livability index and accordingly enforce its implementation.

1.5. Need to establish central regulating and coordinating agency for housing development

Currently housing development functions are handled by various agencies such as NHDCL, NPPF, Banks and private developers in a scattered manner without a sense of focus and common direction. This is apparently due to lack of a central regulating and coordinating agency.

There is lack of coherent and sustained efforts by agencies such as NPPF, NHDCL and Banks who are undertaking housing development. There are rooms for potential collaborations in terms of designing, financing and building. However there is no platform for the agencies to come together to collaborate. It is therefore recommended that MoWHS establish a central regulating and coordinating agency under it so that the complimentary functions are harnessed and guided towards a common purpose of housing development.

1.6. Necessity for housing needs assessment and clear road map for housing development

It was revealed that there were no records of housing needs assessment being carried out at the National level. There are no records, if any of housing needs being assessed at the national level either with the MoWHS or the Thromdes of Thimphu and Phuntsholing.

NHDCL has a needs assessment division but have not carried out any needs assessment except for the Special housing project in Phuntsholing. Therefore there is a requirement to assess the housing needs at the National level based on requisite parameters such as population and economic indicators. Based on the needs assessment, the government may in collaboration with key stakeholders such as NHDCL come up with a clear road map including funding arrangements.

2. Home ownership

Home ownership was one of the three main objectives of the National Housing Development Policy 2002. It is also reflected in the draft human settlement policy under a separate section. Home ownership is the dream and the basic socio-economic launch pad

of a family. The current situation does not provide much scope and opportunities in promoting home ownership. RAA offers the following recommendations to help promote home ownership initiatives.

2.1. Need for a comprehensive home ownership policy

Despite clear statements of intent in the respective policy documents, Home ownership was not pursued with vigor. The NHDCL and NPPF had piloted housing constructions with the aim of promoting home ownership with varying degrees of success. There apparently is no momentum in the direction of home ownership.

In order to promote home ownership, RAA recommends MoWHS to develop a comprehensive home ownership policy.

2.2. Need to promote conduciveness for ownership of condominiums

One obvious set back in the pursuit of home ownership is the lack of clear rights and safeguards in owning a part of a home or so called condominiums. Currently, prospective owners of parts of multi-unit housing structures are not ensured of their rights and safeguards of ownership of land, sharing of expenditure of maintenance of common spaces such as corridors, plumbing, parking space etc.

Therefore, there is a need to enact legislations clearly stipulating legal ownership rights and obligations associated with home ownership in the current situation of multi-unit buildings in urban centers.

3. Population and Housing

Increase in urban population is one of the menace to infrastructure in urban centers. Although reversing the situation may be challenging, governments can control the growth through appropriate interventions. RAA recommends the following to manage the population pressure:

3.1. Need to develop strategies to control rural-urban migration

Although the population of Bhutan grew at modest rates, the urban population grew at substantially higher rates due to rural-urban migration. Conversely there is the issue of Gungtongs in the rural areas of many dzongkhags.

This demographic changes has acted as double edged sword. It has let to increasing pressure on infrastructures such as housing in the urban areas and underutilization of the houses and land in rural areas. The RAA recommends the government to develop strategies to control the rural urban migration in the medium to long term. Some of the interventions may include:

- Reviewing and ascertaining the key reasons for rural-urban migration and making efforts to control and reverse the situation;
- Creating conducive and attractive environment in rural areas by establishing facilities & infrastructures, providing job opportunities, incentives, subsidies etc.;
- Introducing schemes to attract unemployed youth to work in rural setting; and
- Decongestion of urban centres through balanced economic developments.- Cabinet

4. Land and housing development

Scarcity and rising cost of land are some of the factors attributable to housing and affordable housing constructions. In order to promote housing development RAA offers the following recommendations.

4.1. Releasing state land for housing development on long-term lease

The scarcity and cost of land are one of the main causes impeding affordable housing construction. Due to the sheer size and unsurmountable terrain land is a scarce resource in landlocked Bhutan. Further with strong commitment to conservation, large patches of land is covered by forests. High cost of land when factored into the cost of housing it becomes unaffordable.

In order to increase land for development and reduce its cost, releasing land on lease basis apparently is one of the practicable options. Leasing could be a sustainable solution to managing and retaining the state ownership of scarce land. Therefore, the NLCS may explore the desirability and possibility of considering release of land on long-term lease for housing development in urban areas.

4.2. Promote land use certificate system

Limited land resource needs to be optimally utilized. One of the main reasons for higher cost of land is due to apparent speculative land holding. Thus the land is left under-developed in the hope of getting better prices in future resulting in spiking of land prices.

In order to get best value out of the available land there is need to start issuing land use certificate particularly for state-owned lease land in place of the current user right certificate. The current system encourages speculative holding and underutilization of land. Therefore RAA recommends NLCS to consider replacing user right certificate with land use certificate.

4.3. Need to come up with real estates in the outskirts of Thimphu Thromde

Thimphu thromde is already overcrowded and has exceeded its carrying capacity. In a recent conference on ‘Well-tempered Bhutan- creating GNH cities and villages’ organized by RIGGS and Bhutan Foundation, Professor Jonathan F.P. Rose recommended on imposing moratorium on construction within Thimphu thromde. While there may be need to review the composition of the population and its impact on the carrying capacity of the city, there is increasing pressure of the population. One plausible solution for decongestion could be allocating land from the outskirts of the Thimphu urban core for real estate development.

Further, transportation is another cost that adds to the housing affordability. The government may add trunk infrastructure like roads and public transportation system to and from these real estates to make the housing affordable and attractive. The relevant authorities and institutions such as MoWHS, NLC, NHDCL, Financial Institutions and Thimphu Thromde may work together to come up with real estates in the outskirts of Thimphu Thromde.

5. Housing Finance

Interest on housing loan in Bhutan is one of the highest in the world. The cost of finance is one of the determining factors of housing affordability, be it rental or ownership. With the hope of improving the housing finance scenario the RAA recommends the following:

5.1. Need to consider establishing housing financial institution

Many developing countries in Asia have dedicated housing financial institutions while Bhutan does not have one. Having a separate financial institution for housing, could improve access to and reduce cost of housing finance.

RMA had submitted a proposal to the Cabinet, subsequent to undertaking feasibility study in collaboration with ADB for establishing a housing financial institution in Bhutan. The ADB had even set-aside budgets in its Country Operations Business plan (COBP) 2018-2020. The funding if approved, is going to be channelized through concessional windows intending to reduce the housing loan interest rates to as low as 4%.

Therefore there is a need to consider the establishment of housing financial institution with possible funding arrangement from external sources. At a time when, NHDCL is faced with dearth of funding this could be a viable solution in providing low cost housing finance. The RMA could take the lead role in establishment of housing financial institution.

5.2. Need to explore the possibility of NPPF collaborating with NHDCL for funding for affordable housing development

Drawing from the success of HDB-CPF financing arrangement of Singapore, there is potential of NHDCL-NPPF collaboration. NHDCL is mandated with housing development for civil servants and NPPF is concerned with social safety-net of its members. While both the institutions undertake housing development involving similar functions, there is scope for convergence of efforts. NPPF can fund the NHDCL for construction of housing for civil servants like the one special housing project in Phuntsholing. NHDCL-NPPF collaboration could yield necessary impact through scale and specialization of functions.

Therefore there is need for NHDCL and NPPF to explore effective mechanisms to collaborate in development of housing for the civil servants and members. NHDCL could propose the move for collaboration.

6. Construction materials for Housing

The housing development is impeded by high cost of construction materials. The construction materials are mostly imported from India and other neighboring countries. The import of construction materials at high costs not only impacts housing development but also deteriorates the balance of trade. In order to promote domestic production and reduction of the cost of construction materials RAA recommends the following:

6.1. Need to adopt draft Construction Industry Policy 2018

Housing development goes hand-in-hand with development of the Construction Industry. Mechanization of construction methods and domestic production of construction materials

are two main activities that shall catalyze construction industry in general and housing development in particular.

There is a need to initiate programs for domestic production of construction materials of items, based on strategic economic advantage. The Draft Construction Industry Policy 2018 outlines strategies and statements for development of the Industry. Therefore there is a need to adopt and implement the Draft Construction Industry Policy 2018 with urgency to generate necessary focus and achieve outcomes for the industry. The adoption and implementation of the draft Construction Industry Policy 2018 is likely to:

- Accelerate the pace of mechanization of construction industry
- Encourage innovative construction practices
- Promote production and use of domestic construction materials
- Reduce the cost of construction materials
- Improve the quality of construction
- Promotion of Construction Industry
- Create positive impact on balance of trade and influx of foreign laborers

The MoWHS should take the lead role to push for the adoption and implementation of Construction Industry Policy 2018.

CHAPTER 5: CONCLUSION

National Housing Policy was adopted in 2002 and National Housing Development Corporation Limited was created in 2006 to address the issues related to housing. Led by Ministry of Works and Human Settlements there are number of agencies involved in housing development both directly such as NHDCL, NPPF, private real estate developers and indirectly such as banks and thromdes as facilitators. However, after almost two decades there are issues of inadequacy, unaffordability and livability of housing for most of the population in urban areas.

In this backdrop, RAA conducted a performance audit focusing on Thimphu and Phuntsholing thromdes to ascertain whether housing was adequate, affordable and livable. The audit uncovered various issues and factors attributable to these issues.

It was revealed that the Thimphu thromde had exceeded its carrying capacity and Phuntsholing could follow suit in 38 years. The relevant authorities have not maintained databases for the number of building structures and units. Housing needs were not assessed at the macro-economic level. It was found that there are a total of 3955 people comprising of 1228 families mostly from the low income level of the population as of November 2018 living across the border in Jaigaon.

Despite construction of 506 units of housing under the special project, hundreds of families still could not be brought back. Low income people are forced out across the border mainly because of affordability of rental housing in Phuntsholing, while houses in core areas of Phuntsholing are rented by non-Bhutanese traders.

It was observed that, rental expenditures are not affordable for majority of the population based on analysis undertaken on average rental expenditure taken as a ratio of civil servants pay scale. For majority of the population the rental expenditures are exceeding the policy threshold of 35% of household income. The HRA provided to the civil servants hardly covers the house rent expenditure for majority of the civil servant population.

While the houses in the formal settlements of the city meets the parameters of livability, informal settlements are grappling with substandard living conditions. It was found that there are informal settlements in 10 different location in Thimphu and 1 in Phuntsholing. These informal settlements had improper toilet and sewerage facilities. People living in these settlements had limited living space and inadequate water supplies. The housing structures in these settlements are made of low quality materials (roof and wall). These structures are vulnerable to natural disasters such as fire and not secure.

Despite policy provisions for home ownership, there is an increasing proportion of people living in rented apartments and decrease in the number of people owning homes. It was revealed that high costs were discouraging people from owning homes.

Housing development issues are traced to a number of causes such as population, land, finance, construction materials and legal & policy inadequacies. Rapid Rural-Urban migration led to increase in urban population resulting in pressures on urban infrastructures like housing. Scarcity and high land prices were pushing the cost of housing construction. High cost of financing and a lack of dedicated housing financial institution also acts as a hurdle for housing development. Construction materials imported from India and neighboring countries at high prices also affected the cost of constructions.

More importantly, the inadequacies in legal, policy and institutional systems are one of the main causes of issues in housing development. The National Housing Policy 2002 has lost its relevance and draft Human settlement policy is not adopted. The various entities are operating within their own silos without a central coordinating agency. Further, legal inadequacy of owning condominiums in multi-unit buildings in urban areas are also attributable to not so encouraging outcomes in housing development.

Notwithstanding, the issues and causes, housing development if implemented strategically could be one of the important economic activities in addition to promoting the social safety net of the middle and low income population . Once the need for a proper shelter is met people tend to work for higher economic and social goals which could spur progress of the nation to greater heights.

Annexure- Stakeholders Responses



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ROYAL GOVERNMENT OF BHUTAN
MINISTRY OF WORKS AND HUMAN SETTLEMENT
THIMPHU: BHUTAN

"Construction Industry: Solutions to Innovation and Improved Technology"

MoWHS/PPD-01/2019/2434

Dated: March 7, 2019

The Dy. Auditor General
Department of Performance and Commercial Audits
Royal Audit Authority
Kawang Jangsa, Thimphu

Subject: Draft Report of Performance Audit on Housing Development – Adequacy and Affordability

Sir,

The Ministry of Works and Human Settlement has reviewed the draft report of performance audit on Housing Development – Adequacy and Affordability, covering the period January 1, 2013 to December 31, 2017, conducted by the Royal Audit Authority. The Ministry would like to thank the RAA for having undertaken the performance audit on housing and housing development in the country, given the fact that housing adequacy and affordability have become emergent issues resulting from growth of rapid urban centers and increased rural-urban migration.

The Ministry, however, would like to point out that, during the period of the scope of the performance audit, it had not retained and maintained any mandate of housing development, once the National Housing Development Corporation was incorporated and delinked from the Ministry in 2010-2011. Even as such, the mandate of housing development in the country was fragmented once the erstwhile Ministry of Communications was bifurcated into the Ministry of Information and Communications and the Ministry of Works and Human Settlement in 2003 soon after the National Housing Policy, 2002 was adopted, without a clear lead agency charged with the mandate of housing development. In this regard, the Ministry recommends that the NHDCL and the Thromdes may be tasked to verify the veracity of the facts and figures as mentioned in the draft report of performance audit.

Given the situation and the issues that have emerged in housing and housing development in the country over the last 17 years, the Ministry began the process of reviewing and revising the National Housing Policy, 2002 in May 2018 and is expected to complete soon. The majority of issues highlighted in the draft report of performance report have been looked into and are being addressed in the revised National Housing Policy—a draft copy of which is submitted herewith for the RAA's kind perusal and reference.

The Ministry will remain to be guided by the Royal Audit Authority on housing development in the country hereafter in relation to the issues highlighted in the draft report of performance audit.

Your sincerely,

(Chencho Dorji)
Secretary



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ROYAL GOVERNMENT OF BHUTAN
NATIONAL LAND COMMISSION
THIMPHU



NLCS/DSM-25/2019/001831

འུ་ 11/3/19

The Auditor General,
Royal Audit Authority,
Thimphu.

Subject: NLCS's comments to the "Draft Audit Report: Housing Development – Adequacy and Affordability"

Honorable Dasho,

Kindly refer to your report RAA/PSAD/2018-2019/257 dated 31 January 2019 seeking therein the NLCS comments on the captioned subject.

At the very outset, NLCS would like to express our appreciation to the RAA for carrying out a commendable audit of such a vast and complex subject on 'housing' within 2 months and we are in agreement with almost all the findings and recommendations.

However, we would like to share our following views and if they merit for your kind consideration;

1. We fully agree with RAA's observation that there is no dedicated agency to maintain a comprehensive database on housing. Just as the NLCS now have a comprehensive database on land ownership, acreage, census and cadastral information there is a dire need for a housing database. As mandated by TA 2015 and TRR 2018, we also feel that the DHS under MoWHSS should take up this task seriously (Ref: p15).
2. The claim that there is a "lack of land use and zoning plans for Thimphu and Phuntsholing Thromdes" (p36) needs to be re-visited. This is because we are aware that both the Thromdes have Structure and LAPs that define zones within their jurisdiction. However, the implementation as per the zones and monitoring are questionable. Furthermore, the idea of 'precincts' as enshrined in the structure plans of the two Thromdes could be revisited to get a better understanding and perspective of its usages.
3. With reference to the "high and inconsistent valuation of land" (p37) the report may highlight the inconsistency between FI rates and PAVA and also could add value by suggesting where to draw a clear line in order to come to some "standard" as was suggested in the report while recommending thus.
4. The highlight on the need for a dedicated housing financial institution is commendable but the report could have considered to recommend the agency to take the lead role.

11/3

PSAD

Royal Audit Authority

Thimphu : Bhutan

Dairy No. 62074

Date 14/3/2019

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ROYAL GOVERNMENT OF BHUTAN
NATIONAL LAND COMMISSION
THIMPHU



5. We wonder if it is appropriate to refer to the DRAFT National Construction Industry Policy 2018 and the DRAFT National Housing Development Policy.
6. The very fact that they are in the draft form indicate that there could be some problems. (p42 and p43). Some recommendations to these drafts would have added a lot of value.
7. Similarly, a brief highlight on these two policies should have shed some better light to the policy and decision makers. Otherwise, making "an impending" case for a "need to adopt" them is far fetched.
8. The discussion on the "National Housing Policy 2002", a paper tiger, should have been linked to the recent initiative of MoWHS to review the same. In doing so, the report could have looked at the gamout of issues that should best address the challenges Bhutan is facing.
9. With regard to the concern on the "legal and institutional preparedness for ownership of house" (p45 and p48) and or apartment there should not be any concern for sometime to come. This is because the NLCS took the initiative to draft and approve the "Strata Transaction Guidelines." The same was launched on 8th of Jan 2019 and is rigorously under implementation.
10. A study of and recommendation related to how the current land tax system impact the supply and demand of land and housing should have also shed some better light to this report.

Thanking you for your continued support and cooperation.

Yours Sincerely,

(Pema Chewang)
Secretary



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ROYAL GOVERNMENT OF BHUTAN
MINISTRY OF WORKS AND HUMAN SETTLEMENT
THIMPHU: BHUTAN

"Construction Industry: Solutions to Innovation and Improved Technology"

C.c.:

1. CEO, National Housing Development Corporation Limited, Thimphu
2. Thrompons, Thimphu and Phuentsholing Thromdes
3. Directors, Departments of Human Settlement, Engineering Services and Directorate Services, MoWHS, Thimphu
4. Offtg. CPO, Policy and Planning Division, MoWHS, Thimphu



འཕྲིན་ལྷན་ཁག་གི་འཕེལ་འགྲུབ་ལས་འཛིན་ཚད་

National Housing Development Corporation Limited
Thimphu: Bhutan



NHDCL/CEO-11/2019/ 427

March 13, 2019

The Deputy Auditor General
Department of Performance and Commercial Audits
Royal Audit Authority
Kawang Jangsa, Thimphu

Subject: Draft Report of Performance Audit on Housing Development – Adequacy and Affordability

Dear Sir,

Greetings from National Housing Development Corporation Limited (NHDCL).

The NHDCL acknowledges the receipt of the “Draft Report on Housing Development – Adequacy and Affordability” considering the housing crunch situation across the country. It is with the earnest hope that this report would receive the highest priority consideration from the policy makers in addressing the housing issues. Indeed to make the housing affordable and homeownership programme successful, NHDCL has felt that there are lots of cross cutting policies setting need to be corrected, which this report has extensively addressed.

NHDCL would like to comment particularly on the Para 3.1.5. Socio-economic risks of large number of Bhutanese residing in neighboring Jaigaon. “It is reported that NHDCL has received 1,259 applications for the special housing project. It has stated that the form where the applicants filled up revealed that there are about 89 families with either of the spouses being undocumented Bhutanese or non-Bhutanese citizens. Also it has stated that there are more than 144 children born out of such marriages and 201 dependents”.

To this, NHDCL would like to submit the following:

- i. No assessment and physical verification of the documents were done;
- ii. The forms were filled up by the applicants just to submit their housing applications;
- iii. The validity of the absolute figure is still a question;
- iv. The actual and real data can only be known when the applicants occupy the allotted quarters.

In view of the above, NHDCL would like to request your esteemed authority to revalidate the data or inclusion in the report considering the sensitivity of the issue.

Thanking you for your unstinting supporting and direction.

With warmest wishes.

Yours Sincerely
For NHDCL

(Thinley Dorji)
Chief Executive Officer

Chief Executive Officer
National Housing Development Corporation Ltd
Thimphu : Bhutan

NPPF's comments on the draft "Performance Audit of Housing Development"

Page 9, Clause 2.3.2.3 Paragraph 2: "Currently, NPPF holds around 52 acres of land of which 50% have been developed and 89 residential buildings and 3 commercial buildings worth of Nu 714 m at book value" may be changed to "Currently, NPPF owns around 52 acres of land in various parts of the country, 50% of which have been developed consisting of 89 residential buildings and three commercial buildings worth Nu 714 m at book value"

Page 9, Clause 2.3.2.3 Paragraph 4: "NPPF also has plans for construction of commercial buildings in Thimphu and Gelephu in 2017" may be changed to "NPPF has plans for construction of commercial buildings in Thimphu and Phuentsholing and residential buildings in Gelephu".

Page 11, first paragraph: "NPPF provides supplementary services such as architectural design, cost estimations and material recommendation for construction of the houses" may be changed to "At a nominal fee, NPPF provides supplementary services to its members which includes detailed architectural, structural and electrical design of building upto three storeys, basic cost estimations and material recommendation for construction of the houses"

Page 16, Paragraph 3: Currently there is a mismatch between the civil servant population and stock of affordable housing built by NHDC and NPPF" – First, NPPF is not mandated to provide affordable housing to civil servant and therefore to quote NPPF in the aforementioned sentence may not be correct. Second, the new residential buildings built by NPPF in Phuentsholing are now leased to members at prevailing market rates.

Page 47, clause 1.4, paragraph 2: " There is a lack of coherent and sustained efforts by agencies such as NPPF, NDHCL and Banks who are undertaking housing development" – As and when it makes financial sense, NPPF undertakes housing development as an investment venture, as rightly pointed out elsewhere in the report and therefore to state that lack of coherency or sustained efforts on the part of NPPF in housing development may not be justified. NPPF is primarily mandated to ensure the sustainability of the pension and provident fund schemes. Real estate development and management is only one of the many investments NPPF undertakes to realize this mandate.



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ཡུན་ཚོགས་སྤྱིང་བུང་ཁག་།
Royal Government of Bhutan
Dungkhag Administration
Phuentsholing.



PD/ADM-15/2018-2019/ 1851

07/03/2019

The Deputy Auditor General,
Department of Performance and Commercial Audits,
Thimphu

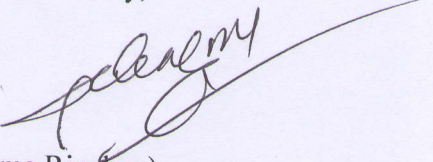
Subject: Performance Audit Draft Report on Housing Development-Adequacy and affordability.

Sir,

I would like to submit that Phuentsholing Dungkhag Administration do not have any comment with regard to Draft Report on Housing Development-Adequacy and Affordability.

Thanking you,

Yours sincerely,


(Karma Rinchen)
Sr. Dungpa

Cc:

1. Office copy



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ROYAL GOVERNMENT OF BHUTAN
PHUENTSHOLING THROMDE
POST BOX NO.02
PELKHIL LAM



PT/Audit-01/2018-2019/ 5309

March 8, 2019

To,
The Deputy Auditor General,
Department of Performance and Commercial Audits,
Thimphu,

Sub: Reply on Performance Audit Draft Report on Housing Development.

Sir,

We have gone through the report and we have no say as it seems appropriate as per our knowledge and concern for the draft report on Housing development-adequacy and affordability.

We would like to thank all the official from Royal Audit team on the draft findings and recommendations.

Thanking you

Yours sincerely

(Uttar Kumar Rai)
Thrompon

Cc to:

1. Offtg Executive secretary for information
2. Finance Officer for record.



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ROYAL MONETARY AUTHORITY OF BHUTAN

RMA: GOV-RAA/2019/5376

March 8, 2019

Deputy Auditor General
Dept. of Performance and Commercial Audits
Royal Audit Authority
Thimphu, Bhutan

Sub: Performance Audit Draft Report on Housing Development – Adequacy and affordability

Sir,

This is in reference to letter no. *RAA/PSAD/2018-2019 dated January 31, 2019* pertaining to the '*Performance Audit Draft Report on Housing Development – Adequacy and affordability*'.

In this regard, we would like to mention that the report has been prepared very comprehensive covering every detail of the significant achievements, shortcomings and deficiencies as well as recommendations aimed in providing enabling legal, policy and institutional systems with clear mandates and strategic direction for housing development.

To further, add value to the report, we would like to inform that a similar exercise is being carried out by the MoWHS in revising the '*National Housing Policy, 2002*'. The Ministry conducted a '**High-level National Consultation Workshop on Revised National Housing Policy**' on **February 1, 2019** comprising eminent members from the parliament, high-level officials from the govt. and other stakeholders during which, the policy document was reviewed and deliberated extensively among the stakeholders and has suggested the Ministry to present the policy document at a later date after incorporating the necessary changes.

Therefore, we highly suggest the RAA to kindly share the same report with PPD, MoWHS so that the document could be reviewed further for deliberation.

Yours sincerely,

Dasho Penjore
(GOVERNOR)



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Thimphu Thromde
Post Box No - 215
Thimphu-11001: Bhutan



03/TT/ADM/2019/

Date: 15/3/2019

The Dy. Auditor General,
Department of Performance and Commercial Audits
Royal Audit Authority
Thimphu: Bhutan

Subject: Performance Audit Draft Report on Housing Development – Adequacy and Affordability.

Sir,

This is with reference to your letter vide no. RAA/PSAD/2018-2019/257 dated 31st January, 2019 on submission of action and plan on the Performance Audit Draft Report on Housing Development – Adequacy and Affordability.

The Thimphu Thromde has planned and included in the 12th Five year Plan with a budget of **21.00 million** to construction low-income housing on Phase wise within Thromde in line with the four parameters as stated in the report,

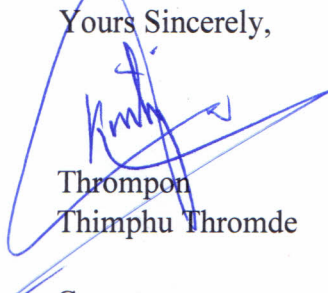
1. Phase I: Drawing and Design in the financial year 2019-2020 and
2. Phase II: Construction of Low-income Housing from Financial year 2020-2021 onwards

Most of the informal settlements living in the area stated in the section 3.3.1 working under Thimphu Thromde will be eased with the construction of low-income housing in the different location within Thromde.

The Private settlement within the area has been discussed in the Thromde Management meeting, a detailed study will have to be carried out for proper decision before noticing them to evacuate and dismantling of their own structures.

The RAA will be intimated with the detailed study report as soon as possible.

Yours Sincerely,


Thrompon
Thimphu Thromde

Copy to:

1. The Executive Secretary, Thimphu Thromde, for kind information
2. Guard File.



AIN: 15831