BHUTAN

NATIONAL URBANIZATION STRATEGY

The World Bank

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ROYAL GOVERNMENT OF BHUTAN
MINISTRY OF WORKS AND HUMAN SETTLEMENT

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BHUTAN NATIONAL URBANIZATION STRATEGY

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List of Abbreviations

ADB	Asian Development Bank
BCCI	Bhutan Chamber of Commerce and Industry
BHU	Basic Health Unit
BNUS	Bhutan National Urbanization Strategy
BPL	Below Poverty Line
BSR	Bhutan Schedule of Rate
CBO	Community Based Organization
CDS	City Development Strategy
DADM	Department of Aid and Debt Management
DUDES	Department of Urban Development and Engineering Services
DUDH	Department of Urban Development and Housing
DYT	District Planning Committee
EA	Executing Agency
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
FGD	Focus Group Discussion
FI	Financial Institutions
GDH	Gross National Happiness
GDP	Gross Domestic Product
GIS	Geographical Information System
HH	House Holds
HRD	Human Resource Development
ICG	Integrated Geog Center
LAP	Local Area Plan
LMI	Low and Middle Income
LP	Land Pooling
MIS	Management Information System
MoF	Ministry of Finance
MoWHS	Ministry of Works and Human Settlement
NEC	National Environment Commission
NGO	Non Governmental Organization
NSB	National Statistics Bureau
Nu	Ngultrum
NUS	National Urbanization Strategy
NWAB	National Women's Association of Bhutan
O&M	Operation and Maintenance
PCBH	Population and Housing Census of Bhutan
PCC	Phuentsholing City Corporation
PIU	Project Implementation Unit
PMU	Project Monitoring Unit
PPD	Policy and Planning Division
PPH	Persons per Hectare
PPP	Public Private Partnership
RGoB	Royal Government of Bhutan
ROW	Right of Way
RSPN	Royal Society for Protection of Nature
SPV	Special Purpose Vehicle
TA	Technical Assistance
TCC	Thimphu City Corporation
TCDS	Thimphu City Development Strategy
TOR	Terms of Reference
ULB	Urban Local Body
WTP	Water Treatment Plant
YDF	Youth Development Fund

Foreword

The nation is standing at an important crossroad awaiting a landmark transformation in 2008 when we will move towards a democratic constitutional monarchy. There is an accepted need to build a future society that is founded on the principles of equity, justice, harmony and unity. Some of the most important challenges the nation faces today are the ones posed by uncontrolled rapid urbanization.

Our vision for development, expressed in Bhutan 2020: A Vision for Peace, Prosperity and Happiness, provides a strategy for our distinct path of development. The vision outlines five development objectives, one of which is achieving balanced and equitable development to ensure that benefits of progress do not accrue to the few at the expense of many. As a part of our collective effort to achieve balanced and equitable development, the formulation of the Bhutan National Urbanization Strategy, is not only timely but also an important indicator of our seriousness and commitment.

Prepared with funding support from the Cities Alliance through the World Bank, the Strategy presents the existing situation and the future prospects of Bhutan's urbanization; identifies regional growth centers as part of the key concern to achieve a balanced and equitable regional development; and outlines the proposed National Urbanization Strategy in terms of the spatial framework and supporting policy and institutional strategies. The strategy is also part of the RGoB's effort to coordinate donor attention in the urban sector and act as a framework for the preparation of subsequent investment projects.

The strategy is the outcome of deliberations and discussions with stakeholders, including representatives from various dzongkhags, various ministries including the Ministry of Works and Human Settlement, and the representatives from the World Bank, at the various national consultative workshops that were held several times.

The report is based on the premise that by the year 2020 the nation will be 60% urbanized (most likely scenario) as against 30% now. The proposed NUS is only an initial vision-led framework in the context of rapid changes (economic, political and social) taking place in the nation. The absence of a parallel long term economic policy document has constrained the NUS approach to attempt a prima facie inclusion of currently available information on various future economic activity generators, such as proposed hydro power projects, proposed industrial estates, proposed road master plan, etc.

We hope that the strategy will be a useful reference to all those who are engaged seriously in ensuring that urban growth and development in our country takes place in a sustainable and environmentally sound way, unique to our distinct national characteristics and philosophy.

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The study has been carried out by Infrastructure Professionals Enterprise Pvt. Ltd, India in association with Gyeltshen Consultancy Services, Bhutan. It was coordinated by the Policy and Planning Division, Ministry of Works and Human Settlement. The representatives from PPDs of various Ministries of the Royal Government of Bhutan including MoE, MoLHR, MoA, MoHCA, MoEA also actively participated in the formulation of this study.

Executive Summary

Background

1. The Government of Bhutan's vision for the country, "Bhutan 2020: A Vision for Peace, Prosperity and Happiness" provides a strategy for the country's distinct path of development over the next decade upto year 2020. It recognizes the country's unique challenges as it undergoes a profound and rapid demographic transition from a largely subsistence rural economy to an urban society and reinforces the Government's policy to promote balanced and equitable economic development.

2. The two key urban sector issues in Bhutan are the *very rapid rates of urbanization* and *limited availability of serviced land*. The estimated average annual growth of urban population in Bhutan was 7.3 percent during 2000–2005, and as high as 12.6 percent in Thimphu city. This rapid urban growth has already created severe pressures on services such as water shortages, lack of sanitation and waste disposal facilities etc. as well as environment in Thimphu and other towns.

Key Concerns of the BNUS

3. Overarching Goal

   Balanced and equitable regional development

Related policies / aims

1) *Preservation of the natural environment and heritage*
2) *Democratization and decentralizing governance*
3) *Poverty alleviation thrust of the 10th FYP*
4) *Facilitating the private sector and CBOs*

Key concerns	*Related concerns*
Very high rates of Urbanization	• Balanced development at the national and regional level • Environmental sustainability • Municipal capacities to manage growth • Preservation of traditional values and heritage
Limited availability of serviced land	• Evolving appropriate land use practices (optimize) • Evolving appropriate methods for development of urban extensions (plan and manage) • Ensuring access to shelter and services for all groups (equity) • Facilitate private sector and CBOs in urban services sector

The Methodology

4. The following was the methodology adopted:
   a. Analyze urban growth (existing and expected) to understand inequities (existing and expected),
   b. Analyze impact of future urban growth on land requirements and possible strategies,
   c. Formulate a systematic and objective process to identify potential regional growth centers (A three level analysis across-Regions, Dzongkhags using a Composite Development Index and towns using 23 indicators was adopted),
   d. Collect data and analyze for identifying the potential growth centers (including visits to assess major towns and finalize the rankings of the towns based on the data),
   e. Formulate a National Urban System consisting of the elements or hierarchy of urban areas, their number and location and their likely future population,

f. Identify issues and recommend policy and institutional framework to support the proposed National Urban System:
   - policies for prioritization and financing of investments and greater involvement of the private sector and community in service provision;
   - enforcement of environmental protection policies;
   - incorporation and preservation of cultural heritage and local values in urban development;
   - institutionalizing public consultation process and ensuring inclusion of the vulnerable groups such as poor and women;
   - requirements for adjustments in taxation, tariff, expenditure and other financial policies;
   - requirements for capacity building for the implementation of the NUS

At every stage consultations and discussions were held and the final recommendations are an outcome of about nine consultations/ discussions/ public dissemination and a national level workshop with the stakeholders. The project was completed over a total period of seven and half months in four phases – the second phase of 16 weeks being the longest.

The Report

5. The purposes of this report are to:
   - Present the existing situation and the future prospects of Bhutan's urbanization;
   - Identify regional growth centers as part of the key concern to achieve a balanced and equitable regional development; and
   - Outline the proposed National Urbanization Strategy in terms of the spatial framework and supporting policy and institutional strategies.

   It is to be noted that:
   1. BNUS is a strategic document developed through extensive consultations based on available secondary data.
   2. It seeks to build strategic intent based on existing conditions, resource base, competencies and future development potential.
   3. Presents options (growth centers) informing decision makers in the government.

6. Much needs to be done in order to take the findings/outcomes of the study further to the next level. This discussion attempts opening doors to actions that can be agreed upon and taken for the same. The proposed BNUS is only an initial vision-led framework in the context of rapid changes(economic, political and social) taking place in the nation. The absence of a parallel long term economic policy has constrained the BNUS approach. With the shift to a democratic constitutional monarchy followed by the expected firming up of a more definitive economic policy, *it is expected that the BNUS will be reviewed - most probably in the year 2010 (if not earlier) for 'midcourse' modification*.

Bhutan's Urbanization: Existing Situation and Future Prospects

1 Total Population		**2 Urban Population**		
Population, 2005 (census)	634,982	Urban popln., 2005 (census)	196,111	196,111
Growth Rate	1.3%	Growth Rate	7.3%	4.6%
Popln., 2020 @ current growth rate	770,731	Urban Popln., 2020 @ current growth rate	564,000	385,000
Implied addl. Popln, by 2020	135,749	Implied addl. Urban Popln, by 2020	367,889	188,889
Urbanization level by 2020 (%)			73	50

Note: Figures in the last column in grey shaded cells are estimated for 50 % urbanization level

7. The additional urban population by 2020 may be between 1.8 lakhs and 3.6 lakhs based on the impact of the policies adopted by RGoB during the period - particularly in the immediately following years.

The Migration Component of Urbanization

8. The Census estimated that 111,770 lifetime migrants had migrated from rural areas into urban settlements. Adjusting the estimate to include the number of out migrants to rural areas, the net urban migrants in 2005 would be 91,778 (47 % of the urban population). In both the large urban cities, Thimphu and Phuentsholing, a high proportion of the population are civil servants (50 percent in Thimphu and 44 percent in Phuentsholing). This suggests that the pull factor for rural-urban migration has to do primarily with administrative decisions to locate the government offices in these two cities. Spatial distribution of government offices will be one solution for mitigating migration to cities. Rural-urban migration is likely to accelerate and, in the absence of mitigating measures, can be expected to lead to increasing congestion, environmental degradation, conflicts of interest, and socioeconomic problems in the cities. Also, there will be loss of an active segment of rural society.

Regional Variation in Population

9. About 44 percent of the country's population is concentrated in the Western Region, (in 20 % of the area). The distribution of urban population is even more skewed with the Western Region containing 65 percent of the country's urban population. Within the regions, the distribution of population is again skewed, showing high concentrations within a few Dzongkhags. Three of the four most populated Dzongkhags are in the Western Region. Most of the Dzongkhags in the central parts of the country have less than 20,000 persons. Out of the 20 dzongkhags in Bhutan, 17 dzongkhags have an urbanization level that is below the national average of 30 percent. A majority, twelve of them have less than 10 % urbanization. This, on one hand may reflect a very low level of secondary and tertiary economic development in these dzongkhags while on another hand be interpreted as representing the latent potential for future urbanization. Surprisingly fifteen dzongkhags have less than 10,000 urban populations. The dzongkhags with the least urban population are concentrated in the Central- Western and Eastern regions.

Number and Size Distribution of Urban Settlements

10. The 2005 Census data has shown that almost 56 towns have a population less than 5000, and only 4 towns, viz. Samdrupjongkhar, Wangdue, Gelephu and Phuentsholing have a population ranging from 5000 to 20,000. It is significant to note that 36 of the 61 census towns actually have a population of less than 1500 persons which is the minimum specified by the recent list of criteria identified by the MoWHS for qualification for a Thromde (or urban centre). If these 36 settlements were to be actually declassified as urban areas, the urbanization pattern of the country would present, statistically speaking, a different scenario.

Land for Urban Development

11. One of the two main sector issues in urban development is that of land availability for urban development. The land cover data from the MoA indicates that 72% of the land is under forest cover. The RGoB has an objective of not allowing this percentage to fall below 60% in any circumstance. Agriculture and horticulture uses account for nearly 8% and the area covered by settlements is only 0.09%. If slopes less than 30 degrees are considered, along with certain other criteria, another 8% of the country's land which is presently under forest and pasture use may be counted as potential agricultural and horticulture use land. A major portion of this 'potentially' convertible land is in the southern dzongkhags, especially in Samdrupjongkhar. Viewed against the Vision 2020's stated concern for food security which is seen as a basic necessity to ensure the nation's sovereignty, the RGoB in general and the MoA in particular, rate the issue of loss of agriculture land to urban uses as a very serious policy area to be addressed urgently.

Urban Densities

12. To understand the land required for urban development, the existing town densities were compiled from the data available. Though Nganglam Town (S.No.38) has the highest gross density of 254 persons per hectare (PPH), it is seen that in general most of the densities range from about 20 PPH to less than 50 PPH. Thimphu itself shows a gross density of only 30 PPH. However, it is to be noted that the Local Area Plans for Thimphu city have planned for higher residential densities ranging between 300 and 600 PPH.This standard will however require a formulation of planning and design guidelines and supported by a carrot and stick policy (that is, incentives and taxes).

Possible Gross Town Densities (PPH)

13. Assuming that only 40% of a town's area will be used for residential use and that the plot coverage will be only 50%, the gross town densities achievable at 100 sq.m. of floor space per household or dwelling unit can be easily be 200 PPH (with only 2 storeyed structures) and more depending on the average number of floors built. Even at 200 PPH gross town densities, the net land required for an additional urban population of about 1.8 lakhs by 2020 is only 900 ha. which is merely 0.02 % of the nation's area. The implied land requirement is not very high to endanger either food security or environmental preservation. On the other hand, if we allow the existing average town densities to continue, the land requirement for the same additional urban population would be 9000 ha. (10 times as much).

Identifying the Growth Centers

14. The growth centers were identified by a process of analysis across three levels:

Level	Criteria used	Rationale
Level 1: *Regional level analysis*	Population and Migration	Identify regions having net out migration, and low population shares (in relation to share of land area)
Level 2: *Dzongkhag level analysis*	Basic Infrastructure, Social Infrastructure and Economic Development	Identify most developed / high development potential dzongkhags within the above identified regions
Level 3: *Town level analysis*	covering existing economic activity, infrastructure and potential for growth	Identify towns within the above identified dzongkhags with potential for development

- Analysis of the 20 Dzongkhags covered three dimensions using a Composite Development Index that attempts to assess development of dzongkhags.
- The Town level analysis used 23 indicators including Area (Sq. Km.), Population, Density, Land Available for Future development, Connectivity to international markets, available facilities, etc.

Prioritized Regional/National Growth Centers

15. The analysis resulted in the identification of the following potential growth centers

S. No	Regions	Dzongkhags	Towns
1	West	Samtse	Samtse
2	Central West	Sarpang	Gelephu – Sarpang cluster
3	Central East	Bumthang	Bhumtang (urban cluster)
4	East	Samdrup Jongkhar, Mongar	1)S/Jongkhar- Nanglam urban cluster and 2)Gyalposhing –Mongar and Lingmethang urban cluster together with Nganglam.

The Proposed Bhutan National Urban System

16. The Elements in the Spatial Framework for the Proposed National Urban System, Bhutan

S. No.	Elements of the Spatial Framework	No. of Respective Urban Centres	Name of the Centres	Approximate Popln. of each Unit, 2020	Total Popln. in the Centres, 2020
1	The nationally important Cities	Seven	Thimphu, Gelephu Phuentsholing, Samtse Bumthang Gyalposhing/Nganglam	1.20 lakhs 60,000 30,000 20,000 20,000 20,000, 20,000	290,000
2	Dzongkhag Centres	Sixteen	All the Dzongkhag headquarter towns excluding the reg. centres	Between 5000 (Gasa, 600) and 10,000 each	67,000
3	Medium Towns	Twelve		Between 1500 and 4,999 each	36,000
4	Small 'Towns' / Gewog Centres	Twenty three (existing) plus appr. 50 ICGs		Between 100 and 1,499 and for ICGs average 500 each	36,500 25,000
5	The Corridors*	Four corridors	Samtse – S'Jongkhar Thimphu – S'Jongkhar Thimphu – P'sholing Wangdue - Gelephu	1.4 lakhs 2 lakhs (incl Thimphu) 50,000 (excl. Thimphu) 40,000	
	All 'urban' population				**460,500**

Note: The Samtse – S'Jongkhar corridor is anticipated as a production corridor (implying a concentration of manufacturing activities), and the other three corridors are seen as essentially services and tourism corridors. Most of the major towns are located on one of these four corridors of urban development. The 'corridors' are to be seen more as regional and national roads (existing and proposed) that would become the routes for concentration of settlements, activities and movement of people and goods.

The proposed National Urban System (Hierarchy of urban settlements)

17. The proposed National Urban System identifies the following hierarchy of urban settlements as forming the spatial framework for the NUS:

S. No.		Elements of the Spatial Framework	Popln. Size	Major Function
National Urban System	1	Gyelyong Thromde (National / Regional City)	> 10,000	National/Regional economic driver
	2	Dzongkhag Thromde (Dzongkhag Centres)	5,000 to 9,999	Dzongkhag Administration/ Service centre
	3	Yenlag Throm (Medium Towns)	1,500 to 4,999	Service centre for nodes
	4	Geog Throm (Small Towns and or Geog Centres)	100 to 1,499	RNR services, market, Geog centre (IGC)
5		Villages		Rural economic activity
6		Hamlets		Rural economic activity

Note: The last two types of settlements are 'rural', yet are presented here as elements of an overall spatial framework.

1.0 Introduction

1.1 Background

1. The Royal Government of Bhutan's vision for the country, "Bhutan 2020: A Vision for Peace, Prosperity and Happiness" provides a strategy for the country's distinct path of development over the next 15 years. It recognizes the country's unique challenges as it undergoes a profound and rapid demographic transition from a largely subsistence rural economy to an urban society. Urban population is expected to increase four times over the period of 20 years and reach 50 percent of the total by 2020. (This is particularly challenging in the environment of high dependence on international resource flows – from hydro power and development assistance – and simultaneously high transportation costs between cities.) One of vision document's major goals is to achieve balanced and equitable development. It recognizes that the country's relatively recent opening to the world economy offers many advantages, while at the same time it also carries risks to Bhutan's traditional values and fragile environment.

2. Given this perspective on its developmental challenges, the Royal Government of Bhutan (RGoB) has placed a lot of emphasis on creating a system of local government with adequate capacities, and developing a strategy for national urban development. Thus, the RGoB launched this initiative for the development of a Bhutan National Urbanization Strategy (BNUS) and Thimphu City Development Strategy (TCDS). A component on the State of the Environment (SOE) for Thimphu was also later included. The proposal is also part of the RGoB's effort to coordinate donor attention in the urban sector and act as a framework for the preparation of subsequent investment projects. The other projects under formulation include the Second Urban Development Project supported by World Bank and Urban Infrastructure Development project supported by the Asian Development Bank (ADB).

3. This strategy initiative is financed and supported by Cities Alliance jointly with United Nations Environmental Program and World Bank, and is prepared through a series of extensive consultations with the staff of government agencies, dzongkhag(districts) authorities and Thimphu City Corporation (TCC) and other stakeholders.

1.2 Key Urban Sector Issues

4. The two key urban sector issues in Bhutan are the *very rapid rates of urbanization* and *limited availability of serviced land*. The estimated average annual growth of urban population in Bhutan was 7.3 percent during 2000–2005, and as high as 12.6 percent in Thimphu city. This rapid urban growth has already created severe pressures on services such as water shortages, lack of sanitation and waste disposal facilities etc. as well as environment in Thimphu and other towns.

1.3 Other RGoB Initiatives

5. RGoB has also been working on the development of the legal and institutional framework in Bhutan for improved urban development. It adopted a National Housing Policy in 2002, established a National Housing Development Corporation (NHDC) in 2003 and improved the legal framework for foreclosure to facilitate mortgage lending. The government has also drafted and is in the process of finalizing, with support from DANIDA, the Bhutan Urban Development Act and the Bhutan Building Act.

6. However, RGoB and TCC acknowledge that for long term and sustainable development of cities, further changes in the legal and institutional framework are needed to enhance the cities' ability to respond to the increasing demands for housing and infrastructure services in a timely manner. A number of areas for improvements and adjustments are identified in the study financed under the ADB's Bhutan Housing Sector Reform Project and acknowledged by the RGOB. These include streamlining land registration procedures, revision of government housing and land administration, more efficient use of the existing serviced land and enhancement of the development of housing finance, among others. These issues are being addressed under programs financed by DANIDA and ADB.

1.4 Objectives and Methodology of the BNUS

1.4(a) Objectives

7. As per the terms of reference (TOR) the key objectives of the project are to improve efficiency and impact of urban growth on the well-being of poor urban citizens and develop a policy framework and guidelines for urban growth. More specifically the strategy shall:

   (a) Develop a pro-active approach to the country's urban growth in a sustainable and environmentally sound way that minimizes the negative effects of urbanization;
   (b) Ensure balanced regional growth;
   (c) Develop a strategy for improving the quality of life of the growing urban population in a way that embraces rather than undermines the local culture and values;
   (d) Come up with a set of recommendations to improve local government systems in Bhutan, including municipal finance and institutional aspects.

8. The National Urbanization Strategy is expected to include:

   (a) Review / analysis of the situation in urban areas in Bhutan, including growth patterns along different regional growth centers, projections for the long term requirements for regional and urban development, service levels, key sector issues, results of public consultations, etc.;
   (b) Vision for a balanced regional growth in Bhutan, identification of future growth centers, prioritization and identification of areas and towns for future development;
   (c) Plans for the development of the specific regional growth centers;
   (d) Policies and institutional framework for the provision of urban services in an environmentally, culturally, economically and socially sustainable way that will lead to sustainable urban management, e.g.:
      i. Policies for prioritization and financing of investments and greater involvement of the private sector and community in service provision;
      ii. Enforcement of environmental protection policies;
      iii. Incorporation and preservation of cultural heritage and local values in urban development;
      iv. Institutionalizing public consultation process and ensuring inclusion of the vulnerable groups such as poor and women;
      v. Requirements for adjustments in taxation, tariff, expenditure and other financial policies;
   (e) Requirements for capacity building for the implementation of the NUS.

1.4(b) Methodology

9. Following is the description of the methodology developed for this project based on the preceding listed objectives and requirement of contents of the two strategies. The project was completed over a total period of seven and half months in four phases – the second phase of 16 weeks being the longest.

10. The first phase (six weeks) consisted of the detailed background study, second phase (sixteen weeks) involved further data collection, field visits, consultations, detailed analysis and drafting of the Urbanization Strategy, the third phase (eight weeks) overlapped the last two weeks of the second phase and concentrated on the CDS(TCDS) development for Thimphu, while in the last phase (five weeks) both the strategy documents were presented for public dissemination and discussion and a national level workshop conducted for formal discussion with the stakeholders.

Phase I – Background Study (Week 1-6)

11. The background study leading to a preliminary understanding of the present context was done through a brief review of key documents and through consultations with local and key stakeholders from various sectors. A general understanding of current perception and ideas and reasons for priority areas and issues was gained.

12. The first stakeholder workshop was conducted on 15th May 2006. The inception report presented the summary of issues, observations, agreements and differences obtained as feedback from the stakeholders.

13. Activities and Outcomes of Phase I:

- Collecting existing documents and reports;
- Consultations with key stakeholders;
- Initial findings related to Bhutan's urbanization;
- Workshop 1, on understanding the urbanization in Bhutan; and
- Inception report

Phase II – Formulating Draft National Urbanization Strategy (Week 7-22)

14. Based on the understanding gained in the preceding phase, a more focused second round of data collection, research and analysis on the potential regional and national growth centers was undertaken. A draft National Urbanization Strategy was formulated and formally presented in a Workshop on 11th August 2006. A week later, the Strategy, detailed further in response to feedbacks received during the Workshop, was presented to the Working Group to steer the study further. The report submitted incorporated the suggestions received during the presentation to the Working Group.

Phase III – Developing the Draft Thimphu City Development Strategy (Week 21-28)

15. The third phase involved developing the Thimphu City Development Strategy based on the Draft National Urbanization Strategy. The activities and outcomes of Phase III:

- Detailed background study for the Thimphu City Development Strategy;
- Detailed consultations under the existing Local Area Plan Framework; and
- Develop the Thimphu City Development Strategy based on the NUS.

16. The draft TCDS was presented to the TCC and stakeholders in the third workshop on 7th October 2006 and Draft TCDS report was submitted incorporating responses to the stakeholder's views and opinions.

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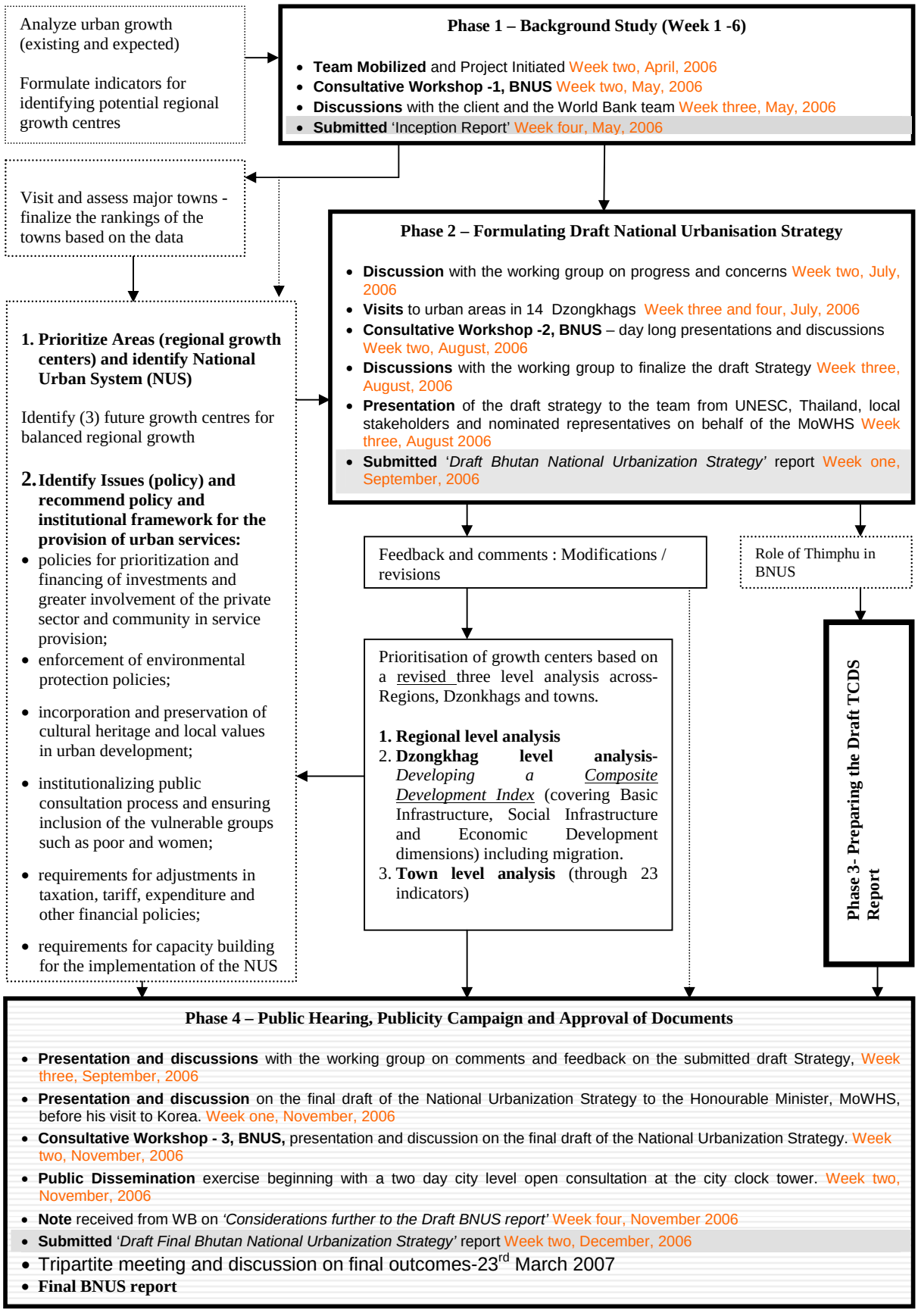
Figure 1.1: Methodology



Phase IV – Public Hearing, Publicity Campaign and Approval of Documents (Week 29-33)

17. The fourth and final phase was started with a national level workshop (Workshop 4 on 9th November 2006) to discuss the outcomes of the project and receive the feedback from various stakeholders and participants. A two day long open consultation was held at the city clock tower square in Thimphu, followed by putting up brief outcomes of the project on the MoWHS website for public comments under the national level dissemination campaign.

18. The project in all its four stages has undergone debate and discussion at the national level with participation by representatives from all the dzongkhags, and representatives from all the relevant ministries and departments of the government.

19. An additional tripartite meeting at the request of the client was organized to discuss with the ministries of Bhutan on the future possibilities for taking the strategy to its next logical level.

20. Activities and Outcomes of Phase IV:

- Public hearing of the draft documents;
- Detail out and develop the materials for dissemination procedure and the awareness raising campaign;
- Conduct and document national level workshop for presenting the outcomes of the project; and
- Finalize the two strategy (BNUS and TCDS) documents and submit for approval.

1.5 Project Outputs and Reporting

21. The key outputs of the project are:

(a) The National Urbanization Strategy;
(b) The Thimphu City Development Strategy;
(c) Four workshops; and
(d) Public information and awareness raising campaign and materials.

The Consultants reported to Secretary, Ministry of Works and Human Settlement through the Project Coordinator, Policy and Planning Division, Ministry of Works and Human Settlement.

Documentation of all relevant information collected during the preparation of the BNUS, TCDS and SOE have been provided to the client for reference, records and future use.

2.0 Urbanization in Bhutan: Existing Situation

2.1 Introduction

The Database

1. The first census in Bhutan was undertaken during Desi Chogyal Sherub Wangchuk (1744-1763). From early 1900, records were maintained to verify genuine citizens from illegal settlers, which was then called Citizenship Verification Census. Once a year all national Bhutanese are required to register in the dzongkhag they come from, regardless of where they actually are living and have been living for long. Therefore, it is a recognized fact that the dzongkhag population records do not reflect the population number actually living in each dzongkhag. As an example, before the Population and Housing Census of Bhutan (PHCB), 2005, it was often mentioned that the population registered in Thimphu dzongkhag is about 10,000 whereas the urban population in Thimphu city alone was known to be about 40,000. The recent PHCB 2005 was the first systematic study related to population to be carried out at the national level. All the previous data related to population were only estimates.

2. An important step for establishing an accurate baseline of urban development information was taken with the Urban Population Count conducted by Department of Urban Development and Housing (DUDH, now the department of urban development and engineering services, DUDES) in June 2000 and approved by the Council of Ministers in August the same year as official figures. However, comparison of this data with that provided by the Census is difficult because of the change in names and designations of specific urban centers leading to resultant negative figures in some cases, and no data available to compare in some other cases.

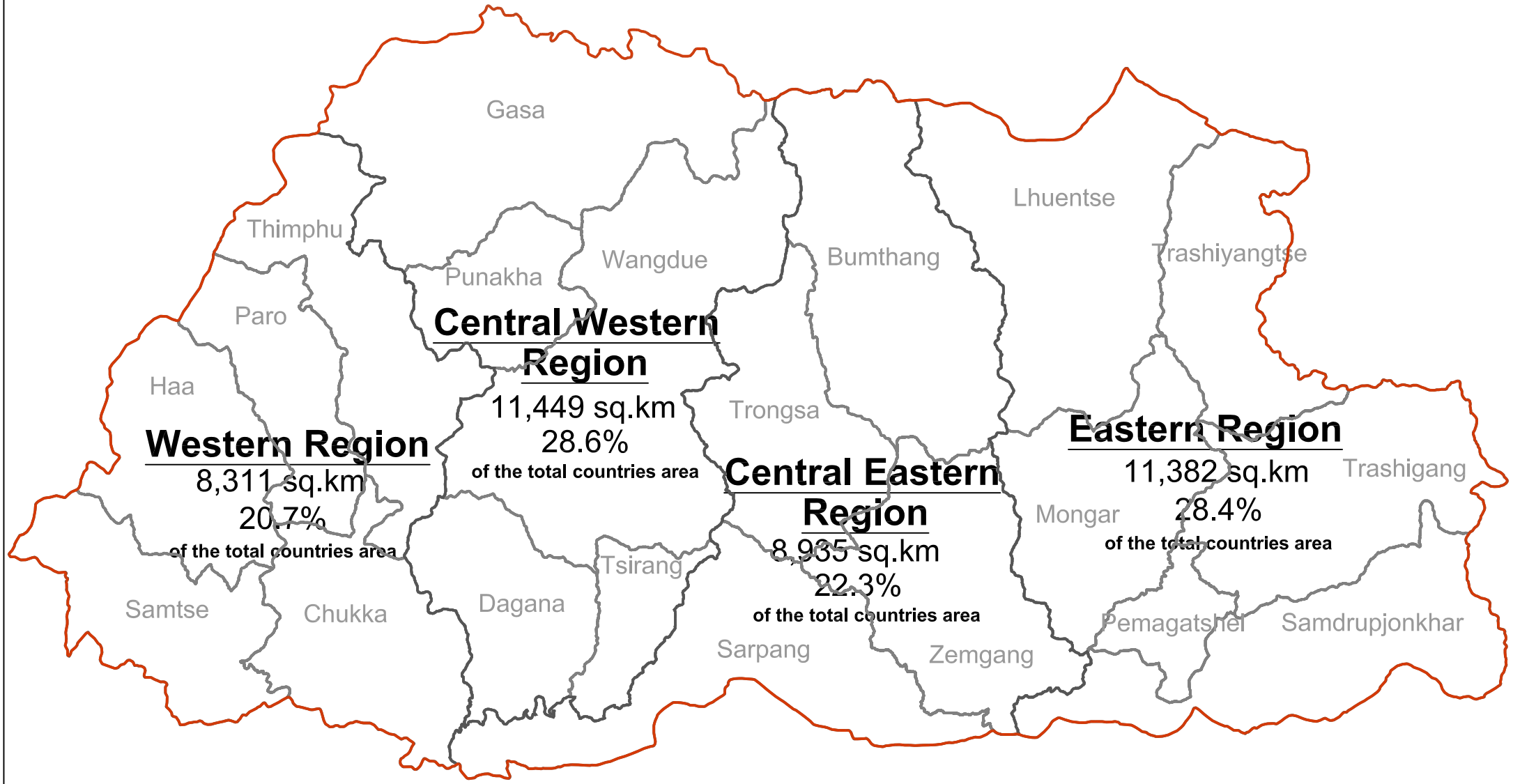
Definition of migrants

3. The PHCB, 2005 defines migrants as people who have lived away from their geog or town of birth for five years or more. Since the PHCB, 2005 records 'lifetime migrants', the definition excludes school children and students, as well as seasonal and short-term labour migrants. The 2005 census has listed 15 reasons for migration in Bhutan, both in urban and rural areas (refer table 2.10).

Definition of urban areas

4. The Census (PHCB), 2005 states that the urban-rural classification used is that of the DUDES. The PHCB, 2005 lists 61 towns varying in size from about 35(Yalang, Pemagatshel) to 79,185(Thimphu) persons.

5. In May 2006 the MoWHS resolved formally that under clause 22 of the Draft Constitution of Bhutan, for an area to be declared as 'urban' (Thromde) the following criteria (up to 75% implying 4 out of the 5 outlined) should be met:
   a) A minimum population of 1,500 people;
   b) A population density of 1,000 persons or more per square kilometer;
   c) More than fifty percent of the population should depend on non primary activities;
   d) The area of the urban center should not be less than 1.5 square kilometers; and
   e) Potential for future growth of the urban center particularly in terms of its revenue base.



Royal Government of Bhutan
Ministry of Works and Human Settlements

Consultants:
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Project: Bhutan National Urbanization Strategy
Map title: Regions in Bhutan and their constituent Dzonkhags

0 20 50kms
Each square = 20 km x 20 km

Drawn by :Poornima.G and Shanti Katel
Dec, 2006

North

Map No.: 1

'Regions' of Bhutan

6. The delineation of regions in Bhutan for the purposes of this study (that is, to aim for a balanced regional development) are based on the previous administrative divisions of the country. Map 1 shows the 'Regions' of Bhutan and their constituent dzongkhag boundaries, along with an indication of the areas of the regions.

Table 2.1: Regions in Bhutan and their constituent dzongkhags

S.No.	**Western region** (5 Dzongkhags)	**Central-Western region** (5 Dzongkhags)	**Central-Eastern region** (4 Dzongkhags)	**Eastern region** (6 Dzongkhags)
1	Thimphu	Wangdue	Sarpang	Samdrupjongkhar
2	Chhukha	Punakha	Bumthang	Mongar
3	Samtse	Dagana	Zhemgang	Trashigang
4	Paro	Tsirang	Trongsa	Trashiyangtse
5	Haa	Gasa		Pemagatshel
6				Lhuentse
Areas	8311 sq.km.	11449 sq.km.	8935 sq.km.	11382 sq.km.

Source: PPD, MoWHS and Bhutan Atlas, MoA

2.2 Population and Growth Rates

7. The population of Bhutan as indicated by PHCB, 2005 is 634,982. The census reports a growth rate of 1.28% based on the preceding year's birth and death count. The urban population of Bhutan as per the PHCB, 2005 is 196,111 accounting for about 30.8 % of the total population.

Table 2.2: Bhutan's population, 2005

Total Population				**Urban Population**	
1	Popln. 2005 (Census)	634,982		Urban popln. 2005 (Census)	196,111
2	Growth rate, 2004 - 2005 (Census)	1.28%		Urban popln. annual growth rate, 2000(DUDH data) - 2005 (Census)*	7.3%
3				Urbanization level, 2005	30.8%

Note: The population data for 2005 is sourced from the PHCB, 2005

*The urban population growth rate is computed from DUDH data of 2000 and the PHCB data for 2005. This ignores the change in figures due to changes in the boundaries of cities

Rates of Natural Increase in Population

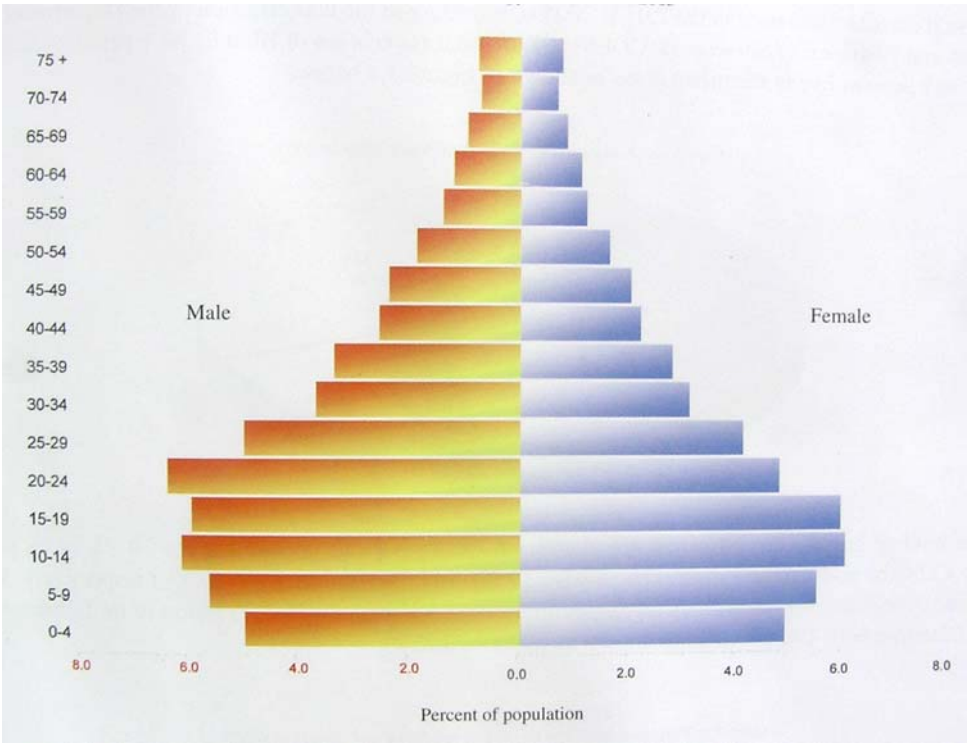
8. The age sex pyramid of the total population (Figure 2.1) indicates a declining birth rate. It is to be noted that the current growth rate in the rural population is only 1.14% and is much higher in the urban areas at about 1.45% (refer table 2.3). Assuming that the higher rate in the urban areas is due to the concentration of educated, younger group (20-24 years of age), it may continue for another decade (the proportion of the age group 10-19 years of age is almost the same), before declining. This implies that in the coming decades, the trend of higher rates of natural increase in the urban population compared to rate of natural increase in the rural population is likely to continue.

Table 2.3: Rates of natural increase in population, Bhutan, 2004-2005

Total Population			Urban Population			Rural Population	
Popln., 2005	Natural increase per annum		Urban Popln., 2005	Natural increase per annum		Rural Popln. 2005	Natural increase per annum
634,982	1.28%		196,111	1.45%		438,871	1.14%

Source: PHCB, 2005

Figure 2.1: Bhutan's Population Pyramid, 2005



Source: PHCB, 2005

The migration component of urbanization

9. The PHCB, 2005 states that 111,770 lifetime migrants had migrated from rural areas into urban settlements. The proportion of migrant urban population to the total urban population in 2005, thus works out to about 57 percent. (The above estimate ignores19, 992 migrants counted as having migrated from urban to rural areas which may be on account of workers having moved from towns into project areas not classified as urban settlements.) Adjusting the urban migrants to include the number of out migrants to rural areas, the net urban migrants in 2005 would be 91,778 (47 % of the urban population).

2.3 Regional Variation in Population and Growth Rates

2.3(a) Population

10. There is a distinct concentration of population in the western part of the country at the cost of the central regions. Table 2.4 shows the population of Bhutan distributed by regions. About 44 percent of the country's population is concentrated in the Western Region, (in 20 % of the area) with the Central-Western and Central-Eastern Regions share of the population falling to as low as 14 percent each. Maps 2 and 3 portray graphically the spatial imbalance in the distribution of population and urban

population respectively. The distribution of urban population is even more skewed with the Western Region containing 65 percent of the country's urban population. The rural population is distributed a little more evenly to the western and eastern parts of the country. In brief, the central parts of the country have less population, both rural and urban and most of the concentration of population, particularly urban is found in the western part of the country. Looking purely at the percentage share of land and population, the Eastern Region seems to be well balanced in having 27 percent of the total population on 28 percent of the land. Only when considering the share of urban population is there an imbalance with only 16 percent of the country's urban population in this region.

Table 2.4: Bhutan's population by regions, 2005

S. No.	Details	Bhutan	Regions			
			Western	Central-Western	Central Eastern	Eastern
1	Popln. 2005	634,982	281,244	88,855	89,720	175,163
2	Contbn. to total popln. (%)	100	44.3	14.0	14.1	27.6
3	Share of nation's total area (%)	100	20.74	28.57	22.29	28.40
4	Urban Popln., 2005	196,111	127,677	13,840	22,880	31,714
5	Contbn. to total urban popln. (%)	100	65.1	7.1	11.7	16.2
6	Rural Popln., 2005	438,871	153,567	75,015	66,840	143,449
7	Contbn. to total rural popln. (%)	100	35.0	17.1	15.2	32.7

Source: PHCB, 2005, Areas from MoA 's Bhutan Atlas

11. Within the regions, the distribution of population is again skewed, showing high concentrations within a few Dzongkhags. Table 2.5 shows the distribution of the Dzongkhags by their population size class in 2005. Three of the four most populated Dzongkhags are in the Western Region with the Central-Western and Central-Eastern Regions not having even one Dzongkhag of 50,000 populations. Most of the Dzongkhags in the central parts of the country have less than 20,000 persons. More than half of the Dzongkhags in the country (11 of the 20) have a population of less than 20,000 and the Western Region has only one of such 'small' Dzongkhags.

Table 2.5: Population size class distribution of dzongkhags in Bhutan, 2005

S.No.	Population size class	Bhutan	Regions			
			Western	Central Western	Central Eastern	Eastern
1	>100,000					
2	50,000 to 100,000	4	3			1
3	20,000 to 49,999	5	1	1	1	2
4	10,000 to 19,999	10	1	3	3	3
5	< 10,000	1		1		
	Total no. of Dzongkhags	20	5	5	4	6

Source : PHCB, 2005

2.3(b) Rates of Natural Increase

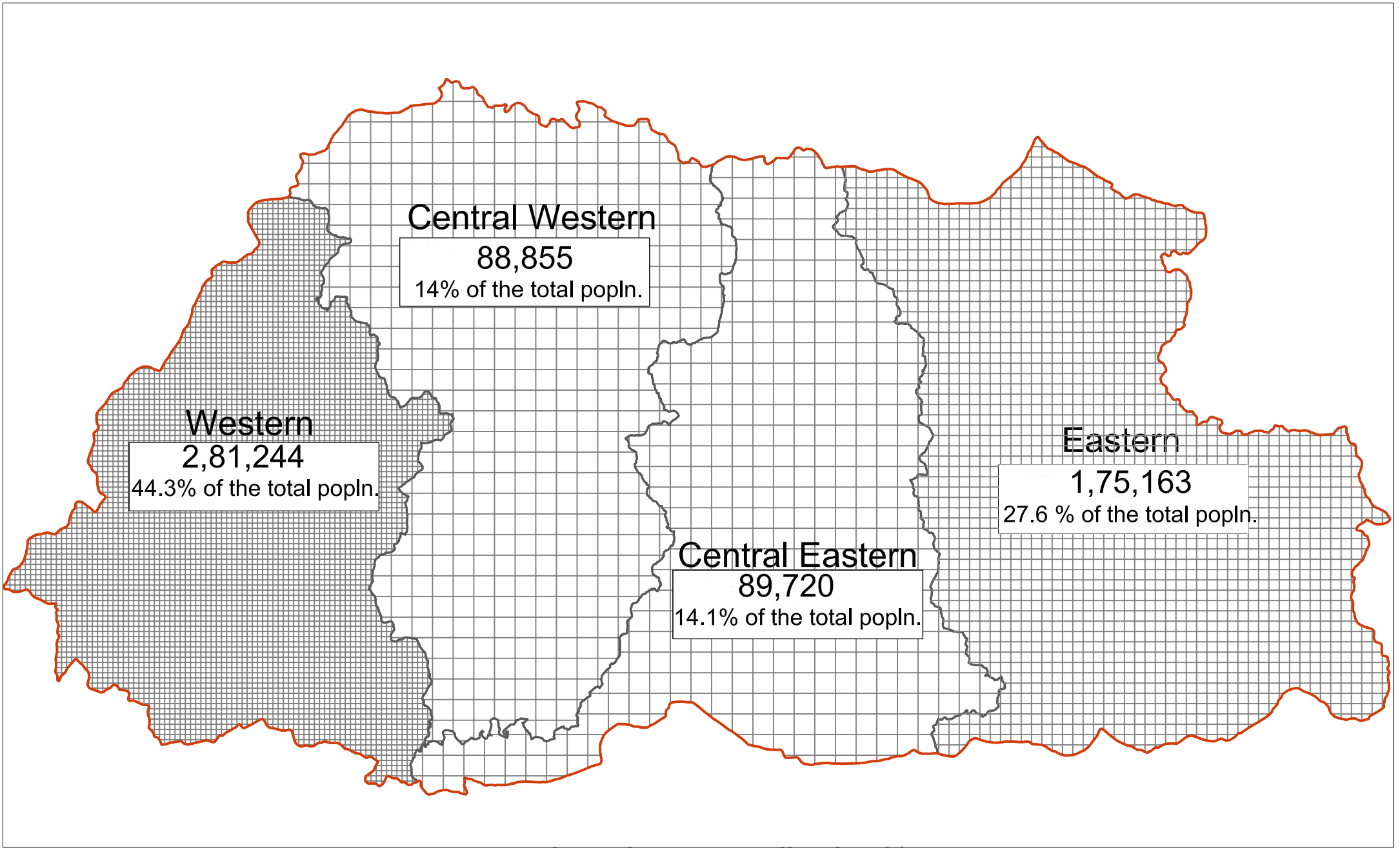
12. The rate of natural increase in the population was computed for each region from the data on survivals given in the census. The results are seen in Table 2.6. It is observed that the Western Region has the lowest growth rates considering both urban and rural population. The rates of growth in the two central regions are significantly higher than in the Western Region, in both, the rural and urban populations. Surprisingly the rate of natural increase in the urban population is

highest in the Eastern Region. However the out migration from this region (as seen from Table 2.8) results in a net loss of population for the region. The data on natural growth rates indicates a process which could lead naturally to a more balanced distribution of population eventually. However, this tendency to balance is more than offset by the process of inter-regional migration which leads to further concentration of population, particularly urban population in the Western Region.

Table 2.6: Bhutan's region-wise natural increase in population, 2004-2005

Population		Bhutan	Regions			
			Western region	Central-western region	Central-eastern region	Eastern region
Total Population	Popln.,2005	634,982	281,244	88,855	89,720	175,163
	Natural increase per annum	1.28%	1.17%	1.39%	1.37%	1.37%
Urban Population	Urban Popln., 2005	196,111	127,677	13,840	22,880	360,508
	Natural increase per annum	1.45%	1.31%	1.68%	1.61%	1.78%
Rural Population	Rural Popln., 2005	438,871	153,567	75,015	66,840	143,449
	Natural increase per annum	1.14%	1.05%	1.33%	1.29%	1.05%

Source: PHCB, 2005



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Ministry of Works and Human Settlements

Consultants:
IPE INFRASTRUCTURE PROFESSIONAL ENTERPRISE (P) LTD
GYALTSHEN CONSULTANCY

Project: Bhutan National Urbanization Strategy

Map title: Regionwise Population and contribution

Data source: Computed from PHCB data 2005

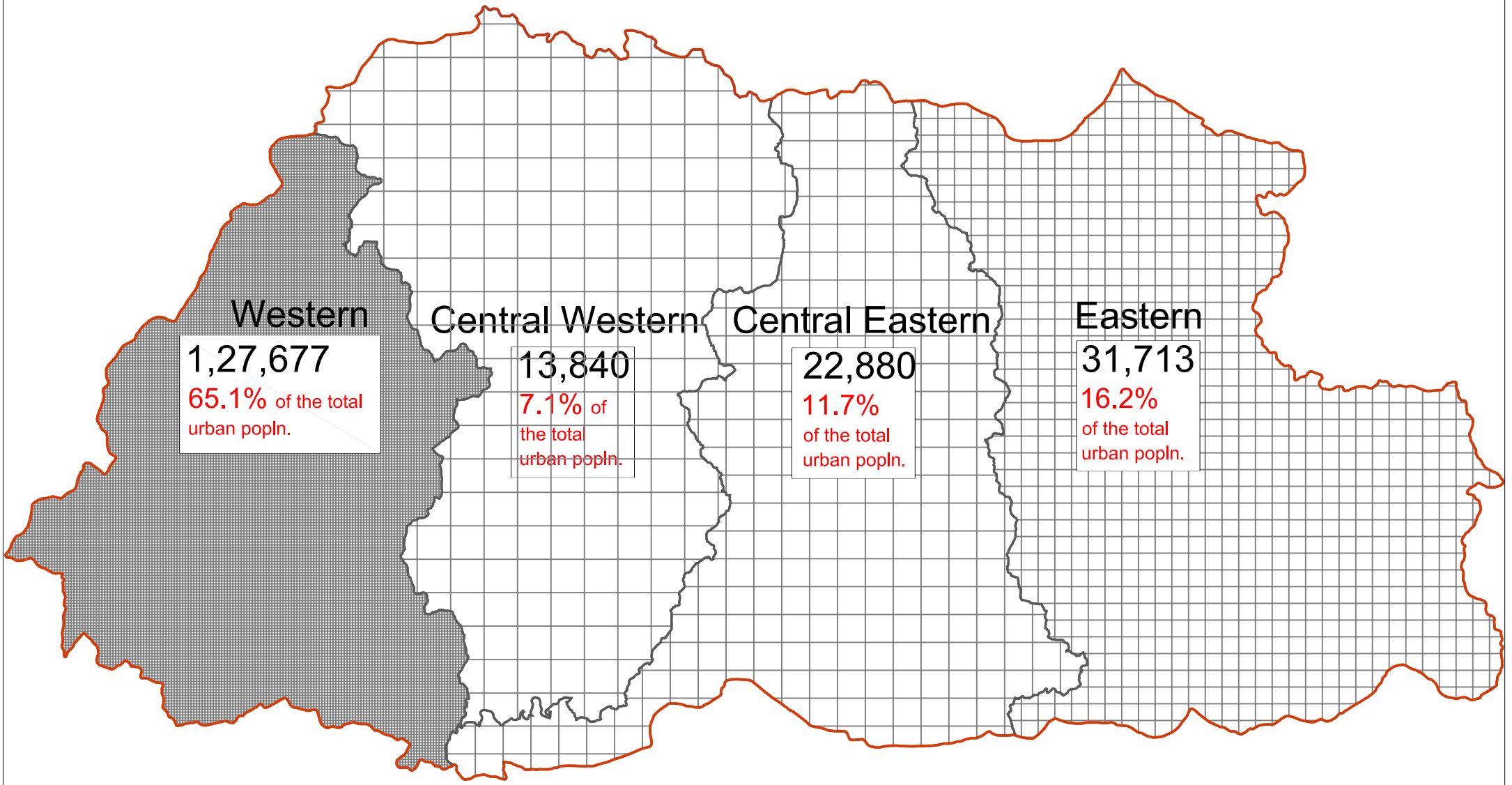
0 20 50kms
Each square = 20 km x 20 km

Drawn by :Poornima.G and Shantl Katel

Dec, 2006

North

Map No.: 2



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Project: Bhutan National Urbanization Strategy

Map title: Regionwise Urban Population and contribution

Data source: Computed from PHCB data 2005

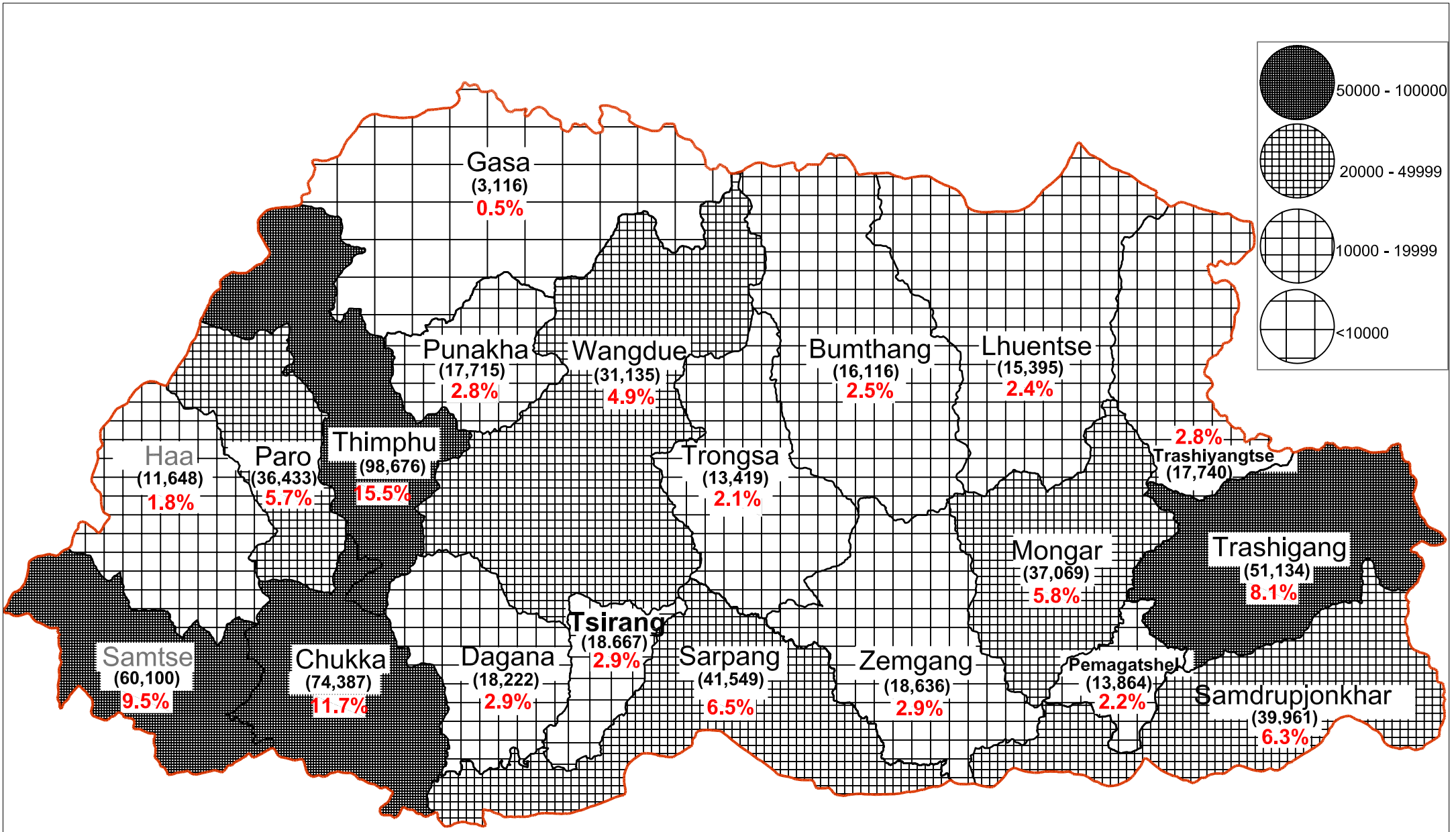
0 20 50kms
Each square = 20 km x 20 km

Drawn by :Poornima.G and Shantl Katel

Dec, 2006

North

Map No.: 3



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GYALTSHEN CONSULTANCY

Project: Bhutan National Urbanization Strategy

Map title: Dzongkhag wise Population and contribution

Data source: Computed from PHCB data 2005

0 20 50kms
Each square = 20 km x 20 km

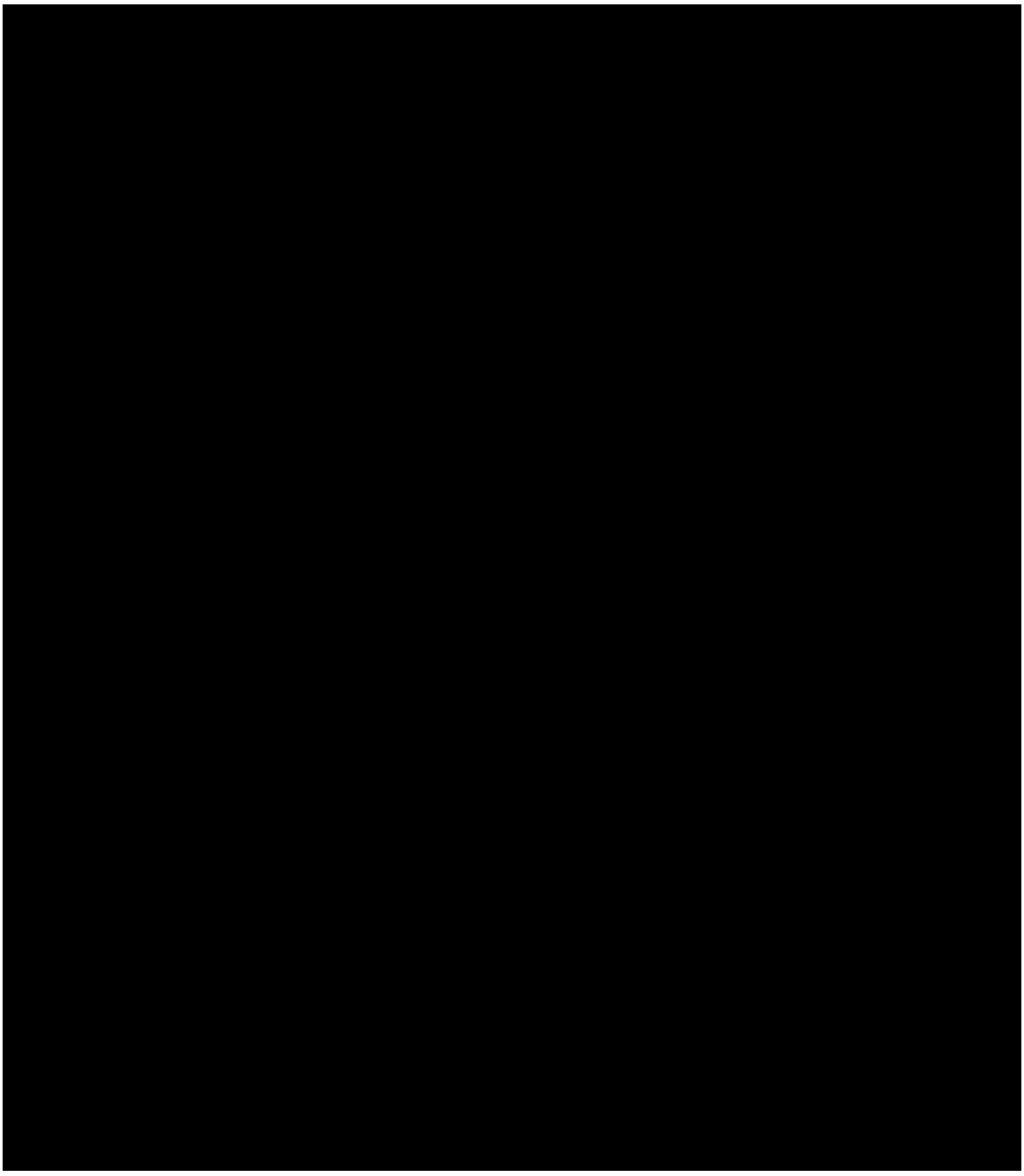
Drawn by :Poornima.G and Shanti Katel

Dec, 2006

North

Map No.: 4

Table 2.7: Dzongkhag-wise natural increase in population, 2004-2005



2.3(c) Migration

13. The data related to inter-regional (and inter–dzongkhag) migration clearly indicates that the main contribution to the existing concentration of population in the Western Region is the migration from all the other three regions. The Western Region has a net gain of a population of 57,524 of which 45,694 (almost 90 percent) is through out migration from the Eastern Region. If the population is adjusted amongst the regions by reallocating back the migrants to their origins, the resulting balance between the Western and the Eastern Regions is to be noted.

Table 2.8 : Regional Migration in Bhutan, 2005

		Regions			
	All Regions	**Western**	**Central-Western**	**Central-Eastern**	**Eastern**
Total Population of Region	634,982	281,244	88,855	89,720	175,163
In-migration	193,044	109,112	25,638	30,172	28,122
Out-migration	193,044	51,588	33,471	34,169	73,816
Net-migration	0	57,524	-7,833	-3,997	-45,694
Adjusted popln., 2005 (ignoring net migration)	634,982	223,720	96,688	93,717	220,857

Source : PHCB, 2005

Inter Dzongkhag Migration

13. The overall figures of net migration at the regional level as discussed in the preceding paragraph need to be seen along the data on inter dzongkhags migration as shown in Table 2.9. The general picture is one of extensive mobility within the country across all dzongkhags. Map 4 shows the migration into and out of all the dzongkhags, ignoring Thimphu and Gasa and marking only the top three destinations or origins of migrants into or out of each Dzongkhag. Thimphu dzongkhag was ignored only because it ranks as the highest attractor and the lines into the area would have blurred the remaining picture. Similarly Gasa was ignored only because the actual number of migrants into or out of it is insignificant. The overall impression received through the data and the map is one of extensive 'churning' (movement and rearrangement) of population, inspite of some favored destination dzongkhags such as Thimphu, Chhukha and Sarpang.

Table 2.9: Dzongkhag-wise migration in Bhutan, 2005

In-migration and Out-migration in all Regions					
Dzongkhag	**Total population of Dzongkhag**	**In-migration**	**Out-migration**	**Net-migration**	**Adjusted Popln., 2005 (ignoring net-migration**
Western region					
Thimphu	98,676	54,685	14,915	39,770	58,906
Chhukha	74,387	24,951	9,471	15,480	58,907
Samtse	60,100	10,839	15,336	-4,497	64,597
Paro	36,433	14,759	7,382	7,377	29,056
Haa	11,648	3,878	4,484	-606	12,254
TOTAL	281,244	109,112	51,588	57,524	223,720

In-migration and Out-migration in all Regions					
Dzongkhag	**Total population of Dzongkhag**	**In-migration**	**Out-migration**	**Net-migration**	**Adjusted Popln., 2005 (ignoring net-migration**
Central-western region					
Wangdue	31,135	9,714	8,063	1,651	29,484
Punakha	17,715	6,461	5,612	849	16,866
Dagana	18,222	3,649	7,938	-4,289	22,511
Tsirang	18,667	5,133	11,308	-6,175	24,842
Gasa	3,116	681	550	131	2,985
TOTAL	88,855	25,638	33,471	-7,833	96,688
Central-eastern region					
Sarpang	41,549	17,997	12,252	5,745	35,804
Bumthang	16,116	5,050	4,347	703	15,413
Zhemgang	18,636	3,519	12,028	-8,509	27,145
Trongsa	13,419	3,606	5,542	-1,936	15,355
TOTAL	89,720	30,172	34,169	-3,997	93,717
Eastern region					
Samdrupjongkhar	39,961	9,532	12,467	-2,935	42,896
Mongar	37,069	5,418	12,871	-7,453	44,522
Trashigang	51,134	7,105	23,802	-16,697	67,831
Trashiyangtse	17,740	2,238	8,509	-6,271	24,011
Pemagatshel	13,864	2,028	8,129	-6,101	19,965
Lhuentse	15,395	1,801	8,038	-6,237	21,632
TOTAL	175,163	28,122	73,816	-45,694	220,857
All Dzongkhags	634,982	193,044	193,044		634,982

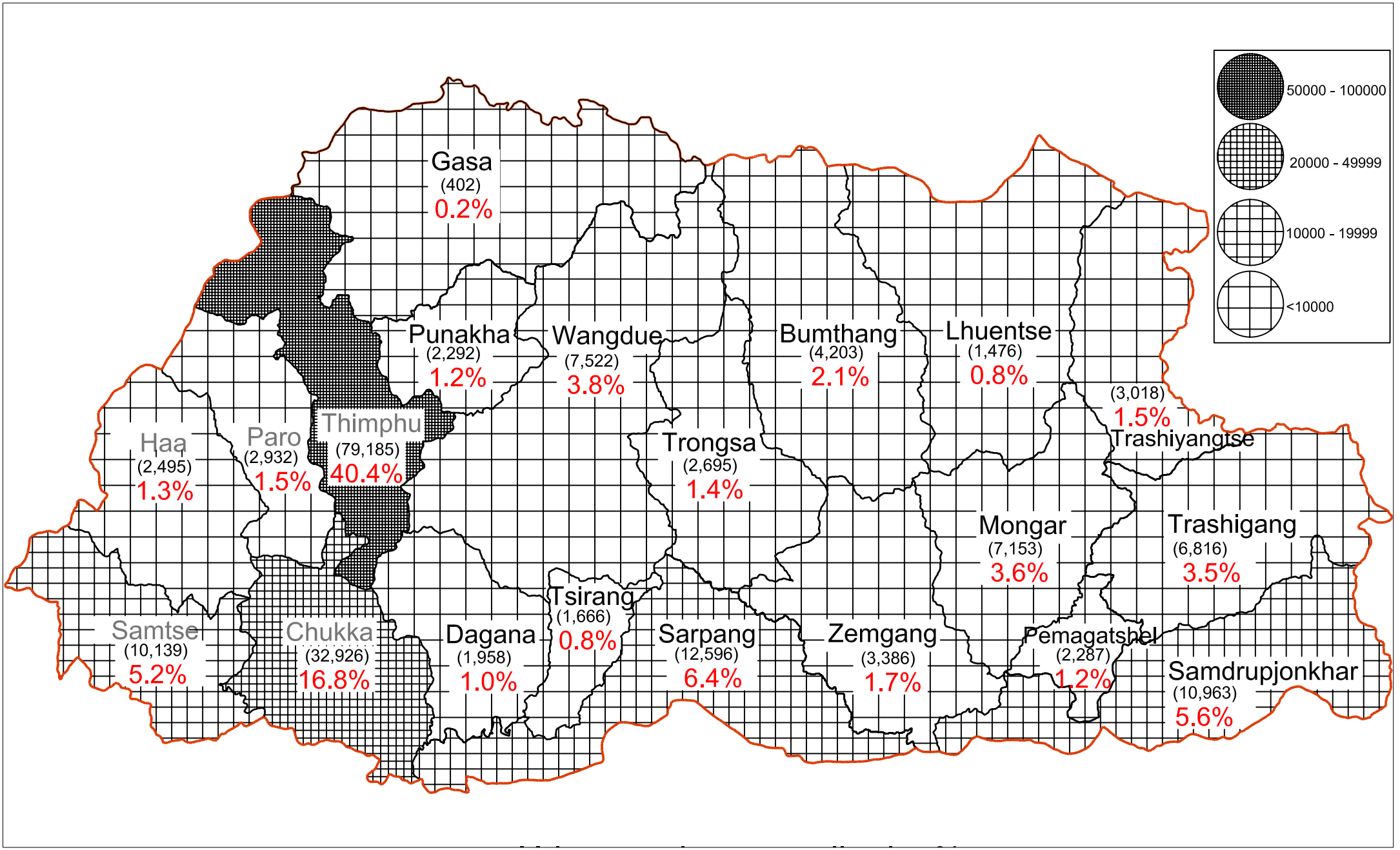
Source: PHCB, 2005

14. The census listed the reasons for the migration and the table 2.10 summarizes the reasons cited for urban and rural migration. In both the cases 'family move' ranks as the most frequent reason for migration, followed by employment as the second most frequent reason for the urban migrant and marriage as the second most frequent reason for the rural to rural migrant.

15. In both the large urban cities, Thimphu and Phuentsholing, a high proportion of the population are civil servants (50 percent in Thimphu and 44 percent in Phuentsholing). This suggests that the pull factor for rural-urban migration has to do primarily with administrative decisions to locate the government offices in these two cities.[1] Spatial distribution of government offices will be one solution for mitigating migration to cities.[2]

16. Rural-urban migration is likely to accelerate and, in the absence of mitigating measures, can be expected to lead to increasing congestion, environmental degradation, conflicts of interest, and socioeconomic problems in the cities. Also, there will be loss of an active segment of rural society.

[1] Ninth Plan Main Document (2002- 2007), Planning Commission, RGoB
[2] *Ibid*



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Project: Bhutan National Urbanization Strategy

Map title: Dzongkhag wise Urban Population and contribution

Data source: Computed from PHCB data 2005

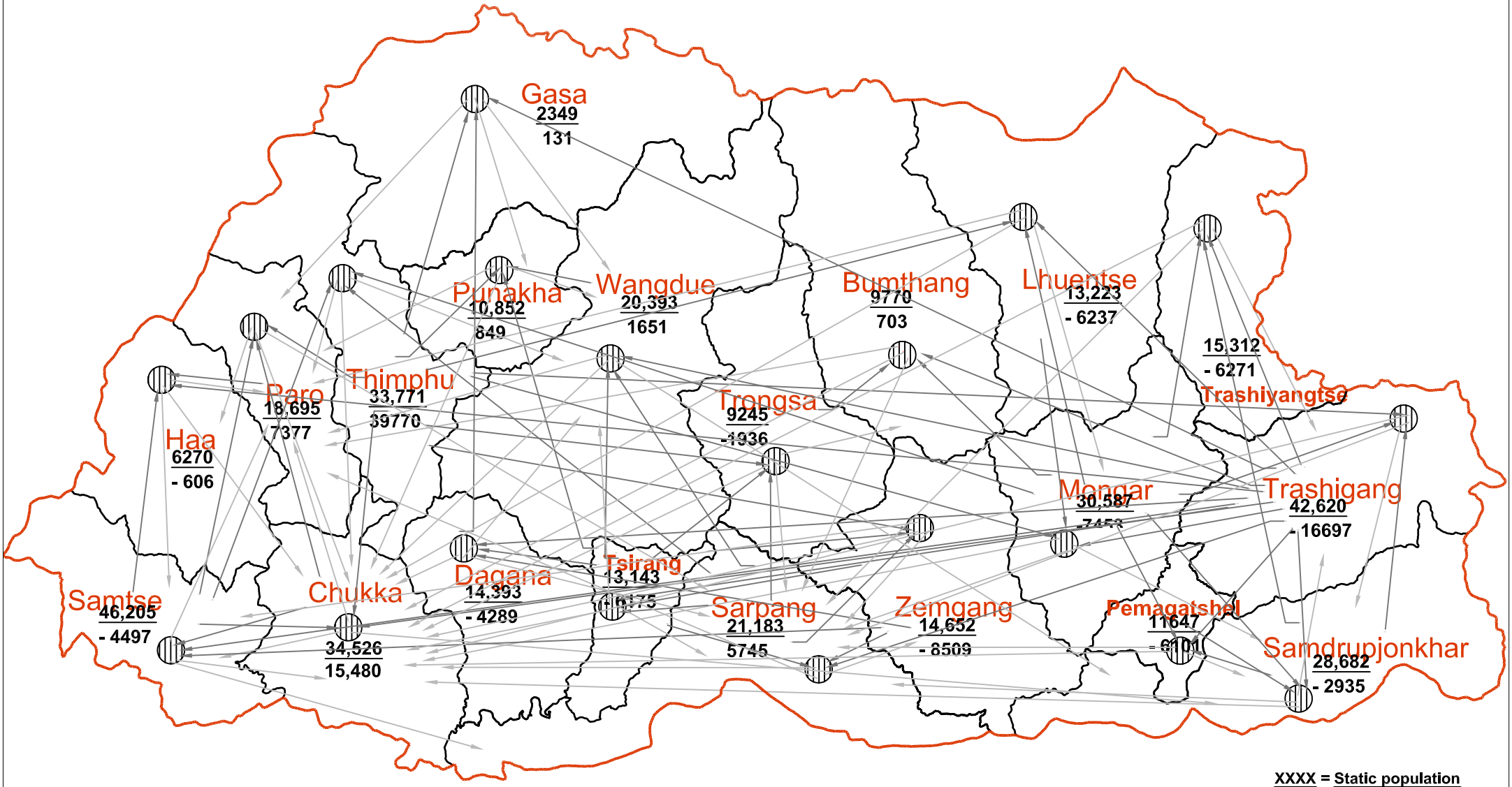
0 20 50kms
Each square = 20 km x 20 km

Drawn by :Poornima.G and Shantl Katel

Dec, 2006

North

Map No.: 5



Note: Top 3 In-migration and Out-migration for each Dzongkhags are plotted ignoring Thimphu and Gasa dzongkhags as destinations

XXXX = Static population
YYY = Net migration

Royal Government of Bhutan Ministry of Works and Human Settlements	Consultants: IPE INFRASTRUCTURE PROFESSIONAL ENTERPRISE (P) LTD GYALTSHEN CONSULTANCY	Project: Map title:	**Bhutan National Urbanization Strategy** **Inter Dzongkhag migration** *Data source: Computed from PHCB data 2005*	0 20 50kms Each square = 20 km x 20 km Drawn by :Poornima.G and Shanti Katel Dec, 2006	North Map No.: 6

Table 2.10: Bhutan: Migration by reasons for urban and rural sector as enumerated by the Census, 2005

S.No.	Reasons of Migration	Urban	Rural
1	Employment	30,446	22,143
2	Education	20,395	21,774
3	Training	2,272	2,169
4	Marriage	9,138	24,357
5	Family move	49,277	51,355
6	Transfer of work place	16,128	15,332
7	Resettlement	1,088	9,864
8	Natural calamities	325	750
9	Security	342	985
10	Health	2,503	1,002
11	Business / Official	3,627	2,491
12	Retirement	874	2,545
13	Tourist	134	100
14	Visiting only	6,718	7,923
15	Others	4,914	8,315
	Population that never moved	*42,863*	*2,65,984*

Source: PHCB, 2005

2.4 Level of Urbanization

17. Though the overall urbanization level of the country is about 31 percent, the disparity in distribution of urban population leads to a 45 percent urbanization level in the Western Region, whereas the other three regions have proportions of urban population (to their total populations) that are below the national average. The Eastern Region, in spite of its significant total population size and a high growth rate in its urban population shows only 18 percent urbanization level. The latent potential in the urbanization of this region needs to be noted.

18. Bhutan is currently experiencing a 7.3% average annual growth rate in its urban population as compared to 1.28% for total population. Table 2.11 which presents urbanization in Bhutan's regions shows that the Western Region posted 11% annual growth rate in its urban population, whereas the Central Western Region actually shows a negative growth rate. The other two regions show a growth rate that is less than the national average. This pattern can be explained by assuming that in spite of the higher natural growth rates in their urban population, the out migration component has effectively reduced the net growth in urban population in the three regions.

Table 2.11: Bhutan's urbanization by regions, 2005

S. No.	Aspects	Bhutan	Regions			
			Western	Central-western	Central Eastern	Eastern
1	Popln. 2005	634,982	281,244	88,855	89,720	175,163
2	Contbn. to total popln. (%)	100	44.3	14.0	14.1	27.6
3	Urban Popln., 2000	137,864	75,449	14,954	17,942	29,519
4	Urban Popln., 2005	196,111	127,677	13,840	22,880	31,714
5	Growth rate in urban Popln., 2000-2005 (avg. annual %)	7.3	11.1	-1.5	5.0	1.4
6	Urbanization level, 2005	31	45	16	26	18

Source : PHCB, 2005

19. Out of the 20 dzongkhags in Bhutan, 17 dzongkhags have an urbanization level that is below the national average of 30 percent. A majority, twelve of them have less than 10 % urbanization. This, on one hand may reflect a very low level of secondary and tertiary economic development in these dzongkhags while on another hand be interpreted as representing the latent potential for future urbanization. Table 2.12 gives the number of dzongkhags distributed by urbanization level classes.

Table 2.12 Urbanization level class distribution of dzongkhags, 2005

S. No.	Size class	Bhutan	Regions			
			Western	Central western	Central eastern	Eastern
1	> 75 %	1	1			
2	50 % to 75 %	0				
3	30 % to 49 %	2	1		1	
4	20 % to 29 %	5	1	1	2	1
5	10 % to 19 %	9	1	3	1	4
6	< 10 %	3	1	1		1
	Total	20	5	5	4	6

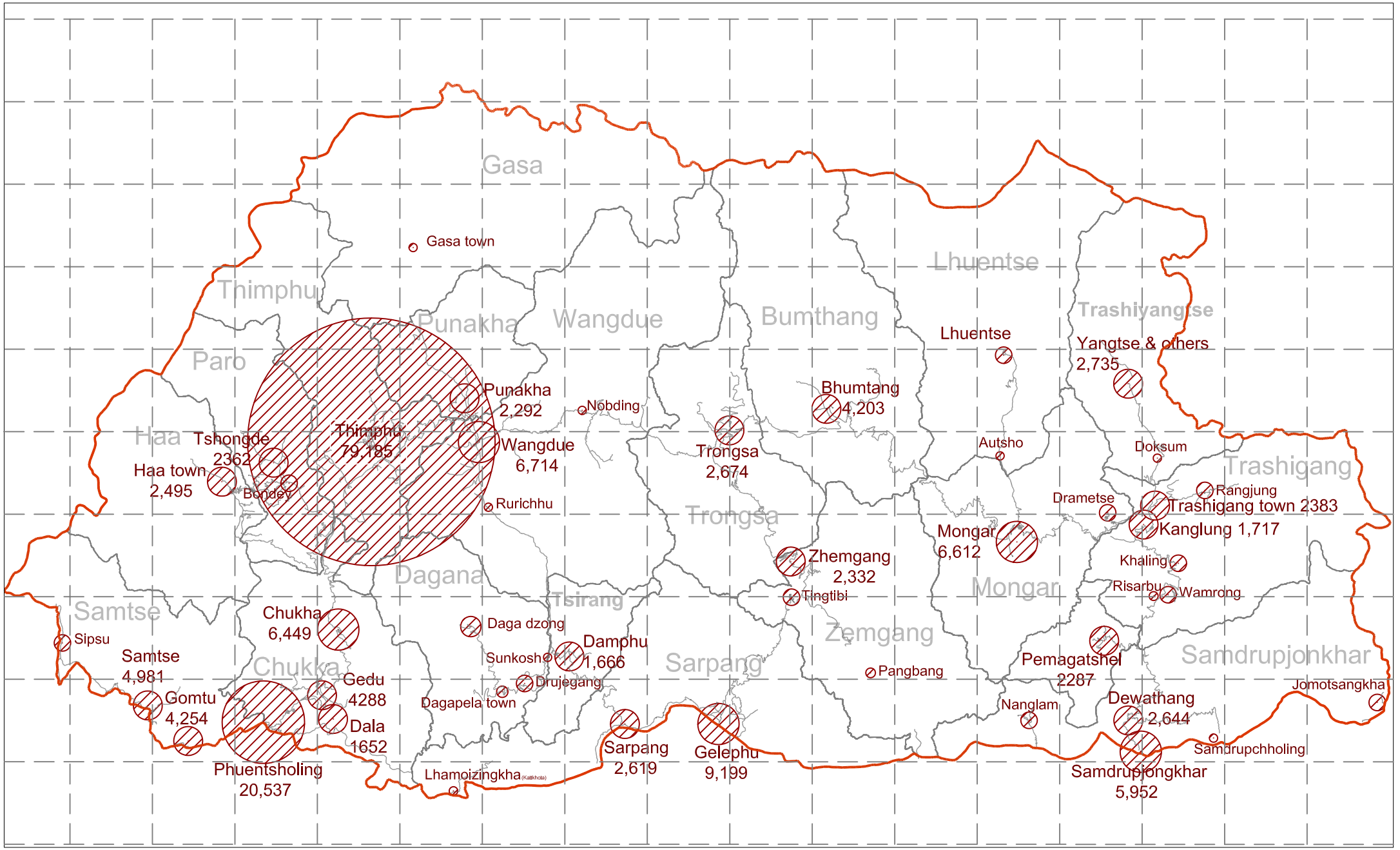
Source: PHCB, 2005

20. Table 2.13 gives the number of dzongkhags distributed by urban population size classes. Surprisingly fifteen dzongkhags have less than 10,000 urban population. The dzongkhags with the least urban population are concentrated in the Central-Western and Eastern regions. Table 2.14 includes the actual urban area within each dzongkhag that accounts for that urban population size class. This table also adopts a more detailed size class interval so as to detail out the distribution at a greater resolution. Though it was considered initially that these dzongkhags may not be to expected to support a regional urban growth centre, local urban experts felt that the inter dzongkhag migration data reflected no such constraints in population movement and settlement.

Table 2.13 Urban population size class distribution of dzongkhags by regions, 2005

S. No.	Size class	Bhutan	Region			
			Western	Central western	Central eastern	Eastern
1	> 100,000					
2	50,000 to 100,000	1	1			
3	20,000 to 49,999	1	1			
4	10,000 to 19,999	3	1		1	1
5	< 10,000	15	2	5	3	5
	Total no. of dzongkhags	20	5	5	4	6

Source: PHCB, 2005



Royal Government of Bhutan
Ministry of Works and Human Settlements

Consultants:
INFRASTRUCTURE PROFESSIONAL ENTERPRISE (P) LTD
GYALTSHEN CONSULTANCY

Project: Bhutan National Urbanization Strategy

Map title: Location and size of Urban centres 2005

Data source:Computed from PHCB data 2005

0 20 50kms
Each square = 20 km x 20 km

Drawn by :Poornima.G and Shanti Katel

Dec, 2006

North

Map No.: 7

Table 2.14 Urban Population size class distributions of Dzongkhags, 2005

S. No.	Size class	Dzongkhags	Nos.
1	>50,000	Thimphu	1
2	45,000 to 49,999		0
3	40,000 to 44,999		0
4	35,000 to 39,999		0
5	30,000 to 34,999	Chhukha	1
6	25,000 to 29,999		0
7	20,000 to 24,999		0
8	15,000 to 19,999		0
9	10,000 to 14,999	Samtse, Samdrupjongkhar	3
10	5,000 to 9,999	Trashigang, Mongar, Wangduephodrang	3
11	2,000 to 4,999	Pemagatshel, Punakha, Haa, Trongsa, Paro, Trashiyangtse, Zhemgang, Dagana, Bumthang	9
12	<2,000	Gasa, Lhuentse, Tsirang	3
Total			**20**

2.5 Number and Size Distribution of Urban Settlements

21. The 2005 Census data has shown that almost 56 towns have a population less than 5000, where as only 4 towns, viz. Samdrupjongkhar, Wangdue, Gelephu and Phuentsholing have a population ranging from 5000 to 20,000. It is significant to note that 36 of the 61 census towns actually have a population of less than 1500 persons which is the minimum specified by the recent list of criteria identified by the MoWHS for qualification for a Thromde (or urban centre). If these 36 settlements were to be actually declassified as urban areas, the urbanization pattern of the country would present, statistically speaking, a different scenario.

Table 2.15 : Population size class distribution of towns in Bhutan, 2005

S. No.	Popln. Size	No. of towns
1	> 50,000	1
2	20,000 to 50,000	1
3	10,000 to 19,999	
4	5,000 to 9,999	3
5	1,500 to 4,999	20
6	< 1,500	36
	Total	**61**

2.6 Land Utilization

22. One of the two main sector issues in urban development has already been listed as that of land availability for urban development.
The land cover data from the MoA as reproduced in Table 2.16 indicates that 72% of the land is under forest cover. The RGoB has an objective of not allowing this percentage to fall below 60% in any circumstance. Agriculture and horticulture uses account for nearly 8% and the area covered by settlements is only 0.09%. The

agriculture area is given as 3,594 hectares. Area under 'others' meaning glaciers and rocky outcrops, etc. account for about 15% and a major part of this area is in the northern part of the country, specially in Gasa, Paro, Thimphu, Bumthang and Wangdue dzongkhags.

Another paper from the GIS division in the MoA states that if slopes less than 30 degrees are considered, along with certain other criteria, another 8% of the country's land which is presently under forest and pasture use may be counted as potential agricultural and horticulture use land. A major portion of this 'potentially' convertible land is in the southern dzongkhags, especially in Samdrupjongkhar.

23. Viewed against the Vision 2020's stated concern for food security which is seen as a basic necessity to ensure the nation's sovereignty, the RGoB in general and the MoA in particular, rate the issue of loss of agriculture land to urban uses as a very serious policy area to be addressed urgently.

Table 2.16: Land cover figures by Dzongkhag (in %)

Dzongkhag	Forest	Agriculture	Pasture	Horticulture	Settlement	Others
Thimphu	56.03	1.93	17.28	0.34	0.54	23.89
Paro	65.16	5.69	6.36	0.41	0.03	22.37
Ha	78.77	1.88	7.10	0.08	0.05	12.12
Chhukha	86.92	9.29	1.68	0.24	0.19	1.68
Samtse	80.86	15.71	0.08	0.89	0.08	2.38
Punakha	89.41	4.72	1.92	0.03	0.07	3.85
Gasa	32.86	0.17	5.29	0.00	0.00	61.68
Wangdue	73.81	2.26	3.52	0.00	0.06	20.35
Tsirang	76.17	21.74	0.13	0.11	0.01	1.83
Dagana	82.17	12.69	1.17	1.10	0.00	2.87
Bumthang	66.74	2.07	8.18	0.00	0.06	22.94
Trongsa	87.58	5.78	3.61	0.13	0.02	2.87
Zhemgang	86.75	10.60	0.46	0.02	0.10	2.08
Sarpang	83.19	11.98	0.55	0.24	0.26	3.78
Lhuentse	75.27	4.44	3.27	0.00	0.01	17.01
Mongar	88.46	9.77	0.80	0.00	0.05	0.93
Trashigang	78.97	14.19	4.78	0.00	0.06	1.99
Trashi Yangtse	76.55	7.81	3.29	0.00	0.03	12.32
Pemagatshel	53.60	45.25	0.04	0.02	0.09	0.99
Samdrup Jongkhar	77.27	18.24	0.34	0.04	0.12	3.99
National	72.47	7.71	3.90	0.14	0.09	15.69

Source: Land Cover and Area Statistics of 20 Dzongkhags, 1996, LUPP, PPD, MoA

2.7 Urban Densities

24. To understand the land required for urban development, the existing town densities were compiled from the data available. Table 2.17 shows the town densities estimated on the basis of the population as per the PHCB, 2005, though the areas of the towns may be many years older(DUDES). Though Nganglam Town (S.No.38) has the highest gross density of 254 persons per hectare (PPH), it is seen that in general most of the densities range from about 20 PPH to less than 50 PPH. Thimphu itself shows a gross density of only 30 PPH. However, it is to be noted that the Local Area Plans for Thimphu city have planned for higher residential densities ranging between 300 and 600 PPH. Though these cannot be equated to smaller town level densities, higher densities than those existing at present may be desirable (in smaller towns) in a context of limited land availability. This standard will however require a formulation of planning and design guidelines and supported by a carrot and stick policy (that is, incentives and taxes)

Table 2.17 : Town density classes, Bhutan, 2005

Town Density Class (PPH)	**No. of Towns**
>200	1
100 - 199	1
50 - 99	7
20 - 49	22
10 - 19	10
<10	6
Total	**47**

Avg. Density	22.1	PPH

Note : Areas for the other 14 Census Towns were not available

Source : Town areas from DUDES, MoWHS
Popln. from PHCB, 2005

2.8 Impacts of Urbanization

25. Besides the skewed distribution of population leading to an imbalanced regional development and consequent socio-economic and environmental imbalances in general, the following are the other observable impacts of urbanization in Bhutan

2.8 (a) Environmental Impacts

26. More than 40% of the total urban population lives in the two main cities (Thimphu and Phuentsholing) and environmental problems such as water shortage, air and water pollution, municipal waste generation, congestion of traffic and land degradation are manifest in both these two main cities. In general urban centers consume prime agricultural lands in the valleys and encroach on forested hill slopes. Lack of proper infrastructure and facilities for drainage, sanitation and waste disposal have cumulative adverse impacts on the environment. Primary environmental pressures on the urban environment arise from:

- Water supply
- Waste water collection and treatment
- Drainage and flooding
- Solid waste collection and disposal
- Hill cutting and erosion

Secondary environmental issues are:

- Electrification and street lighting
- Noise
- Traffic congestion
- Air pollution
- Pedestrian areas
- Household fuel supply

Water supply

27. Bhutan has abundant water resources. The annual rainfall ranges from 4,000 mm at low altitudes to 500mm at high altitudes. The per capita minimum flow availability of water is estimated at 20,000 m3. The generally accepted minimum flow requirement is 5,000 m3 per capita per year. The water treatment plants employ conventional flocculation, sedimentation and chlorination. However not all households are supplied from municipal sources with water treatment plants which purify the water. Other houses connect unofficially to streams and other sources.

Waste water collection and treatment

28. In Thimphu (even being a capital city) only about 12% of the city is sewered. The rest of the buildings are connected to septic tanks which often overflow, or in fact discharge directly to surface drains which then lead directly into the river. Assuming the water supply to the city is 5,000 cubic metres per day, and taking a figure of 80% of drinking water becoming waste water, this means that over 3,000 cubic metres per day of untreated waste water is entering the river.

Drainage and flooding

29. Poor road surfaces and inadequate provision of drains leads to surface ponding. This situation is worsened by uncollected garbage blocking drains.

Solid waste collection and disposal

30. Taking Thimphu as an example, the city currently generates about 40 tonnes of waste a day. This is removed from bins and skips by compactor vehicles which then have to make a 24 kms round trip to a landfill. The landfill is almost at full capacity and a new one is planned. This will involve a 38 kms round trip. Using compactor vehicles for such long distances is not a cost effective use. There is little attempt at recycling and hauled garbage is a mix of food waste, bottles, cans, paper, plastic bags etc. Segregation at source or at the transfer station could generate useful resources and reduce the load to the landfill, thus extending its life. Composting is being attempted in Thimphu. To be successful it requires segregation at source, removal of all glass, broken bottles, sharps, cans, plastics, PET bottles, waste toilet cleaner chemicals, aluminum cans paper and cardboard. It also requires a market to off take the finished product which is not fertilizer but a soil conditioner. Viability can be dubious. In rural areas it may be feasible for smaller administrative units to pool resources to run common landfills.

Costs

31. All of the above services involve a cost which must be paid for in some manner. At present such services are heavily subsidized by government, but if the coverage of the services is to be extended, and the services improved, then some allocation of costs to the individual consumers must be considered.

Hydro power

32. High precipitation, extensive forest cover and well-preserved watersheds have endowed the country with abundant hydropower resources. Hydropower will reduce the country's dependence on fuel wood. The socio-economic and environmental benefits notwithstanding, hydropower development imposes several environmental and social costs. Though it is impossible to totally avoid these costs, prudence and employment of necessary safeguards can greatly reduce the adverse social and environmental impacts from hydropower development.

Cleaner energy and technology

33. Bhutanese households, particularly in the urban areas, are increasingly using cleaner sources of energy in place of traditional solid fuels such as fuel wood. The number of electricity consumers increased from 31,600 in 1998 to 44,700 in 2003. Also per

capita electricity consumption increased from 619.4 kilowatt-hours (KWh) to 927.3 KWh in over the same period. For lighting 57.1% of all households used electricity and 2.5% used solar power. For cooking, 30.6% used electricity and 25.6% used liquefied petroleum gas, which are much cleaner than wood. (Ref - The PHCB 2005) The use of electricity as a primary source of energy is expected to become more widespread in the near future with the inception of additional hydropower projects and expansion of power transmission and distribution network.

34. MTI has established Clean Technology and Environmental Management (CTEM) Fund to especially support industries that existed before the enactment of the Environmental Assessment Act to upgrade their equipment and switch over to cleaner technology that meets the industrial emission standards. The CTEM Fund is implemented on a cost-sharing basis with the recipient industry chipping in 50 percent of the costs. So far, the CTEM Fund has aided five large-scale industries. In the case of new industries, environmental clearance is mandatory and inclusion of measures to adhere to the requisite industrial emission standards in the project proposal is a key criterion for such clearance.

Noise and incompatible land uses

35. The issue of conflicting uses will also emerge, if noisy and air-polluting workshops are allowed to be established within the city. For example, the existing sawmills in Thimphu City are an inappropriate function in the city.

Land conversion

36. Conversion of forest land has been significant. Data compiled by the Department of Forestry show that more than 1,300 hectares of forest land have been cleared between 2001-2005 for various infrastructure development activities, with roads and power transmission lines alone accounting for more than 70 percent of the total area cleared. Population growth can cause excessive use of biodiversity resources especially in places where there is high population density. For instance, hardwood species have become scarce in forests around Thimphu as a result of continuous extraction of hardwood species for fuelwood by Thimphu residents in the 1980s and 1990s. Urbanization has led to conversion of forest land to construct buildings and other infrastructure for the urban population and also to increase in harvesting of timber from adjacent forests to meet construction demands in the urban centers.

Forest harvesting

37. Logging operations are carried out in order to meet demands for timber and fuelwood. The Department of Forestry supply more than 280,000 m3 of wood annually. Estimates (Ref - from forest resource production assessment carried out by the Forest Resources Development Division in 2004) suggest that wood demand far exceeds the current supply situation. The estimated demand is about 769,000 m3 per year whereas the volume of current wood supply averages 284,000 m3 per year. This suggests that there is pressure on forests to match wood demand. Excessive extraction of wood from the forests will lead to forest degradation, causing soil and water erosion and impacting on land productivity and stability.

    Infrastructure development such as construction of roads and power transmission grids has damaging consequences on biodiversity especially when they cut through natural habitats and create wide corridors of barren space.

Environmental mapping

38. Bhutan suffers from a shortage of productive land as all such areas tend to be confined to river valleys. At the same time, urban development and land needed for utilities would naturally occur in these valleys. Urban spread up the valley sides can lead to loss of forest cover and slope instability. It is proposed that the GIS department of the MoA is association with the NEC identifies “environmental

hotspots", such as areas of pristine forest, high ecological value, or slopes exceeding a specific gradient, so that they may be avoided. These are very much local issues and this needs very proactive involvement of local planning authorities in order to identify sensitive areas correctly.

Institutional issues

39. There are already several laws, regulations and development planning controls in existence to guide and control environmentally sound urban development. However, in many cases these seem to be ignored. There is a need for institutional strengthening and raising public awareness to inculcate a spirit of civic pride and sense of responsibility for these issues.

2.8 (b) Economic Aspects

Economic growth

40. During the Eighth Five Year Plan, the real GDP of Bhutan has grown by 6.7 percent, and the Ninth Plan target is set at 8.2 percent. The year-wise growth trend suggests that this target is likely to be achieved. As of 2004-05, nominal GDP is about Nu 31.2 billion (USD 693 million at BTN/USD of 45). Despite impressive growth, the economy is still in its infancy with narrow productive base. The growth impulses have been largely coming from the sectors like power, construction and transport.

41. The economy of Bhutan is primarily based on agriculture and forestry. Agriculture consists largely of farming and animal husbandry. Though the contribution of the sector has declined from 33.8 percent in 2001-02 (end of the Eighth Plan) and further to 25 percent in 2004, agriculture still plays a critical role in the economy and absorbs 63 percent (as of 2004) of the total work force. The sector is gradually shifting from subsistence level farming to cash crop production.

42. Leaving aside agriculture, the economic growth is driven largely by hydropower, construction sector, transport and communication. While contribution of these sectors are high, about 38 percent of GDP (power: 8.6 percent; construction: 19.0 percent; and transport and communication: 10.8 percent), the employment generation is very low, accounting for a meager share of 5 percent in the total employed persons. Thus, generating growth for providing employment is one of key development challenges. Mining, Manufacturing and Tourism are other developing sectors in Bhutan.
    The future growth potential seems to reside in economic diversification and industrial development, with focus on power, mining/manufacturing, and tourism sectors.

43. The Royal Government has a good record of managing public finances in a prudent and judicious manner. The government has ensured that recurrent expenditure is financed only with domestic revenue, which is crucial for ensuring the sustainability of the development program. For augmenting revenue, RGoB has recently raised domestic power prices and introduced user charges for domestic water and school materials. The government has also introduced personal income tax.

2.8 (c) Poverty and Social Issues

44. Though the incidence of urban poverty in Bhutan is currently insignificant (at only 3% of the urban population reported to be below the poverty line) the 'urbanization of poverty' is a likely outcome of the rapid urbanization expected in the coming decade unless pro-poor approaches to urban development are put in place.

    Few concerns of the poor (most of them migrants who do not own land in the town) that needs to be addressed are:
    a. Unaffordable rentals that seem to be responsible for squatting. Housing for poor is critical area that would need to be addressed

b. Housing with access to quality /effective basic and social services.
c. Livelihoods and local economic development, youth unemployment
d. Transport
e. Environment

2.8 (d) Culture and Heritage

45. The Vision 2020 recognizes the role of culture and tradition as a rich fund of social philosophy to meet the spiritual and emotional needs of the Bhutanese people for maintaining its distinctive identity, and cushioning the society from some negative impacts of modernization[3]. The Royal Government of Bhutan recognizes the need for development, but culture and heritage preservation is undoubtedly one of its most important and ambitious goals. Besides the apparent and perceptible negative impact on the lifestyles of the people[4,] impact of technology in the form of visible impacts on the built and physical culture are making people reconsider level of integration with the outside world and negative impacts of development. Concerns have been increasing about replacement of traditional skills in various areas such as architecture, construction, farming, weaving, arts and crafts due to contact with the outside world and needs for improved and increased production. Meanwhile it is accepted that positive winds of change might have an impact on the knowledge, belief and life systems of Bhutan but it is important that the culture and identity of the nation does not alter itself in a big way.

46. Culture and heritage consist of a number of intangible and tangible aspects of which the traditional built environment, community spaces and places form the most important as they are mostly home to and imbibe within themselves traditional rituals, ceremonies and festivals; arts, crafts and textiles including dances, poetry/literature (folklore, myths, legends), music and religion; values and relationships; dressing and etiquette; social setup and structures.

47. It is a well known fact that traditionally, Bhutanese society has been a rural society and most of the traditional systems were created keeping in mind the social conditions of a rural set up. Current situation of increased urbanization will impact the traditional built environments and community spaces, and more so in a negative way if not planned for. In light of the above, even though it is accepted and advised that the existing examples of culture and heritage be conserved (mainly the monuments, religious structures, places, objects of artistic or historic interest, *dzongs, lhakhangs*, *goendeys, ten-sum, nyes,* arts and religion), it is strongly suggested that research activities and studies be promoted and encouraged to understand the larger system under which they were created and have sustained for so long so as to locate for them an important and undeniable place in the modern(urban) Bhutanese society[5]. The government's recognition of culture and heritage as an evolving and dynamic force for sustainable and progressive society would be the stepping stone for the same[6] .

48. Urban development related activities have the potential to negatively impact the cultural heritage structures and systems. Wherever these development activities are developed by experts and specialists who belong to external knowledge groups there is a possibility of overlooking the heritage and cultural fabric as existing in the areas locally. The impact could be in the form of inappropriate technology for the local setup, dismantling of old and dilapidated structures which nevertheless form an

[3] Planning Commission, RGoB, Bhutan 2020- a vision for peace prosperity and happiness, 1999
[4] Akiko Ueda, The center of Bhutan Studies, Culture and Modernization from the perspectives of young people in Bhutan, 2003
[5] National Environment Commission, RGoB, The Middle Path, , 1998
[6] The Draft Constitution, RGoB, 2005

important part of the community's life, relocation of small and seemingly insignificant structures or even rocks and hillocks which are religiously revered as holy.

2.8 (e) Municipal, Institutional and Financial Aspects

49. Decentralized, participatory, consultative and accountable system of governance form the core of the draft Constitution of Bhutan and the national vision contained in Bhutan 2020. This is already manifested in the existing participatory structures such as Dzongkhag Yargye Tshogchung (DYT) and Geog Yargye Tshogchung (GYT) that are presently functioning to enable the people at large assume greater responsibility for participatory development. The existing organisational and institutional system, however, do not conform to these in urban centres. The legal framework as well is susceptible to overlaps and inter-organizational conflict.

50. Barring the capital city of Thimphu, municipal finance system does not exist in other cities and towns; this is a constraint for addressing municipal finance for determining its share in the national GDP. Civic services are presently financed from the national budget by the civil administration in the various Dzongkhags. Revenues collected from taxes that are local in nature, is remitted to the national treasury. Local services are, therefore, financed through a de facto hidden grant.

51. People's participation in their 'own' development has been a key policy in Bhutan since 1974 when His Majesty, the King was coroneted. Decentralisation through devolution to the people of Bhutan was formalised in 1981 by creating Dzongkhag Yargye Tshogchung (DYT -District Development Committee). The new wave of decentralisation was consolidated further in 1991 with the creation of Geog Yargye Tshogchung (GYT -Block Development Committee) in 1991.[7] Decentralisation initiative especially for large urban centres was taken with the enactment of the Bhutan Municipal Act (BMA) of 1999. The Act enables establishment of municipal corporations (MC) as legal entities though it does not spell out the criteria for creation of MC. Hence which size category of towns/cities should have MC form of urban local government is still unsettled.

52. The first municipal corporation in Bhutan was created in the capital city of Thimphu through a Royal Decree of 1995 that granted it an autonomous status. Provisions of the new BMA were extended to the Thimphu City Corporation (TCC) in 2003 through a Charter issued in accordance with the provisions of the BMA of 1999. Though the Charter created the TCC according to the newly enacted Act, it also withdrew the autonomy granted to the TCC by the Royal Decree mentioned above. Phuentsholing, another large city of Bhutan, is presently functioning as the second municipal corporation next to TCC though the Royal Government of Bhutan (RGoB) has not yet issued the required Charter for formally extending provisions of the BMA to Phuentsholing. The not too recently enacted BMA has deficiencies and gaps for effective functioning of Municipal Corporation in the country.

53. The RGoB also has plans for effectively regulating urban planning and development in the country. For this a Draft Bhutan Urban Development Act (DBUDA) has been prepared that provides for creation of Urban Planning Organisation (UPO) and Urban Area Development Agency (UADA). The draft legislation has certain provisions that overlap and even conflict with some of the provisions in the BMA.

54. In view of the above, Annex 5 analyses the areas of overlapping and conflicts in the BMA and the UDA for appropriately addressing these issues.

[7] Royal Government of Bhutan (Planning Commission), Ninth Plan, Main Document (2002-2007), P. 22.

3.0 Urbanization in Bhutan: Prospects, 2020

3.1 Projected Population

1. The Vision 2020 document, brought out in 1999 envisaged a 50 % urbanization level by 2020. However, if the growth rate in urban population is calculated on the basis of an estimate of urban population by the DUDH in 2000 (which was 137,864), it works out to about 7.3% annually over the five years from 2000 to 2005. If this rate of growth in the urban population were to continue to 2020, the urban population in 2020 would be 564,281. Assuming that the overall population would continue growing at 1.28% annually, it would be 768,727 by 2020. The implied urbanization level would then be about 73 %. Since it is very unlikely that the current rates of urban growth would continue over the next fifteen years these figures are only indications of what may be expected if current trends continue, and are only to present a rationale for a proactive approach to the BNUS.

Table 3.1: Bhutan's population, 2005 and projected population, 2020

Total Population				Urban Population	
1	Popln. 2005 (Census)	634,982		Urban popln. 2005 (Census)	196,111
2	Growth rate (Census)	1.28%		Urban popln. growth rate (Census and DUDH data)	7.3%
3	Popln. 2020 @ current growth rate	768,727		Urban popln. 2020 @ current growth rate	564,284
4	Implied addl. popln. , 2005 - 2020	133,745		Implied addl. urban popln. 2005 - 2020	368,173
5				Implied urbanization level by 2020 (%)	73%

Note: The population data for 2005 is sourced from the PHCB, 2005
The urban population growth rate is computed from DUDH data of 2000 and the PHCB data for 2005

2. The Vision 2020 states that '*Our aim is to achieve a 61 percent reduction in fertility in 15 years, and to achieve a replacement rate of 2 surviving children per women by the year 2012. This reduction will make it possible to progressively reduce the overall rate of population growth to 1.3 percent by the year 2017.'* This was against the then (1999) estimated 'current rate of growth of 3.1 percent per annum'. (pg. 26). The annual natural growth rate of Bhutan's population has already reduced to 1.28 percent in 2005. To estimate the future population of the nation in 2020, two possible annual growth rates, 1.28 percent and 1.0 percent are assumed. Table 3.2 presents the projected population of Bhutan in 2020 for the two annual growth rates. The additional urban population by 2020 is estimated at a maximum of 341,805, and a minimum of 172,486 for different growth rates and different urbanization levels (which in this case is a tacit indicator of possible rural – urban migration levels).

   The consensus among the stakeholders after due deliberations was that among the three values, the most likely urbanization level of the nation by 2020 could be taken as 60%. Corresponding to this urbanization level the likely additional urban population would be between 246,206 and 264,960. This should be seen more as a 'middle path' desirable plan target rather than as an objective and precise forecast.

Table 3.2: Projected population of Bhutan, 2020 for two annual growth rates.

		Population			Addl. Urban Popln.	
		Total	Urban	Rural	2005 - 2020	Remarks
1	Popln. 2005	634,982	196,111	438,871		
	Popln. 2020 (Projected)					
2	**@growth rate of 1.28% per annum**	768,452				
a	@ 50% urbanization level		384,226	384,226	188,115	
b	@60% urbanization level		461,071	307,381	264,960	*More likely urbanization level*
c	@70% urbanization level		537,916	230,536	341,805	Maximum
3	**@growth rate of 1.0% per annum**	737,194				
a	@ 50% urbanization level		368,597	368,597	172,486	Minimum
b	@60% urbanization level		442,317	294,878	246,206	*More likely urbanization level*
c	@70% urbanization level		516,036	221,158	319,925	

3.2 Land Requirement for the Additional Urban Population

3. Table 3.3 presents the gross land required to accommodate the additional urban populations at different gross town densities. If the existing town densities are to be continued as the norm, the 20 PPH density standards will require nearly 17,000 ha. for the maximum population expected or 8624 ha. for the least additional urban population expected. These imply 0.44% and 0.22% of the nation's land area respectively or more than four times and twice the land currently occupied by human settlements respectively. Two factors constrain such consumption of land for urban uses, one is the official concern to minimize loss of agricultural land and the other is the financial, technical and organizational capacity of the local authorities to develop such relatively large extents of serviced land.

Table 3.3: Gross land required (in hectares) to accommodate the additional urban population (2005 - 2020) at different gross town densities

		Gross town densities (PPH)					
S.No.	**Popln.**	**10**	**20**	**50**	**100**	**150**	**200**
1	**341,805**	34,181	17,090	6,836	3,418	2,279	1,709
	Implied % of nation's land	0.88%	0.44%	0.18%	0.09%	0.06%	0.04%
2	**246,206**	24,621	12,310	4,924	2,462	1,641	1,231
	Implied % of nation's land	0.63%	0.32%	0.13%	0.06%	0.04%	0.03%
3	**172,486**	17,249	8,624	3,450	1,725	1,150	862
	Implied % of nation's land	0.44%	0.22%	0.09%	0.04%	0.03%	0.02%

Note: For purposes of estimating the % of the nation's land required for the respective population, the area of Bhutan is taken as 38,816 sq. km. as given in the Census (PHCB, 2005)

1. On the other hand if a density standard of 100 PPH is adopted, the land required will only be as much as is now under human settlements (0.09%) for the highest expected urban population and only half of that for the least expected urban population in 2020. For accommodating the most likely additional urban population of about 250 thousand, at a gross density of 100 PPH, only 2462 ha. (or 0.06%) of land will be required. Assuming that only 40% of a town's area will be used for residential use and that the plot coverage will be only 50%, the gross town densities achievable at a space standard of 100 sq.m. of floor space per household or dwelling unit are shown in Table 3.4. This strategy of achieving a higher intensity of land utilization requires a sustained and planned effort to

ensure such development, particularly in the context of involving the private sector in urban development.

Table 3.4: Gross town densities achievable *

No. of floors (average)	Gross town density implied	Town category	Popln. size
2	200 PPH	Small towns	< 5000
3	300 PPH	Medium towns	5000-20,000
4	400 PPH	Large towns	>20,000

* Assuming that only 40% of a town's area will be used for residential use and that the plot coverage will be only 50%, at a space standard of 100 sq. m. of floor space per household or dwelling unit

3.3 Regional Variations in Population

5. Table 3.5 presents the details of population projected region wise, assuming the continuation of currents growth rates of natural increase in the respective regions and in the respective sectors (urban and rural). This will not result in any significant change in the distribution of the population. The Western Region will still have 43.5% of the total population and nearly 64% of the country's urban population. However, this is too simplistic a projection of the likely scenario, since it does not consider inter regional migration.

Table 3.5 Projected population in Bhutan, 2020, Region wise

		Regions			
	Bhutan	Western	Central Western	Central Eastern	Eastern
Popln., 2020	768,827	334,776	109,257	110,099	214,689
% share	100%	43.5%	14.2%	14.3%	27.9%
Urban popln. 2020	243,266	155,203	17,776	29,083	41,310
% share	100%	63.8%	7.3%	12.0%	17.0%
Rural popln., 2020	525,570	179,615	91,457	81,009	173,474
% share	100%	34.2%	17.4%	15.4%	33.0%

3.4 Prospects of the New Urban Classification

6. Traditionally, urban areas in Bhutan are categories into three classes, A,B and C based on about 26 criteria ranging from population estimates to number and types of schools, shops, other commercial facilities, public bus service and level urban infrastructure provision. The classification is mainly used for taxation and assessment of compensation when Government acquires land pursuant to the land Act.

Table 3.6: Hierarchy and size-class distribution of urban areas according to the 'Land Compensation Rules, 1996' framed under the 'Bhutan Land Act 1979'.

S.No.	Category of urban areas	Popln. size class	No. of urban areas	
1	Class A	> 10,000	2	Thimphu, Phuentsholing
2	Class B	5,000 to 10,000	6	Samdrup-Jongkhar, Galephu, Trashigang Town, Mongar, Paro Town and Samtse
3	Class C	< 5,000	20	
	Total		28	

7. In May, 2006 the MoWHS resolved formally that under clause 22 of the Draft Constitution of Bhutan, for an area to be declared as 'urban' (Thromde) the following (up to 75% implying at least four out of five) criteria should be met:
    a) A minimum population of 1,500 people;
    b) A population density of 1,000 persons or more per square kilometer;
    c) More than fifty percent of the population should depend on non primary activities;
    d) The area of the urban center should not be less than 1.5 square kilometers;
    e) Potential for future growth of the urban center particularly in terms of its revenue base.

    If the definition of 'urban' area is changed as it most likely will be, on account of the requirement to delimit urban constituencies for forthcoming general election to the national assembly / parliament, the urbanization pattern and the national urban system will be statistically changed. This change in 'urban' classification of settlements will also have implications on the financing, governance and hence the growth potential of the settlements. Table 3.7 presents the outcome of application of the above criteria for declaring 'Thromde'. The detailed data for the towns in ascertaining their qualification under the size, and density specifications are given in Table 3.8.

Table 3.7 Definition of 'urban' and implied number of towns in Bhutan, 2005

		No. of urban areas / towns		
S.No.	**Popln. Size Class**	**2005 census**	**With changed definition (a)**	**With changed definition (b)**
2	>20,000	2	2	2
3	10,000 to 19,999			
4	5,000 to 9,999	3	3	2
5	1,500 to 4,999	20	20	2
6	< 1,500	36	-	-
	Total	**61**	**25**	**6**

Note : (a) if only the popln. size requirement of 1500 persons is considered
(b) if the other requirements of density and min. area are also considered.

Source: DUDES, Land Compensation Rates

Table 3.8 : Town data for qualification for 'Thromde' status, 2005

S.No.	Dzongkhag	Towns in respective Dzongkhags	Population of towns	Areas of towns (in Sq.Km.)	Densities of towns (P/Sq.Km.)
	Western Region				
1	Thimphu (1)	Thimphu	79185	26.14	3029
2	Chhukha (1)	Gedu	4288		
3		Tsimasham	1233	2.05	601
4		Phuentsholing	20537	7.96	2580
5		Dala	1652	0.59	2800
6		Chhukha	2855		
7		Tsimalakha	2361	1.04	2270
8	Samtse (1)	Samtse	4981	3.44	1448
9		Gomtu	4254	1.11	3832
10		Sipsu	904	0.19	4758
11	Paro	Tshongdue	2362	0.36	6561
12		Bondey	570	0.13	4385
13	Haa	Haa	2495	1.19	2097
	TOTAL				
	Central-western region				
14	Wangdue (1)	Wangdue	6714	1.99	3374
15		Nobding	473	1.11	426
16		Rurichu	335	0.23	1457
17	Punakha	Khuru	2292	0.51	4494
18	Dagana	Daga dzong town	1146	0.39	2938
19		Dagapela town	145	0.035	4143
20		Sunkosh town	115	0.017	6765
21		Drujegang	552	0.13	4246
22	Tsirang	Damphu	1666	1.03	1617
23	Gasa	Gasa	402	0.4	1005
	TOTAL				
	Central-easter region				
24	Sarpang (1)	Sarpang	2619	1.48	1770
25		Gelephu	9199	8.14	1130
26		Lhamoizingkha	778	0.43	1809
27	Bumthang	Jakar	772		
28		Batbalathang	221		
29		Chamkar	1617		
30		Dekiling	1045	6.34	165
31		Jalkhar Town	548		
32	Zhemgang	Zhemgang	2332	0.9	2591
33		Tingtibi	675	0.77	877
34		Panbang	379		
35	Trongsa (1)	Trongsa	2695	2.1	1283
	TOTAL				
	Eastern region				
36	Samdrupjongkhar	Samdrupjongkhar	5951	1.41	4221
37		Deothang	2644	1.16	2279
38		Nanglam	1018	0.04	25450
39		Samdrupchoeling/Bangtar	393		
40		Jomotsangkha/Daifam	957		
41	Mongar	Mongar	3502	0.94	3726
42		Gyalposhing	2291	2.54	902
43		Drametse	541	0.23	2352

44		Lingmethang	819		
45	Trashigang	Khaling	1349	0.16	8431
46		Wamgrong	581	0.07	8300
47		Trashigang Town	2383	0.38	6271
48		Rangjung	633	0.41	1544
49		Kanglung	1717	0.74	2320
50		Resarbu	153		
51	Trashiyangtse (1)	Yangtse & others	2735	2.62	1044
52		Duksum	283	0.13	2177
53	Pemagatshel	Pemagatshel Town	1066		
54		Kaynadang	69	0.45	153
55		Nangkor	672	0.099	6788
56		Kherigonpa	141	0.028	5036
57		Mongling	66	0.006	11000
58		Yalang	35		
59		Khothakpa	238		
60	Lhuentse	Lhuentse	1175	0.51	2304
61		Autsho	301	0.13	2315
	TOTAL				

Note		Qualified	at least 1,500	at least 1.5 sq.km.	at least 1000 p/ sq.km.
		Disqualified			

3.5 Issues in Bhutan's Urbanization

8. Some issues / questions that emerge in considering the prospects of Bhutan's future urbanization are:
   - Considering that the economic basis for urbanization is a certain minimum scale of urban agglomeration (of population) so as to achieve economies of scale, is there really a potential regional "growth" centre given the lack of a minimum population catchment's size, and the general inaccessibility due to the topography? The economic imperative for urbanization in Bhutan is not very obvious. By the time the nation shifts to a democratic constitutional monarchy the macroeconomic imperatives may be more clearly comprehensible and it is expected that a firming up of a more definitive macroeconomic policy will be possible.

   - The sectors which contribute most to GDP do not generate significant employment for the Bhutanese – power generation, roads and construction. In the absence of a significant generator of employment, how can the national urbanization strategy take support from the national economic framework?

   - The most potential contributors to the economy are power generation, agriculture, horticulture and forestry which can support processing industries and tourism. All these could result in a regional dispersed development which could be sustainable. So there are two options of economic framework to the urbanization pattern – large scale industries through FDI attracted to power generation sites and the other through micro-enterprises in the agri-horti-processing sector and the tourism services dispersed all over the country. It is anticipated that large/medium scale industries will be established along the southern border of the nation (the production corridor along the southern Samtse-Samdrup-Jonkhar highway, and through the proposed industrial estates) mainly focusing on medium and high end production, processing and manufacturing.

- The high level of rural-urban migration is apparently due to push factors – lack of facilities and inefficiencies in the farm sector on one hand and due to pull factors – the RGoB's policies of development of the education and health sector which give rise to aspirations for an urbane life (the education policy is one of the major contributors to the "pull" factors in Bhutan's urbanization – since most of the educated youth stayed back in the towns).

- Though trends show Gelephu as the potential growth centre with manufacturing and a possible international airport can it overcome some of the constraints it has been facing to grow into a national city? Most of the local stakeholders feel that it is a question of will and that it is the 'best bet'.

- Given the relative scarcity of land for agriculture / horticulture (less than 8 %), the competition for accessible and usable land, between the non-urban sector and the urban sector is a major area of policy conflict with environmental and macro-economic factors biased towards support for the agriculture sector and the micro-economic factors supporting conversion to urban uses. (One example is the experience in Thimphu of zoning the agriculture areas which was resented by the farmers who wanted to build and get rents rather than pursue agriculture with its much lower incomes).

- One argument or hypothesis could be that urbanization at present is being driven by the government. Therefore the RGoB can insist all departments that they locate their projects and investments, in the identified growth centres which must be mandatory for all government funded projects. Another output could be a Government service distribution strategy / policy.

3.6 Opportunities and Constraints for Urbanization in Bhutan

Location of economic activities

9. The distribution of major opportunities for urbanization in Bhutan can be spatially identified by looking at the map showing the distribution of economic activities in the country. The economic activities indicated are the major sectors in Bhutan's economy, other than agriculture and construction, viz., hydro-power generation, tourism, mining and industries. The location of agriculture activity has been included in the map showing the spatial extent and location of protected areas. The map indicates a relative concentration of economic activities / opportunities in Thimphu, Chhukha, Samtse, Pemagatshel, Trashigang, Sarpang, Bumthang and Samdrupjongkhar dzongkhags.

Road network

10. The road network presents potential axii for the location and development of urban activity. In Bhutan the road is the only modern means of surface transport for goods and passengers. The road network in most of its length follows the rivers along their course through the valleys. Therefore these roads are not only the axii for urban development, but also access most of the fertile and wetlands adjoining the valleys. The road network map indicates that the rivers and the roads almost join together to form clear lines or corridors of existing and potential development of rural and urban settlements. They also reveal the underlying structure of future development within each region as one that would be north south oriented. It is in this context that the rational for the delineation of the regions across the east west axis is best comprehended when looking at these natural watersheds defined by the river valleys. It would be easy to plan for a distributed and balanced urban development in the country by embarking on an appropriate road network pattern, if the same were not constrained by the nature of the topography and the mountainous terrain. It is against this background that the future urbanization of Bhutan may be overtly influenced by

the land routes in India close to the southern borders of Bhutan, and by the proposed rail links from India. Both these factors may tilt the favour of location and concentration of future economic activities towards the southern parts of the regions.

Geography of protected areas

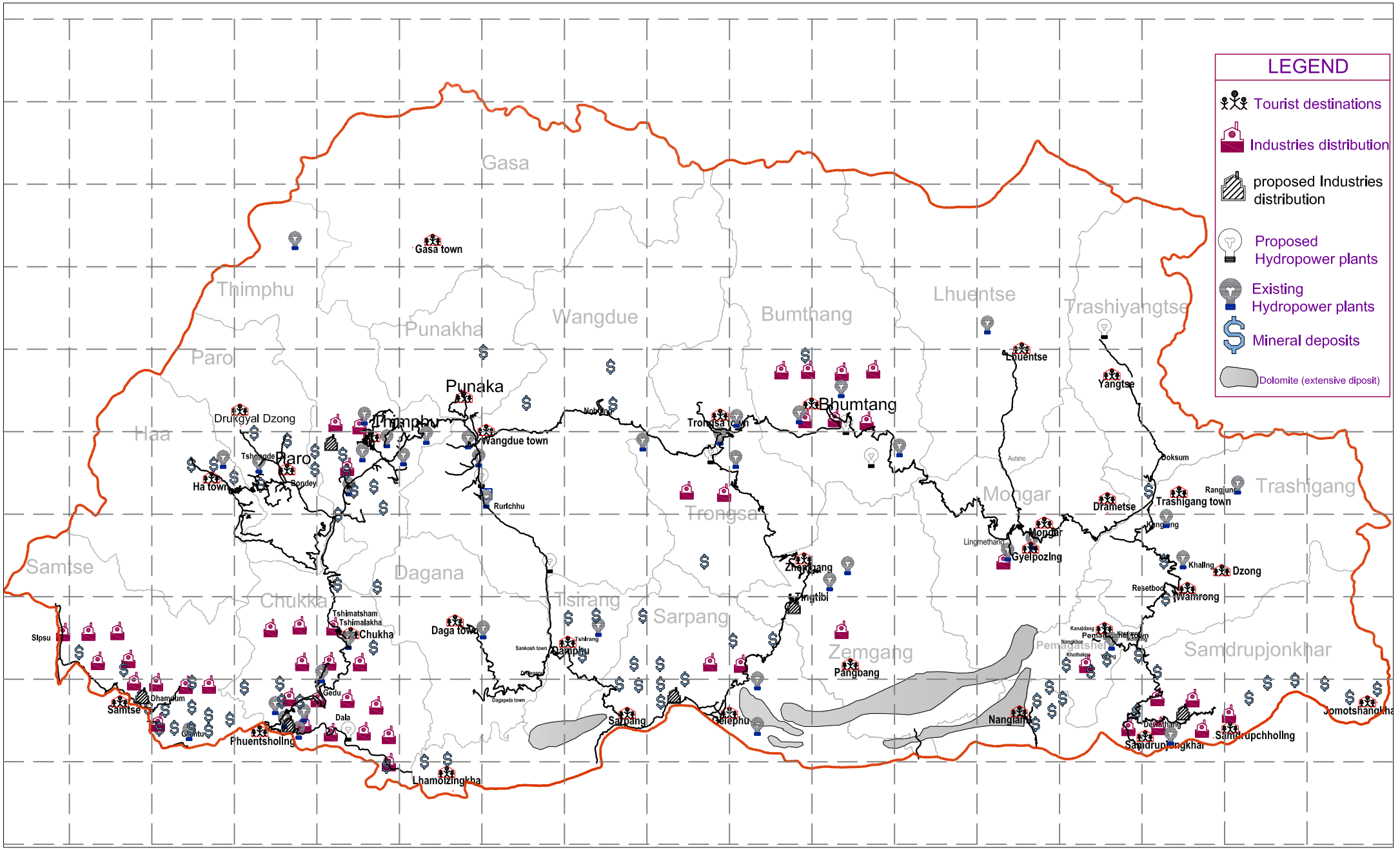
11. The RGoB has, in its policy of protecting the country's natural forests and the environment declared vast areas as protected zones. These areas may preempt the development of adjoining urban settlements except as nodes for tourist services. The map shows that the two central regions have a large proportion of their area as protected areas. In addition to this, most of the agriculture areas are in the central and eastern regions. Thus the geographical distribution of these natural resources and the policy of protection of these resources may discourage urbanization in these regions inspite of their higher rates of growth in their population. In this respect at least, Bumthang and Mongar / Gyalposhing urban centres, in the eastern part of the country seem to be free of this constraint.

12. The location and size of existing urban settlements may be interpreted as a constraint or as an opportunity for urban development depending on whether one wants to focus / canalize growth into a nearby settlement or to induce growth in existing settlements.

13. The challenges and constraints to urban development in Bhutan are summarized for each of the key aspects in Table 3.9. Similarly the opportunities and requirements for urban development in Bhutan are summarized in Table 3.10.

Table 3.9 Challenges and constraints to urban development

S.No.	Aspect	Challenges	Constraints
1	Land	Scarcity of land	It is within a scarce 8% of the country's area that urbanization has to take place in an escalating competition with agriculture for suitable land
2	Economic	Weak urban trades sector	Characterized by limited potential for further economic development. The level of mechanization and technology is low, productive units predominantly small and private investments seem weak and arbitrary
3	Demographic	Young, educated population	Increasing demand for urban employment and will lead to higher urbanization
4	Environment	Fragile ecological setting	Increased timber logging and conversion of slopes into urban uses will increasingly impact the environment adversely
5	Social	Loss of the extended family set up	As the proportion of migrants in the urban areas increase, the traditional extended household will be the major social loss
6	Cultural	Modernization and loss of traditional vocation based rituals and life styles	The urban settings would not facilitate many of the traditional rituals and lifestyles, which may eventually fade away unless a pro-active approach is evolved.



Royal Government of Bhutan Ministry of Works and Human Settlements	Consultants: IPE INFRASTRUCTURE PROFESSIONAL ENTERPRISE (P) LTD GYALTSHEN CONSULTANCY	Project: **Bhutan National Urbanization Strategy** Map title: **Spatial distribution of economic activities in Bhutan**	0 — 20 — 50kms Each square = 20 km x 20 km Drawn by :Poornima.G and Shanti Katel — Dec, 2006	North Map No.: 8

Table 3.10 Opportunities and requirements

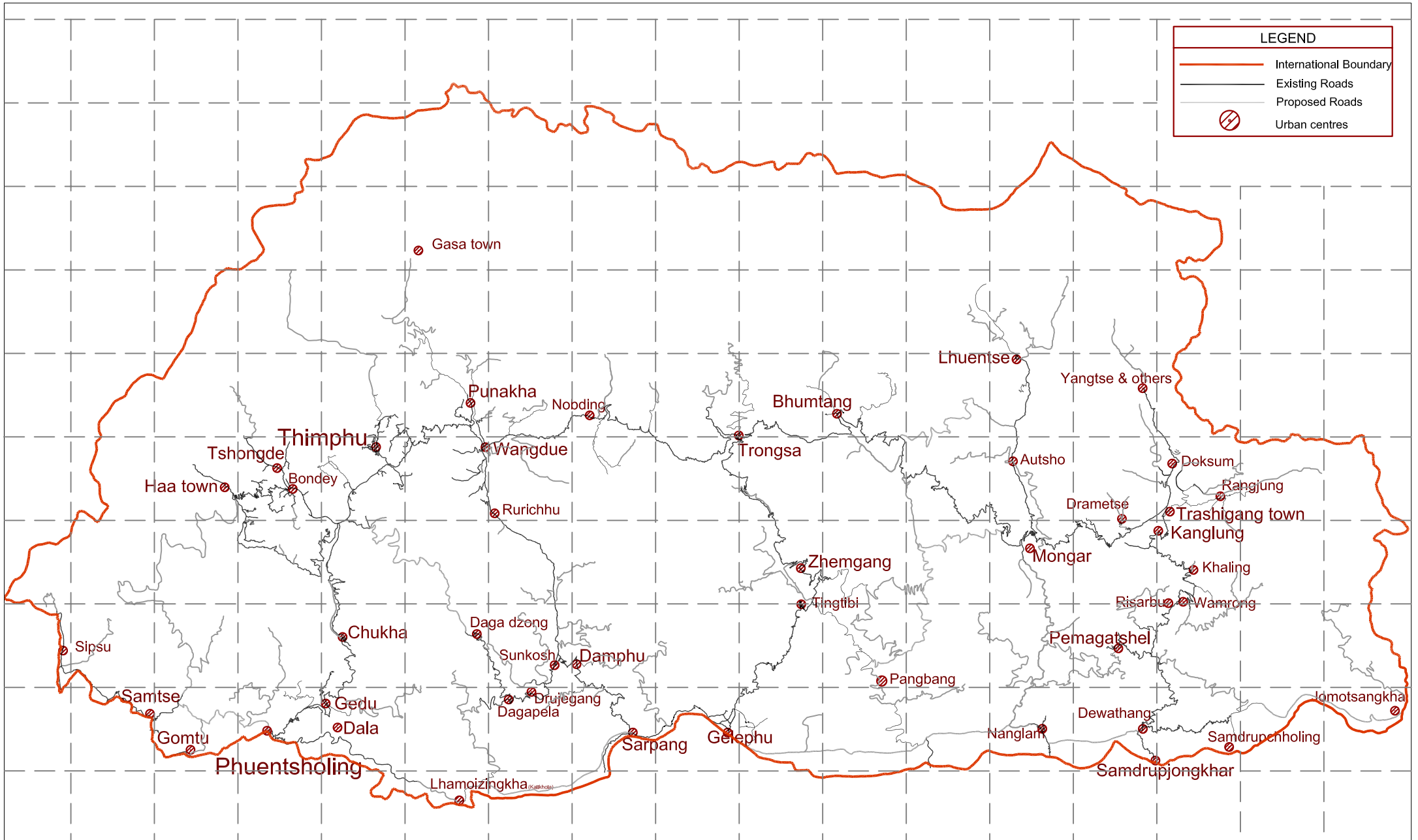
S.No.	Aspect	Opportunities	Requirements
1	Land	High density development planned in Thimphu as a future standard	Compared to existing town densities of 20 to 50 PPH, Thimphu's structure plan has already planned for a 350 to 750 PPH at the local level. At these land use intensities only 0.025 % of the land area may be required for urban development uptil 2020.
2	Economic	5 new Industrial Estates, SEZ, International airport	bringing employment opportunities to a designated region
3	Demographic	Mobility of the population	Help canalize future settlement patterns
4	Environment	National Environment Strategy, Draft Planning Act	Provision for: • preparation of regional land use plans • a rural development plan • city environmental strategies
5	Social	The traditional empowerment of women	Provide for women's participation at all levels of urban development too
6	Cultural	A definite policy and an institution for preservation of culture	Consultation and coordination with the institution and the monk body for all major urban development initiatives

3.7 Bhutan's Urbanization: Basic Policy Choices

14. The two different approaches to future urbanization between which the NUS could choose may be stated as:

    1 A pro-active approach requiring policy, financial and institutional intervention to support the emergence and canalization of growth into 'Regional Growth Centres',

    2 A path of least resistance - allowing existing trends to continue without any planned intervention - Thimphu as primate city (probably also Phuentsholing), playing a major role (1,75,000 popln. by 2020 ?) with a lot of smaller towns of different sizes dispersed all over the country.



Royal Government of Bhutan
Ministry of Works and Human Settlements

Consultants:
INFRASTRUCTURE PROFESSIONAL ENTERPRISE (P) LTD
GYALTSHEN CONSULTANCY

Project: Bhutan National Urbanization Strategy

Map title: Existing and Proposed Road Network in Bhutan

Data source: Department of Roads

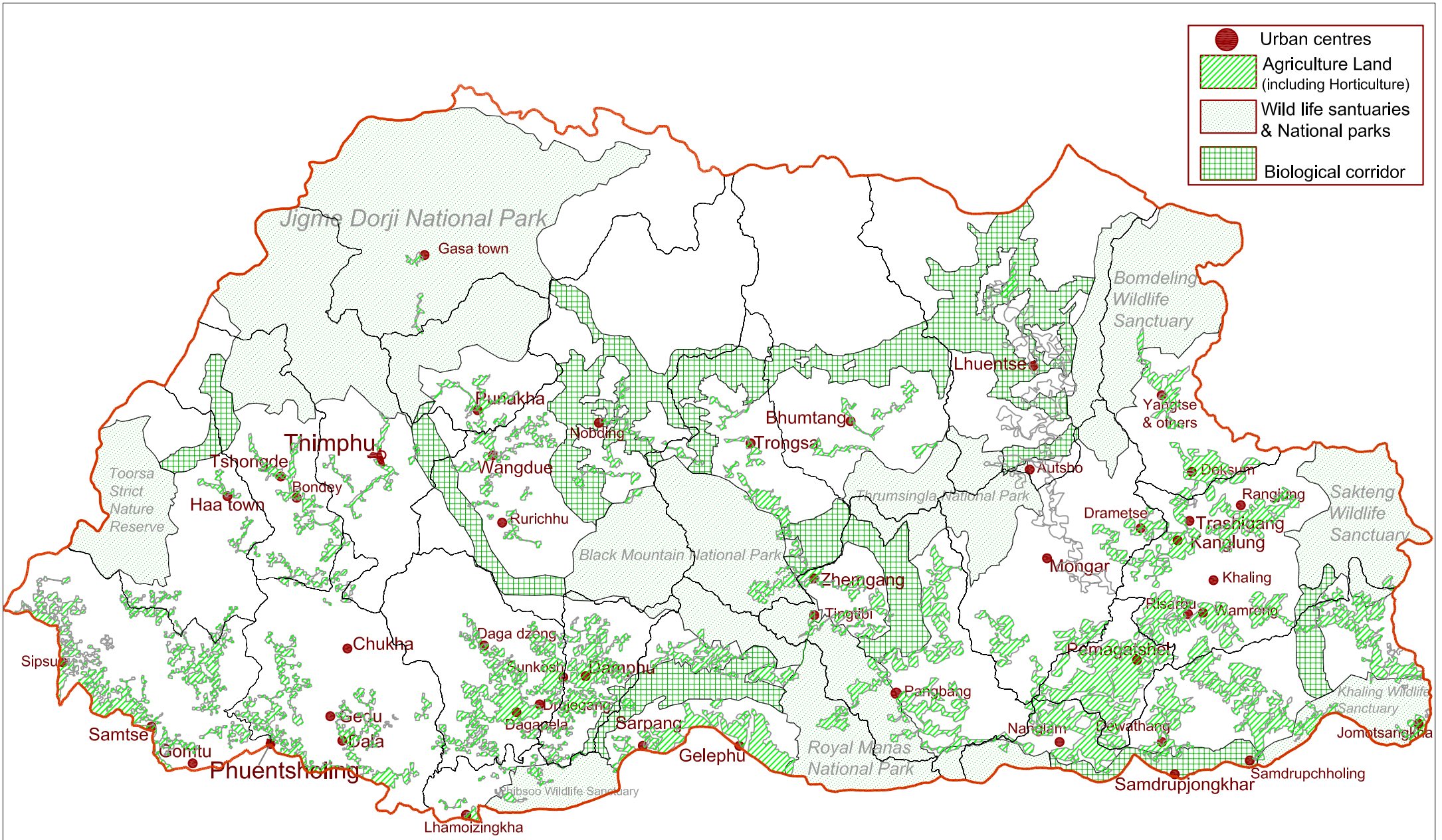
0 20 50kms
Each square = 20 km x 20 km

Drawn by :Poornima.G and Shantl Katel

Dec, 2006

North

Map No.: 9



Royal Government of Bhutan Ministry of Works and Human Settlements	Consultants: IPE INFRASTRUCTURE PROFESSIONAL ENTERPRISE (P) LTD GYALTSHEN CONSULTANCY	Project: **Bhutan National Urbanization Strategy** Map title: **Geography of Bhutan showing Agricultural lands and proteced areas** *Data source: Bhutan trust fund for environmental conservation (www.bhutantrustfund.org)*	0 20 50kms Each square = 20 km x 20 km Drawn by :Poornima.G and Shantl Katel Dec, 2006	North	Map No.: 10

4.0 The Proposed National Urban System, 2020

4.1 Components

1. The Bhutan National Urbanization Strategy (BNUS) has two major components:
   A. The proposed 'National Urban System' which is a description of the hierarchy of urban settlements in the country and their respective roles (functional, spatial, administrative, etc.) to be considered for purposes of future priorities in financing, planning, developing land, infrastructure, amenities and economic and other activities. This is proposed to accommodate a future urban population of about 450 thousand in 2020 (the most likely and 'middle path' estimate).
   B. The supporting policy and institutional strategies for realizing the BNUS

The Proposed National Urban System is described in this chapter, and the supporting policy and institutional strategies are described in Chapter 5 of this report.

4.2 The Aims and Approach

2. RGoB recognizes that further urban development is essential for, and an integrated part of economic development and enhanced prosperity for the country. Thus, it is the vision of RGoB that development of urban areas takes place in a planned, economically sound, socially proper and environmentally sustainable manner with a view to strengthen economic development and in this way further promote Gross National Happiness for the Nation and its people.

3. Restating the choices, the two different approaches to future urbanization between which the NUS could choose are:
   a) A pro-active approach requiring policy, financial and institutional intervention to support the emergence and canalization of growth into 'Regional Growth Centres',
   b) A path of least resistance - Allowing existing trends to continue without any planned intervention - Thimphu as primate city, playing a major role (1,75,000 popln. by 2020 ?) with a lot of smaller towns of different sizes dispersed all over the country.

4. The vision of the proposed National Urbanization System chooses the pro-active path with the understanding that it is the only way to ensure equitable, balanced development which would preserve the environment and support the other goals of national planning, viz., decentralization, reduce the negative impacts of urbanization on the poor and on local traditions. The two most important targets of the proposed National Urban System are:

   1. **Balanced regional development** – by identifying regional growth centers in the eastern and central regions of the country

   2. **Rural – urban integration** - by conceptualizing a settlement hierarchy system wherein the geog centres / small towns are seen as elements in the settlement system whose primary function is to be services nodes for the rural region

5. Growth centers are identified by following a three level approach by filtering existing urban centers for their development potential across three levels. Figure 4.1 indicates the three level analysis used for the identification of the potential growth centers.

Figure 4.1 : The approach used for identifying potential growth centres:

Level	Criteria used	Rationale
Level 1: *Regional level analysis*	Population and Migration	Identify regions having net out migration, and low population shares (in relation to share of land area)
Level 2: *Dzongkhag level analysis*	Basic Infrastructure, Social Infrastructure and Economic Development	Identify most developed / high development potential dzongkhags within the above identified regions
Level 3: *Town level analysis*	covering existing economic activity, infrastructure and potential for growth	Identify towns within the above identified dzongkhags with potential for development

4.3 The Proposed Regional Growth Centers

4.3.1 Regional Level Analysis

6. As the RGoB's overarching goal is to have balanced development in the nation it is imperative that regional development across Bhutan be equitable. Population distribution across regions is a key reflection of development across the nation. The regional level analysis contained in the chapters 2 and 3 is recapitulated in Table 4.2 covering aspects of population, urban population and migration. It provides the basic criteria to identify the current imbalance and the regions in which the future growth centers may be located so as to address this imbalance.

Table 4.2 Regional analysis

		Total popn., 2005	Total Urban popn., 2005	Contbn. to popln., 2005 (%)	Contbn. to urban popln. %)	Growth rate in urban popln., 2000-2005 (avg. annual %)	Urbanization level, 2005(%)	Share of total area (%)	Net-migration
Bhutan		634,982	196,111	100	100	7.3	31	100	0
Regions	Western	281,244	127,677	44.3	65.1	11.1	45	20.7	57,524
	Central-western	88,855	13,840	14	7.1	-1.5	16	28.6	-7,833
	Central Eastern	89,720	22,880	14.1	11.7	5	26	22.3	-3,997
	Eastern	175,163	31,714	27.6	16.2	1.4	18	28.4	-45,694

7. The table shows that the eastern region has witnessed the most out migration; the two central regions register the lowest contribution to the total urban population, while the western region has the highest urban growth rate, highest in-migration and highest urbanization levels. Urbanization levels in the nation are grossly skewed and there is a need to locate growth centers in the eastern and central regions of Bhutan as a matter of priority. In the eastern region, just providing an alternative destination /s for net migration within the region will result in the emergence of medium and larger size towns and one of these may be identified as the growth centre. In the two central regions, on the other hand the

potential for growth / concentration is not so apparent considering the lower levels of out migration and the need to induce growth or concentration seems to be the need. It seems rational that the further growth and concentration of population should be in the three regions other than the western region, if the overarching goal of balanced and equitable regional development is to be achieved.

4.3.2 Dzongkhag Level Analysis

8. An analysis of the 20 Dzongkhags across three dimensions using a Composite Development Index (CDI) presents the relative development of the dzongkhags. Each of these three dimensions use select indicators with indicator comprising of a few underlying variables/factors. Information on the various indicators and underlying variables was compiled from different sources. 'RNR development' was included as an indicator since it was considered as an important criterion for looking at the level of economic development and the potential for developing related secondary and tertiary sector activities. The following table presents the three dimensions, their respective indicators and the variables considered for each indicator.

Table 4.3: Dimensions, indicators and variables for dzongkhag level analysis:

Dimension	**Indicators**	**Variables/Factors**	**Info. Sources**
1. Economic development	*1.1 RNR development*	1.1.1 Cereal production in kg/hh	2003/Selected RNR Statistics
		1.1.2 Potato production in kg/hh	
		1.1.3 Oil seed production in kg/hh	
		1.1.4 Spices production in kg/hh	
		1.1.5 Mixed vegetable production in kg/hh	
		1.1.6 Nos. of fruit trees/hh	
		1.1.7 Nos. of livestock unit/hh	
	1.2 Industries	1.2.1 No. of industrial licenses	2004/ MTI
		1.2.2 No. of industry licenses for large & medium scale units	
	1.3 Employment	1.3.1 Employment rate - urban & rural	2005-Census
		1.3.2 Percentage of non-agriculture employment	
		1.3.3 Percentage of population with farming/livestock as source of income	
2. Basic infrastructure	*2.1 Electricity & water*	2.1.1 Percentage of population with electricity as main source of lighting	2005-Census
		2.1.2 Percentage of population with piped water supply - within & outside house	
	2.2 Communication & banking	2.2.1 Road network in kms per 1,000 sq km of area	Census 2005 & June 01/Annual Information Bulletin
		2.2.2 Less than 30 minutes distance from approach road	
		2.2.3 Nos. of telephone exchange per 10,000 population	
		2.2.4 Nos. of postal facilities per 10,000 population	
		2.2.5 Nos. of bank branches per 10,000 population	
3. Social infrastructure	*3.1 Health*	3.1.1 Nos. of hospitals per 10,000 population	Census 05 & 2006-annual health bulletin
		3.1.2 Nos. of basic health units per 10,000 population	
		3.1.3 Percentage of child born in the last year attended by health personnel	
	3.2 Education	3.2.1 Male literacy rate	2005-Census
		3.2.2 Female literacy rate	
		3.2.3 No. of education facilities per 10,000 population	

9. To calculate the average deprivation index for any indicator, the variables are identified. The values for the variables for 20 districts are listed and the maximum and minimum value for each of the variable is identified. The relative deprivation value for the variables are calculated using the formula to measure deprivation of a dzongkhag relative to the best among all the districts and scaled to the max-min range.

10. The average deprivation index is calculated by taking an average of the relative deprivation values and subtracting them from 1(that is, the no deprivation value). To calculate the CDI, a simple average of the indexes for each of the dzongkhags is taken and subtracted from 1. The resultant ranking of the dzongkhags is shown in Table 4.4. For further details Annex 2 & 3 may be referred.

11. There are some interesting and noteworthy findings that this analysis brings out. Chhukha Dzongkhag ranks first in the CDI, even higher than Thimphu. And though Thimphu ranks quite high in most of the indicators, it ranks quite low in education (even after additional variables of literacy were introduced, following suggestions made during the final workshop in November). Gasa being an inaccessible dzongkhag (not connected by road) and ranking low in industrial activity interestingly ranks very high in communication/banking and employment, possibly due to its small population size.

Table 4.4: Ranking of the various dzongkhags across the chosen indicators and the Composite Development Index. (Refer annex 2 & 3 for more details)

Dzongkhag	Renewable resources	Industrial licenses	Employment	Electricity & water supply	Communication and banking	Health	Education	Comparative development index (CDI Rank)	No. of indicator ranks	
									Highest (top) 3 ranks	Lowest (bottom) 3 ranks
Chhukha	3	1	3	5	4	13	16	**1**	1 first rank, 2 third ranks	
Thimphu	13	2	10	1	9	5	19	**2**	1 first rank, 1 second rank	1 nineteenth rank
Haa	9	14	4	3	6		13	**3**	1 first rank, 1 third rank	
Bumthang	14	10	1	4	3	8	8	4	1 first rank, 1 third rank	
Trongsa	6	15	5	15	2	2	2	5	3 second ranks	
Paro	1	8	8	2	7	12	15	6	1 first rank, 1 second rank	
Punakha	4	11	12	6	15	4	12	7		
Sarpang	2	6	9	7	8	10	17	8	1 second rank	
Wangdue	5	5	7	11	14	15	11	9		
Trashigang	18	7	11	8	11	11	7	10		
Lhuentse	16	19	6	13	20	7	1	11	1 first rank	1 twentieth rank, 1 nineteenth rank
Zhemgang	12	12	19	17	12	3	6	12	1 third rank	1 nineteenth rank
Gasa	17	20	2	20	1	6	4	13	1 first rank, 1 second rank	2 twentieth ranks
S/jongkhar	10	4	18	12	10	16	14	14		1 eighteenth rank
Mongar	15	9	16	14	16	19	9	15		1 nineteenth rank
Tsirang	7	17	14	18	5	9	18	16		2 eighteenth ranks
Trashiyangtse	19	18	13	10	18	18	5	17		1 nineteenth rank, 3 eighteenth ranks
Samtse	8	3	17	16	17	17	20	**18**	1 third rank	1 twentieth rank
Pemagatshel	20	16	20	9	13	14	3	**19**	1 third rank	2 twentieth ranks
Dagana	11	13	15	19	19	20	10	**20**		1 twentieth rank, 2 nineteenth ranks

Top 3 ranks	
	1
	2
	3

Bottom 3 ranks	
	18
	19
	20

12. It is to be noted that though Samtse and Samdrupjongkhar rank low in most indicators they are actually high rankers in terms of industrial activity and due to their favourable locations can be identified as having development potential. Trashiyangtse scores as a dzongkhag with most low rankings whereas Trongsa is one of the top high rankers.

13. The following Table 4.5 indicates that most of the top ranking dzongkhags are located in the Western Region and most of the low ranking dzongkhags are located in the Eastern Region. The dzongkhags in the two central regions are distributed across the three classes.

Table 4.5: Clustering of dzongkhags into more developed, moderately developed and less developed.

Characteristic	Dzongkhags (CDI value, rank, ± net migration in '000)	Regions
More developed	Chhukha (0.525, 1, +15.5),	Western region
	Thimphu (0.509, 2, +39.8),	
	Haa (0.467, 3, -0.6), ,	
	Paro (0.449, 6, +7.4)	
	Bumthang (0.459, 4, +0.7),	Central-eastern region
	Trongsa (0.449, 5, -1.9)	
Moderately developed	Punakha (0.417, 7, +0.8),	Central-western region
	Wangdue (0.396, 9, +1.6),	
	Gasa (0.362, 13, +0.1)	
	Sarpang (0.415, 8, +5.7),	Central-eastern region
	Zhemgang (0.363, 12, -8.5)	
	Trashigang (0.390, 10, -16.7),	Eastern region
	Lhuentse (0.384, 11, -6.2)	
Less developed	Samtse (0.335, 18, -4.5)	Western region
	Tsirang (0.345, 16, -6.2),	Central-western region
	Dagana (0.263, 20, -4.3),	
	Samdrupjongkhar (0.356, 14, -2.9),	Eastern region
	Mongar (0.351, 15, -7.4),	
	Trashiyangtse (0.341, 17, -6.3),	
	Pemagatshel (.320, 19, -6.1)	

More developed dzongkhags

14. Six dzongkhags in the western and central-western regions are relatively more developed, namely (in order of ranking): Chhukha, Thimphu, Haa, Bumthang, Trongsa, and Paro. Of these, Thimphu and Chhukha draw highest migrants followed by Paro. Bumthang population has also marginally increased due to in-migrants (net). However, Haa and Trongsa dzongkhags have faced some out-migrants (net). Despite being more developed, the six dzongkhags need further development in several areas. For instance, Bumthang, Haa and Trongsa rank low in industrial activities. Trongsa is better placed in terms of RNR development, but Bumthang, Haa and Thimphu rank low in this regard.

15. Chhukha ranks very low in terms of health and education facilities. With growing population, even Thimphu requires further development of social infrastructure. To give an example, number of basic health units (BHU) in Thimphu is *one* per ten thousand populations as against *three* in Punakha or Wangdue. Similarly,

number of educational facilities is *four* per ten thousand populations as against *seven* in Punakha or *eight* in Wangdue.

Moderately developed dzongkhags

16. There are seven moderately developed dzongkhags - Punakha, Wangdue and Gasa in the central-western region; Sarpang and Zhemgang in the central-eastern region; and Trashigang and Lhuentse in the eastern region. While the population in Punakha, Wangdue, Gasa and Sarpang dzongkhags have swelled due to in-migrants (net), the dzongkhags in the eastern and central-eastern regions (i.e., Trashigang, Lhuentse and Zhemgang) have witnessed significant out-migration (net).
17. Punakha ranks high for RNR development, but it requires further development of basic and social infrastructure as well as more industrial activities. Sarpang ranks high both in terms of RNR and economic development, but it lags far behind the other dzongkhags in terms of social infrastructure.
18. While Trashigang needs more RNR and industrial development, Zhemgang lacks in economic development and requires adequate development of basic infrastructure. Lhuentse and Gasa ranks very low in terms of RNR development and as well as lacks basic infrastructure.

Less developed dzongkhags

19. Among 20 dzongkhags, seven have been identified as less developed dzongkhags. These are: Samtse in the western region; Tsirang and Dagana in the central-western region; and Samdrupjongkhar, Mongar, Trashiyangtse and Pemagatshel in the eastern regions. Annex 9 presents brief profile of each of these dzongkhags.
20. Samtse accounts for 3.4 percent of the total industrial licenses and five large, three medium and 23 small scale production and manufacturing units are located in this dzongkhags. The other business is mainly limited to cottage industries and construction activities by petty contractors.
21. Despite the presence of several manufacturing units, only 35 percent of the employed population is engaged in non-agriculture activities in Samtse. Farming and livestock is source of income for 45 percent of the population. It lacks basic infrastructure (about 40.5 percent of the population has electricity supply, while two-third population receive piped water supply) including communication and banking facilities. This dzongkhag also ranks very low in terms of health and education facilities. Thus, an integrated plan is required to develop Samtse, which has got high potential for economic growth.
22. Another typical case is Samdrupjongkhar dzongkhag. Being one of the gateways to Bhutan and commercial hub for the eastern region, it accounts for 4.6 percent of the total industrial licenses and three large scale, one medium scale, five small scale and 41 cottage production and manufacturing units are located in this dzongkhag. The other business is mainly limited to cottage level services and construction activities by Class C and D (petty) contractors. In terms of employment, S/jongkhar is moderately placed. Farming and livestock is source of income for 38 percent of the population. Non-agriculture employment is 46 percent.
23. However, S/jongkhar ranks very low in terms of basic health facilities and services. It also ranks poorly in terms of literacy rate and education facilities. So, social infrastructure needs to be built up for realising high growth potential of S/jongkhar dzongkhag.

Dzongkhags for locating 'Regional Growth Centres'

24. Keeping in view the comparative development of the dzongkhags as discussed above, the regional growth centres may be located in the following dzongkhags:

    1. *Central Western Region:* Punakha and Wangdue rank high from the central-western region as potential growth centres. Between the two, Wangdue ranks much higher in terms of development potential; Tsirang meanwhile ranks fairly high in terms of agricultural production and RNR activity. However since all these Dzongkhags are too close to other potential national / regional cities (either Thimphu or to the Gelephu-Sarpang cluster), they have not been included in the list of dzongkhags for locating potential national or regional cities.

    2. *Central Eastern Region:* It appears logical to select from the most developed dzongkhags, either Bumthang or Trongsa from the central-eastern region for creating a regional growth centre. Between the two, Bumthang ranks much higher in terms of industrial development and employment and, hence, it is recommended. In the central-eastern region, Sarpang dzongkhag also ranks high in terms of development and is recommended for locating a growth centre. As mentioned earlier, Sarpang ranks high both in terms of RNR and economic development. A new industrial estate is also proposed to be set up in this dzongkhag. However, Sarpang lacks adequate social infrastructure and that needs to be developed.

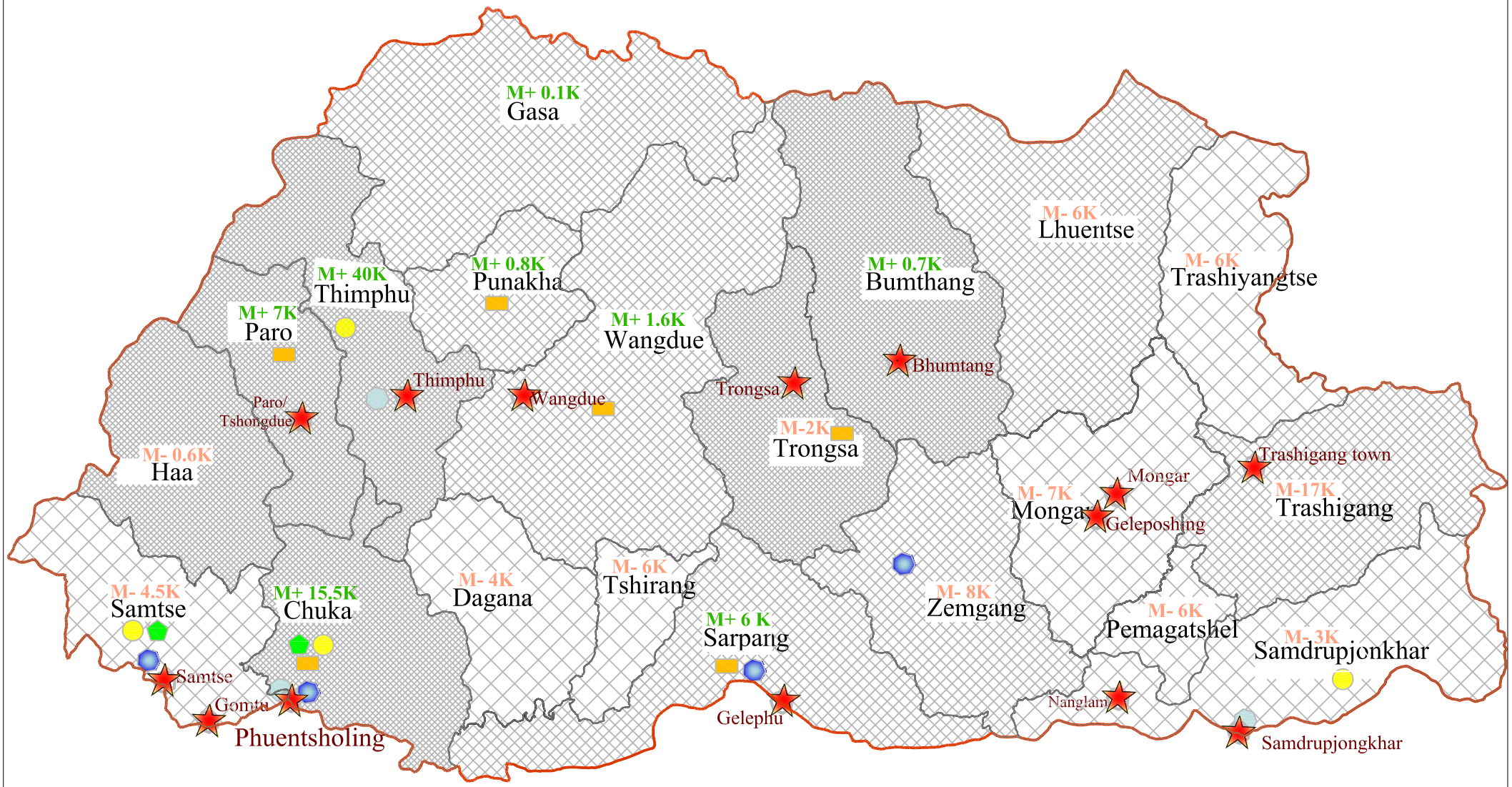
    3. *Eastern Region:* In the eastern region Trashigang and Lhuentse dzongkhags rank highest in CDI, but two factors against their selection is their location and their potential economic development. While Trashigang is on the eastern border almost at the end of a physical "cul-de-sac" in terms of the regional road network and access to markets (particularly international markets), Lhuentse is next to Bumthang which has already been selected for locating a regional growth centre. Also Lhuentse has very low urban population (1,476 compared to 10,964 in *Samdrupjongkhar in the same region). Samdrupjongkhar and Mongar*: Being one of the gateways to Bhutan and commercial hub for the eastern region, Samdrupjongkhar has great potential to develop. *Mongar* dzongkhag is next in CDI rank and has registered relatively high out migration (may be seen as holding potential if the out migration can be attracted to stay back with appropriate economic and social development inputs). One factor that may also count in its favour is that it is relatively more centrally located within the region, both geographically and also in terms of road network and accessibility.

    4. *Western Region:* Like S/jongkhar, Samtse in the western region holds great promise for becoming a growth centre. As mentioned earlier, it lacks basic and social infrastructure and an integrated plan is required to develop the dzongkhag for achieving the growth potential.

4.3.3 Town Level Analysis

25. As per the project requirements three potential regional growth centers from within the Central and the Eastern Regions have been identified and prioritized. The potential growth centers were selected on the basis of the following methodology which was discussed in the workshops with the stakeholders and also during the subsequent technical presentation to the Working Group

    1) Listing the indicators (of development potential at the regional level)
    2) Compiling the data on the indicators for the main towns
    3) Giving weightings to the indicators
    4) Calculating the rankings of the main towns as per the weightings
    5) Listing the top ten ranked towns as potential regional centers
    6) Prioritizing three of the top ten towns as potential regional centers for development inputs and support



Royal Government of Bhutan
Ministry of Works and Human Settlements

Consultants:
IPE INFRASTRUCTURE PROFESSIONAL ENTERPRISE (P) LTD
GYALTSHEN CONSULTANCY

Project: Bhutan National Urbanization Strategy

Map title: Development levels of dzongkhags (using composite development index) and top ranking urban centres with development potential

0 20 50kms
Each square = 20 km x 20 km

Drawn by :Poornima.G and Shanti Katel

Dec, 2006

North

Map No.: 11

26. Twenty three indicators were finalized on the basis of available information from secondary sources; observations during field visits and interviews with the dzongkhag authorities. These indicators were broadly categorized under the three groups:

    1. Existing features and activities / functions,
    2. Potential for future development
    3. Available infrastructure and facilities.

Table 4.6: List of Indicators for identifying potential growth centres

	Sr. No.	Indicators	Explanation	Information Source
Existing Features	1	Category/function	In terms of primary function of the town.	Secondary data, Interviews with government officials and site visits
	2	Economic Function	in terms of Character and Potential	Secondary data, Interviews with government officials and site visits
	3	Area (Sq. Km.)	Potential for Development, Draft Constitution Criteria	Secondary data
	4	Population	Number of people, Draft Constitution Criteria	Census document 2005, other secondary documents
	5	Density	Pressure on urban land, Draft Constitution Criteria	Secondary data, Interviews with government officials and analysis
Future For Potential Development	6	Land available	Allowing further growth	Secondary data, Interviews with government officials and site visits
	7	Connection with International markets	Trade and economic development potential	Secondary data, Interviews with government officials and site visits
	8	Major Proposed projects	Potential for future, man made	Secondary data, Interviews with government officials
	9	Natural Setting Terrain	Natural conditions, development possibilities	Secondary data and site visits
	*	Availability of water for future development		Almost no information available
	10	Location within Dzongkhag	Accessibility and connectivity to service areas[8]	Secondary data, Interviews with government officials and site visits
Available Facilities	11	Health facilities	Infrastructure facilities: taken from the town classification criteria utilized by the DUDES, including information collected during rapid assessment of the towns.	Land Compensation Rates 1996 formulated under the land act 1979, including information collected during rapid assessment of the towns.
	12	Education Facilities		
	13	Banks		
	14	communication		
	15	Recreation/sports facilities		
	16	Vegetable Markets		
	17	Fire station		
	18	Water Supply		
	19	Public toilets		
	20	Sewerage facility		
	21	Shops		

[8] Bhutan Agricultural Atlas, 1999, Ministry of Agriculture

	Sr. No.	Indicators	Explanation	Information Source
	22	Hotels		
	23	Public Transport (no. of departures)		

The indicators identified by the EUSPS project were also reviewed and though they were suitable for assessing the 'health' of an existing urban settlement it was felt that the indicators for development potential would be more important. Table 4.6 lists and elaborates the selected indicators:

27. Weightings were assigned based on the classification criteria already utilized by the DUDES, MoWHS since 1996. Indices 1-10 were assigned weightings based on various criteria which were agreed upon with the stakeholders (annex 4) and indices 11-23 were given weightings as per the prevalent criteria of DUDES[9] which were found to be adequate for the exercise. Negative grading or indicators were not included as it was assumed that the towns with notable negative character would in most cases not score high during the ranking exercise.

28. Of the sixty one towns identified and listed by the census, only 31 towns were ranked as they had higher population and were included in the DUDES list of main or important secondary towns. The ranking is attached as annex 11 and the top ranking towns of Bhutan are listed in table 4.7 in the order of their ranking:

Table 4.7: Top ranking towns based on weightings for potential growth

Ranking	Town	Net Weight
1	Thimphu	53
2	Gelephu	50
3	Phuentsholing	49
4	Samdrupjongkhar	44
5	Samtse	40
6	Tshongdue	38
7	Bumthang	37
8	Mongar	36
9	Trongsa	35
10	Gomtu	35
11	Nganglam	34
12	Trashigang	34
13	Wangdue	34
14	Deothang	33
15	Damphu	33

29. As seen above Thimphu, Gelephu and Phuentsholing get the top three positions in the ranking exercise, though Gelephu and Phuentsholing have little difference in their scores.

4.3.4 Prioritizing the Growth Centers

30. Thimphu being the capital and the administrative center scored the highest rank, but Phuentsholing which is otherwise perceived to be the second most important town ranked a close third to Gelephu in light of the tremendous growth potential that the Gelephu has. Tshongdue in Paro also ranked quite high but it is located quite close

[9] DUDES criteria of classification of urban areas based on Land Compensation Rates 1996 formulated under the land act 1979

to Thimphu. Based on the above three level analysis, and following discussions with the officials at the DUDES, as also in the workshops and with the working group, it seemed rational to cluster the towns together on the basis of their distances (half an hour to one hour motorable distances) and consider the clusters as potential future agglomerations. After due consultations and deliberations the following list of town clusters was formulated as representing the potential growth centres.

Table 4.8 : Prioritizing potential growth centres

S. No	Regions	Dzongkhags	Towns	Argument
1	West	Samtse	Samtse	• Highest rank for potential development in the dzongkhag • Largest town in the dzongkhag • Industrial activity (Need not be considered as one of the three regional growth centres for priority development support – likely to grow on its own with incentives for the private sector)
2	Central West	Wangdue, Tsirang	None	Since these Dzongkhags are too close to other potential national / regional cities (either Thimphu or to the Gelephu-Sarpang cluster), no towns have been identified here for locating potential national/regional cities.
3	Central East	Bumthang	Bumthang (urban cluster)	• Highest rank for potential development in the dzongkhag (with a tourism and high value added bio-products and handicrafts manufacturing base) • Largest urban cluster in the dzongkhag
		Sarpang	Gelephu – Sarpang cluster	• Highest rank for potential development in the dzongkhag • Largest town in the dzongkhag • With the proposed international airport and dry port can be a national city with some initial development support and inputs
4	East	Samdrup Jongkhar, Mongar	1)S/Jongkhar-Nganglam urban cluster and 2)Gyalposhing –Mongar and Lingmethang urban cluster together with Nganglam.	• Highest rank for potential development in the dzongkhag S/Jongkhar town is located right on the international border but has a serious constraint - little land for expansion. However the upcoming town of Nganglam shows a lot of potential for future growth. • An alternative was to locate a regional growth centre in the dzongkhag with the second most development potential, a little away from the border in a more central location (both geographically within the region and also w,r,t, the road network) hence Gyalposhing – Mongar-Lingmethang cluster together with Nganglam has also been included.

1) Based on the proposed projects like the international airport, trade gateway (dry port), proposed rail link and a large industrial estate, it was felt that **Gelephu** should be identified for development as a second National City, that is next only to Thimphu in terms of importance and developed mainly through private sector

enterprise mainly based on manufacturing, trade and transport functions. This view was endorsed in the consultative workshop and the technical presentation with the Working Group, even though there was some skepticism on the real level of development that would be achieved. Due to the proximity of Gelephu and Sarpang (half an hour travel distance) and the location of the proposed industrial estate halfway between the two cities, Gelephu and Sarpang may soon merge as one and may be considered as one cluster.

2) Similarly though the original choice based on the three level analysis was for **Samdrupjongkhar town**, still due to its location, terrain, lack of availability of land for expansion outside current urban boundaries and proposed connection to Nganglam, potential water supply, etc. **Nganglam**, the border town will soon be connected very well with rest of eastern Bhutan by road and may become a very important trade point (A large cement factory is already planned here), and also major government investments for the promotion of this town have been proposed. In this case it is possible to look as Nganglam as the growth center connected together with the identified eastern growth cluster (Monger-Gyalposhing- Lingmethang) likely to complement it.

3) **Gyalposhing urban cluster** including Mongar and Lingmethang was selected as the alternative growth center which together can act as a counter magnet for migration in the eastern region. It is notable here that Gyalposhing and Lingmethang have land available for future development and are connected to international market through Nganglam, while Mongar being an important node is well developed and a lot of government investment has already taken place there.

4) **Bumthang** was unanimously selected as the third growth center as it being a major connection to the east, has major potential for tourism as an industry, cultural and religious hub of Bhutan and ample flat land available for development. Few concerns have been raised that the Ura-Nangar Bypass may reduce its existing popularity a bit but the bypass is 12 Km away from the town and should not have a major impact on its economy.

5) **Samtse** is another town that was identified as a potential regional growth center for the west. However it being in the western region, its proximity to the Thimphu - Phuentsholing corridor, its location on the southern border, high industrial potential, high RNR development and possible gateway in future for trade makes it logical to facilitate private sector involvement in its development rather than prioritize it for direct development inputs and support.

6) It is worth noting that the town of **Damphu** in Tsirang has a lot of potential for growth in terms of availability of land and development of tourism, and the location of the town on the Gelephu-Wangdue Highway is also favorable. The town at present is a somewhat dormant town but with increase in traffic between Thimphu and Gelephu the town can grow as a tourist resort attracting both, local urban 'holidayers' from Gelephu and also international tourists once Gelephu has an international airport. The location does not have an available water source to cater high population in the future.

31. It is to be reiterated at this point that this identification of potential growth centres is based on existing information, analysis, extensive and repeated discussions with officials in Thimphu and representatives from the various dzongkhags who attended the workshops and working group meetings; it is important that detailed feasibility studies focusing on infrastructure engineering costs and macro-economic issues be conducted to actually firm up the viability of these towns becoming urban centers in the future.

4.4 The Proposed National Urban System

32. The proposed National Urban System identifies the following hierarchy of urban settlements as forming the spatial framework for the NUS:

    1. Gyelyong Thromde (Cities of National / Regional Importance);
    2. Dzongkhag Thromde (The Dzongkhag Centres);
    3. Yenlag Throm (The Medium Towns); and
    4. Geog Throm (The Small Towns and Integrated Geog Centres)

    Adapting the already identified potential for a hierarchically size-based functionally appropriate settlement system, the suggested functions of the hierarchical elements are presented in Table 4.9

Table 4.9: Proposed functional hierarchy of settlements in Bhutan

S.No.		Elements of the Spatial Framework	Popln. Size	Major Function
National Urban System	1	Gyelyong Thromde (National / Regional City)	> 10,000	National/Regional economic driver
	2	Dzongkhag Thromde (Dzongkhag Centres)	5,000 to 9,999	Dzongkhag Administration./ Service centre
	3	Yenlag Throm (Medium Towns)	1,500 to 4,999	Service centre for nodes
	4	Geog Throm (Small Towns and or Geog Centres)	100 to 1,499	RNR services, market, Geog centre (IGC)
5		Villages		Rural economic activity
6		Hamlets		Rural economic activity

Note: The last two types of settlements are 'rural', yet are presented here as elements of an overall spatial framework

33. The following Table 4.10 summarizes the salient features of the five elements of the spatial framework for the National Urban System. It shows how the expected urban population of about 450 thousand would be distributed among the different urban settlements and service centers as envisaged by the proposed NUS by the year 2020.

34. The urban population of 2020 as expected to be distributed by regions and within the regions in each of the Dzongkhag, is shown in Table 4.11. These figures are based on the specific town wise 'expected' populations envisaged under the National Urban System, by the year 2020. The detailed town wise populations are exhibited in Annex 12. The relative spatial distribution of these settlements as envisaged by 2020 is graphically presented on the country map.

35. The proposed national cities are in line with the existence of a number of nationally important cities in many countries today including India (Delhi, Bombay, Kolkata, Chennai, Bangalore, Hyderabad, Ahmedabad), Pakistan (Karachi and Islamabad), China (Beijing and Shanghai), Germany (Frankfurt and Berlin), Indonesia (Jakarta and Sumatra), Sri Lanka (Jaffna and Colombo), Australia (Melbourne and Sydney).

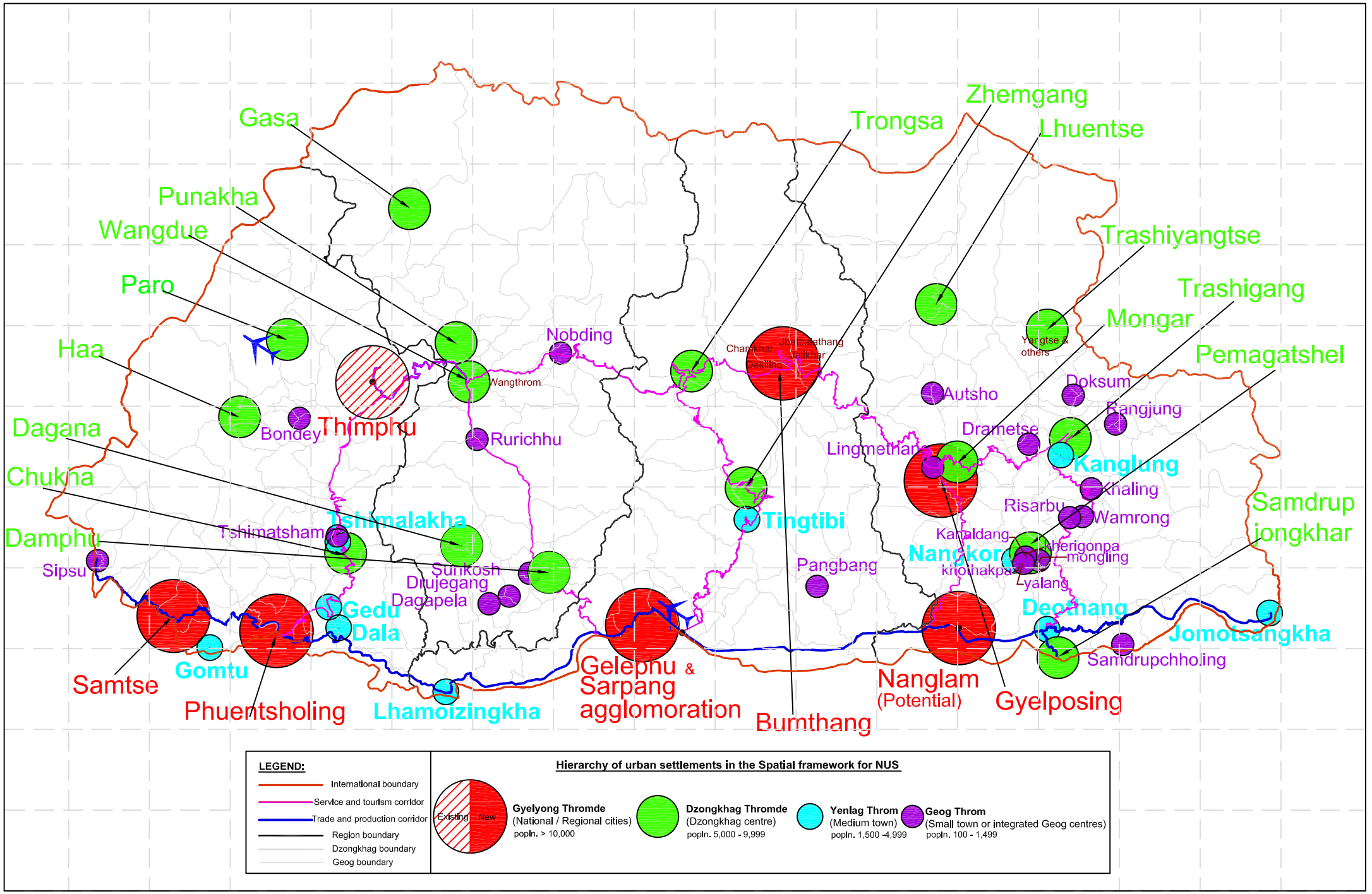
36. There has been an on going discussion regarding the classification of the identified growth centers as 'national/regional' towns. It is felt that the category or name of the identified growth centers is not as important as the understanding that these growth centers are of national importance and will have to get priority RGoB's support to address the regional needs of the people for services and administration.

37. The proposed National Urban System has been formulated on the basis of consultative meetings with the officials considering variables such as regional growth rates and development potential, market linkages, land availability, etc. This is mainly a preliminary framework, which will require fine-tuning and is intended to be flexible enough to respond to emerging issues and perceptions. The proposed system is primarily a framework that gives a holistic picture and essentially works as a decision making tool regarding urbanization. The final NUS in its details can evolve further in tune with political consensus, and emerging concerns of the government.

Table 4.10: The Elements in the Spatial Framework for the Proposed National Urban System, Bhutan

S. No.	**Elements of the Spatial Framework**	**No. of Respective Urban Centres**	**Name and Location of the Centres**	**Approximate Popln. of each Unit, 2020**	**Total Popln. in the Centres, 2020**
1	Gyelyong Thromde (National / Regional Cities)	Seven	Western Region: *Thimphu* *Phuentsholing* *Samtse* Central Eastern Region: *Bumthang Cluster* *Gelephu cluster* Eastern Region: *Gyalposhing cluster* *Nganglam*	 1,20,000 30,000, 20,000, 20,000 60,000 20,000 20,000	290,000
2	Dzongkhag Thromde (Dzongkhag Centres)	Sixteen	All the Dzongkhag headquarter towns excluding the Gyelyong Thromde	Between 5000 and 10,000 each (except for Gasa, 600)	67,000
3	Yenlag Throm (Medium Towns)	Twelve		Between 1500 and 4,999 each	36,000
4	Geog Throm (Small Towns and or Integrated Geog Centres)	Twenty three (existing) plus appr. 50 ICGs		Between 100 and 1,499 ICGs average 500 each	36,500 25,000
5	The Corridors*	Four corridors	*Samtse – S'Jongkhar* *Thimphu – S'Jongkhar* *Thimphu – P'sholing* *Wangdue - Gelephu*	140 thousand 200 thousand (incl Thimphu) 50,000 (excl. Thimphu) 40,000	
	All 'urban' population				**460,500**

* Note: The Samtse – S'Jongkhar corridor is anticipated as a production corridor (implying a concentration of manufacturing activities), and the other three corridors are seen as essentially services and tourism corridors. Most of the major towns are located on one of these four corridors of urban development. The 'corridors' are to be seen more as regional and national roads (existing and proposed) that would become the routes for concentration of settlements, activities and movement of people and goods. Please refer to Map 12 for the spatial description of the corridors.



Royal Government of Bhutan
Ministry of Works and Human Settlements

Consultants:
IPE INFRASTRUCTURE PROFESSIONAL ENTERPRISE (P) LTD
GYALTSHEN CONSULTANCY

Project: Bhutan National Urbanization Strategy

Map title: Proposed Bhutan's National Urban System (NUS), 2020

0 20 50kms
Each square = 20 km x 20 km

Drawn by : Poornima.G

March, 2007

North

Map No.: 12

Table 4.11: Urban Populations, 2020 by Regions and Dzongkhags, as per the Proposed National Urban System

S.No.	Hierarchy	Sub-total																			
I	**Nation**		**BHUTAN**																		
	Urban Popln. 2005	196,111										196,111									
	Exp. Popln. 2020	463,600										463,600									
	Addl. Urban Popln. 2005 to 2020	267,489										267,489									
II	**Regions (4 Nos.)**		Western Region					Central Westen Region					Central Eastern Region				Eastern Region					
	Urban Popln. 2005	196,111	127,677					13,840					22,880				31,714					
	Exp. Popln. 2020	463,600	212,500					30,100					103,000				118,000					
	Addl. Urban Popln. 2005 to 2020	267,489	84,823					16,260					80,120				86,286					
III	**Dzongkhags (20 Nos.)**		Thimphu	Chhukha	Paro	Haa	Samtse	Wangdue	Punakha	Dagana	Tsirang	Gasa	Sarpang	Bhumtang	Zhemgang	Trongsa	Samdrupjongkhar	Mongar	Trashigang	Trashiyangtse	Pemagatshel / Nangkor	Lhuentse
	Urban Popln. 2005	196,111	79,185	32,926	2,932	2,495	10,139	7,522	2,292	1,958	1,666	402	12,596	4,203	3,386	2,695	10,964	7,153	6,816	3,018	2,287	1,476
	Exp. Popln. 2020	463,600	120,000	52,500	7,000	4,000	29,000	13,000	5,000	8,500	3,000	600	68,000	20,000	10,000	5,000	46,000	30,000	14,000	9,000	11,000	8,000
	Addl. Urban Popln. 2005 to 2020	267,489	40,815	19,574	4,068	1,505	18,861	5,478	2,708	6,542	1,334	198	55,404	15,797	6,614	2,305	35,036	22,847	7,184	5,982	8,713	6,524

5.0 Supporting Policy and Institutional Strategies

1. The Draft National Urbanization Strategy is a sector strategy, but it will have implications and bearings outside the urban sector for areas relating to:

   - RNR sector – agriculture, rural development and land utilization planning
   - Transportation and communication
   - Trade and industry
   - Employment
   - Environment
   - Infrastructure
   - Social affairs
   - Municipal finance
   - Local governance
   - Housing
   - Education
   - Health

   (The list above is not in the order of importance.)
   Since policies, relevant sector institutions, guidelines and to some extent legal frameworks already exist separately or are pending approval for most of these areas the Draft National Urban Strategy needs to be seen as an integrating mechanism for coordinating and harmonizing these activity areas and issues in the context of their physical location and land use in urban areas.

5.1 Supporting Strategies

2. The following policy strategies are essential supports for the Proposed NUS to take effect.
   - All public sector projects to be located on a priority basis in the regional centres.
   - Evolve incentives for private sector projects locating in the regional centres.
   - Legal Framework for Urban Planning and Management (Planning Act) to be developed
   - Guidelines to be developed for public private partnership for urban development and management
   - Housing Policy to be formulated with focus on low-income group – including land banking, land market, land tenure and development standards for ensuring higher densities
   - Evolve options to resolve conflict (between agricultural use of land and urban use of land), with strategies such as farm subsidies, dual use urban agriculture/ recreation?

3. Supporting institutional strategies
   - DUDES to have regional offices manned by qualified planners in the regional centres
   - Special development authorities may be formed in these regional centres as Special Purpose Vehicles (SPVs). They may be empowered to oversee public private partnerships for urban development and management

4. Supporting financial strategies
    - Priority allocation of budget in national plans to the regional centers
    - Facilitate priority funding in the regional centers by international agencies
    - Limited Financial Autonomy to be conferred to the regional centers

5. Institutional Framework for Local Governance in Urban Areas

a) Current official thinking:

- Create Thromde Chhungwa (Town) in size category 1,500 – 9,999 having organic links with Dzongkhag Tshogdu through two directly elected representatives.
- Create Thromde Chhewa (city) in towns with more than 10,000 population as autonomous units of self-government.

b) Constraining Factors:

- As many as 56 towns have less than 5,000 population that will not make a viable system of Local Government.
- No established norms & standards for cost of providing basic service and O&M in different size categories of towns that could help firm up viability issue.

Prima facie, towns with less than 5,000 population will not be viable units of urban local government (ULG). Therefore two types of ULG being suggested are:

- Towns in 5,000 – 9,999 categories to have Thromde Chhungwa of the official genre as autonomous form of government independent of the Dzongkhag Tshogdu.
- As an exception, the three regional/National growth centres (Bumthang, Gelephu and Gyalposhing) that have less than 5,000 population, will also have Thromde Chhungwa.
- Towns with more than 10,000 population to have Municipal. Corporation or Thromde Tshogdu status.
- The remaining towns to have structures similar to the Geogs and be part of the DYT (Dzongkhag Tshogdu)

5.2 Prioritization and Financing of Investments in Service Provision

6. Urbanization in Bhutan needs to be canalized both for giving a fillip to the process of urbanization and for promoting a balanced urbanization by decanting and deflecting population migrating to Thimphu City and to Phuentsholing. In order to promote such a balanced urbanization, the Bhutan Urbanization Strategy proposes to develop three regional centres viz. Bumthang (Jakar), Gelephu, and Gyalposhing. Success of the proposed national urbanization strategy is contingent on investments in urban infrastructure and services such as telecommunication, roads, potable water supply, management of liquid and solid wastes, and other social infrastructure such as education, health and social welfare. Provision of these infrastructures will go a long way in (i) improving the quality of life of the populace residing there, and (ii) attracting investments for generation of employment and income. This will give further boost to the urban economy and hence to urbanization impulses. Provision of services and infrastructure at the scale required for the regional centres to be viable centres for residence and investments especially the private investments requires a formal finance system for creation of the required level of urban infrastructure and services to make the regional cities engines of economic activities and growth in true sense of the term. In view of the pivotal role to be played by the regional growth centres, it is suggested that they would need to be included for creation of Thromde Tshogdu irrespective of their current population size. The remaining towns should have structures similar to the Geogs linked organically with the

Dzongkhag Tshogdu wherein financing of services will continue to be within the existing framework of DYT.

7. It is suggested that objective norms and standards for (i) provision of basic urban infrastructure and services and (ii) operations and maintenance of the created infrastructure should be developed for different size category of towns on a priority basis. This will also help in making people realize the costs for providing basic infrastructure and service that would need to be recovered from them. The Thimphu City Corporation presently (2005) incurs a per capita operating expenditure of Nu 469. But this can not be used as a norm for other small and tiny towns where conditions are entirely different.

8. The Thromde Tshogdus would need to be devolved with own sources of revenue constituting of tax sources including land based non-property taxes and non-tax sources including user charges. Creating a municipal finance system by devolving new sources of revenue to the urban local government units and by transforming the existing Land Tax into a full fledged Property Tax with defined and rationalized tax base (Unit Value system as introduced profitably in some of the Indian states and in Poland) will have to be important component of the municipal finance system in Bhutan. Creating a sustainable municipal finance system will as well entail a formal and rational fiscal transfer system for the urban local government units. A formal urban local government system and the accompanying municipal finance system will be instrumental in financing of services. This very well fits into the Ninth Plan principle for financing of services. The Plan document envisages sustainability of municipal services and encouraging institutional capacity for operations and maintenance. Municipal Corporations should become self-sustainable in meeting their current costs and towns' own income should be commensurate with their needs to supply municipal services.[10]

Budgetary Allocation for Financing of Services

9. Absence of urban local self-government and a municipal finance system in Bhutan has been a constraining factor for lack of an organised system of information on financing of services in the country. Plan allocations are presently made to the central government and its agencies and to the Dzongkhags. In such a system of allocation of funds, tracking allocations to financing of urban infrastructure and services per se assumes complexities. The Ninth Plan recurrent and capital outlays are given in the Table below:

Table 5.1: Ninth Plan Outlay (Nu in millions)

Level of Government	Recurrent	Capital	Total
Centre	187.379	2,400.00	2,587.379
Dzongkhags	132.861	1,359.411	1,492.272
Total	320.240	3759.411	4,079.651

The Ninth Plan outlay presented above does not reveal specific outlays for financing of services especially in urban centres. Nevertheless, it indicates that about 41.49 percent of the recurrent outlay and a little more than 36 percent of the total outlay has been allocated for capital investments. But the investments for financing of services in urban settlements are not known from this. Allocations to Dzongkhags include for provision of services in the urban areas within the Dzongkhags also. According to the budgetary allocations of the Royal Government of Bhutan, budgetary allocation for development expenditure to the

[10] Royal Government of Bhutan (Planning Commission), Ninth Plan, Main Document (2002-2007), p.91.

Ministry of Works and Human Settlement was Nu 1,784.86 in 2003-04 out of a total budgetary allocation of Nu 6,570.23 millions.[11] This constitutes a little more than 27 percent of the total budgetary allocation. But not all of these are spent exclusively in urban areas. In view of these constraints, it is difficult to suggest further improvement in budgetary allocation.

10. It would be advisable, therefore, to enhance investments in financing of services through enhanced allocation to the local government units to be created in the three regional centres on a priority basis. This could be done as special dispensation in form of capital grants to the three local governments in the three regional centres. This should be accompanied by fiscal concessions to private investments in these three regional centres in the form of tax holidays and concessions on investments for specified number of years, single window clearance for investments, and innovative public-private partnership formats. These will give incentives for investments in the three regional centres that will accelerate employment and income generation and infrastructure creation.

Investments

11. The following table (5.2) presents ongoing and planned investments for improving urban infrastructure across towns in Bhutan, compiled with inputs from the PPD, MoWHS. The selection criteria of future and existing growth centers (in chapter 4) has been built on similar large scale planned and proposed investments based on information collected from various sources, verified by the dzongkhag engineers. The table below indicates that in recent times most of the significantly larger investments have been limited to Thimphu, Phuentsholing, Samdrupjhongkar and Daga Towns, and the other towns have received relatively insignificant or no investments.

12. As per the recommendations of the BNUS a preliminary approximate cost projection for budget planning purposes across dzongkhags (population wise) has been carried out based on papers / reports and discussions with authorities at the HIDP, Ministry of Health, SPBD, Ministry of Education, Water Supply Section, DUDES, MoWHS, City Corporation, Thimphu and the Ministry of Trade and Industries. The approximate estimates have been worked out for the Dzongkhag level based on additional required infrastructure and facilities under the proposed national urban system.(Refer Annex 8)

[11] Royal Government of Bhutan (National Statistical Bureau), Statistical Year Book of Bhutan, 2004, Catalogue Number 101, February 2005.

Table 5.2 : Investments from external funding sources (recent and ongoing) in towns in Bhutan (in decending order)

S.No.	No.	Town	Dzonkhag	Funding source	Area	Investement		Totals
						other currencies	in Million Ngultrums	
1		**Thimphu**	Thimphu					**2209**
	a			Danida	water Supply		50.100	
	b			Danida	Housing		8.600	
	c			Danida	Toilet upgradation		2.080	
	d			ADB	Infrastructure	5.11 million USD	204.400	
	e			ADB*	Infrastructure	30.75 million USD	1230.000	
	f			Danida	Infrastructure and others		76.246	
	g			Danida*	sewerage	85 million DKK	637.500	
2		**Phuentsholing**	Chhukha					**2182**
	a			Danida*	sewerage	85 million DKK	637.500	
	b			Danida	Water Supply		27.000	
	c			Danida	Infrastructure		83.186	
	d			ADB	Infrastructure	5.11 million USD	204.400	
	e			ADB*	Infrastructure	30.75 million USD	1230.000	
3		**Samdrupjongkhar**	Samdrupjongkhar	GoI	Infrastructure		1389.600	**1390**
4		**Daga**	Dagana	ADB*	Infrastructure	30.75 million USD	1230.000	**1230**
5		**Mongar**	Mongar					**153**
	a			Danida	sewerage		4.450	
	b			Danida	Water Supply		9.500	
	c			Danida	Infrastructure and others		91.317	
	d			Danida	Infrastructure and others		28.765	
	e			Danida	Water Supply		19.060	
6		**Wangdue**	Wangdue	WB	Infrastruture		96.996	**97**
7		**Tshongdue**	Paro	WB	Infrastructure		82.516	**83**
8		**Haa**	Haa	GoI	Infrastructure		71.925	**72**
9		**Bhumtang**	Bumthang	WB	Infrastructure		72.005	**72**
10		**Trashigang**	Tashigang					**46**
	a			WB	Infrastructure		41.181	
	b			Danida	Infrastructure		5.093	
11		**Trongsa**	Trongsa	WB	infrastructure		43.608	**44**
12		**Yangtse**	Trashiyangtse	WB	Infrastructure		40.859	**41**
13		**Lhuentshe**	Lhuentshe	WB	Infrastructure		32.836	**33**
14		**Zhemgang**	Zhemgang	WB	infrastructure		18.034	**18**
15		**Tingtibi**	Zhemgang	WB	infrstraucture		17.978	**18**
16		**Gelephu**	Sarpang	Danida	Infrastructure		17.950	**18**
17		**Damphu**	Tsirang	Danida	Infrastructure		12.979	**13**
18		**Duksum**	Trashiyangtse	WB	Infrastructure		8.778	**9**
19		**Galeposhing**	Mongar	Danida	Infrastructure		5.209	**5**
20		**Samtse**	Samtse	Danida	Infrastructure		5.000	**5**
21		**Nanglam**	Samdrupjongkhar	NA	Infrastructure		NA	**NA**

Source: PPD -MoWHS, RGoB
Note :
* Combined investements for few cities
These investements relate to information made available for the period between 2003-2007
The conversion rate for USD has been taken as 1USD=40Nu
The conversion rate for DKK has been taken as 1DDK=7.50 Nu
The term "infrastructure" under Area refers to investements for improving infrastructure under a common plan/investement scheme
The term "infrastructure and others" refers to investements for improving infrstructure including training and capacity intervensions

5.3 Enforcement of Environmental Protection Policies

12. Bhutan has acceded to several international environmental agreements. These are: Cartegana Protocol on Biosafety; Kyoto Protocol; Basel Convention on Transboundary Movements of Hazardous Wastes and their Disposal; and Convention on International Trade in Endangered Species of Fauna and Flora. Bhutan became a party to the Vienna Convention for Protection of Ozone Layer and Montreal Protocol on Substances that Deplete Ozone Layer. Rules and Regulation on Control of Ozone Depleting Substances were promulgated and a National Ozone Unit was established to coordinate the functioning of mechanisms for control, monitoring and reporting of the import and export of ozone depleting substances. Bhutan has also acceded to the World Heritage Convention. These Conventions require the country to report regularly on its environmental performance.

13. Environmental conservation has been incorporated in the Draft Constitution of the Kingdom. The Tenth Five Year Plan (July 2008 – June 2013) is expected to have a major emphasis on environment, with a separate chapter devoted to environment as a cross-cutting area as well as mainstreaming of environmental issues and management needs in the plans of various sectors such as agriculture, forestry, trade and industry, energy, public works, and urban development.

14. The National Environment Strategy, which was first prepared in 1998, is expected to be updated and revised to reflect changing social, political and economic circumstances and concomitant environmental management needs. A strong possibility is to update and expand the National Environment Strategy into a National Strategy for Sustainable Development (NSSD).

15. Presently the National Environment Commission is in the process of developing and operationalizing an Environmental Information Management System (EIMS). This will provide the baseline for setting up a set of indices that will enable monitoring of environmental conditions and trends. Earlier the Bhutan Water Partnership was set up as an inter-agency body to coordinate programs and policy development related to water resources management and to serve as the national focal agency to international and regional bodies concerned with water resources management.

16. At the local level Dzongkhag Environmental Committees (DEC) have been established in all the dzongkhags, in coordination with the Dzongkhag Administrations. The DECs have the responsibility to ensure integration of environmental concerns in dzongkhag plans and to implement environmental assessment and clearance procedures for dzongkhag and geog level projects and activities that are small-scale and unlikely to have any major adverse environmental impacts. The Thimphu city corporation has its own environmental cell but over all control and guidance is provided by the NEC. NEC sets standards and acts as an over all controlling body for environmental issues in the nation.

17. MTI has established separate Clean Technology and Environmental Management (CTEM) Fund to especially support industries that existed before the enactment of the Environmental Assessment Act to upgrade their equipment and switch over to cleaner technology that meets the industrial emission standards. The CTEM Fund is implemented on a cost-sharing basis with the recipient industry chipping in 50 percent of the costs. So far, the CTEM Fund has aided five large-scale industries. In the case of new industries, environmental clearance is mandatory and inclusion of measures to adhere to the requisite

industrial emission standards in the project proposal is a key criterion for such clearance.

18. Though the policies and some form of institutional framework are present, there is a need for developing further clarity in terms of the hierarchy and role that the various environmental cells and committees have to play. Most importantly there is a need to build the capacity of these cells and committees to adequately provide the technical inputs required. As the Bhutanese society has always been quite aware and concerned about its environment one may say that there is a need to improve institutional strengthening and raising public awareness to inculcate a spirit of civic pride and sense of responsibility for these issues in the fast changing context of present.

5.4 Preservation of Culture and Heritage

19. Under the tenth five year plan government plans to focus on conservation and promotion of culture and heritage by improving accessibility, ensuring improved preservation, promoting traditional arts and crafts, inventorying and documenting the same and increasing usage of dzongkhag[12].

20. The division for conservation of architectural heritage and dept. of culture, MoHCA are currently in the process of making an inventory of the vast and spatially scattered cultural and heritage sites, spaces and places which may also act as a guide document for future urban development related project proposals and activities. There is a need for greater coordination between the concerned departments of the MoHCA and MoWHS so that in the process of aiming for modernization, irreparable damage to the traditional systems and setups is avoided and they are included and appropriately complemented in the urbanization framework as unique pillars of the Bhutanese culture.

21. One of the other important aspects to be kept in mind is the impact of tourism of the traditional cultural systems in Bhutan. Enhanced tourism activities have good economic implications generally but it is important to remember that the scale and impact of tourism should not in any way affect the existing fabric. It is appreciable that government understands that some areas will never be open to tourist activities and others will be open to such activities in limited scale and magnitude. The tourism cycle can and generally does affect destinations and sites in numerous ways and it is imperative that a guiding document on suggested tourism based development be prepared by close consultation within the Dept. of Culture, MOHCA, Dept. of Tourism, MoTI, Dept. of Urban development and engineering services, MoWHS and the NEC so that the impact of development is as desirable.

22. Finally the most important will be consultative development, involving all stakeholders in different forums including the various related ministries and departments and the affected/beneficiary communities. Consultation is mostly time consuming and expensive but in the long run it is quite cost effective for choosing appropriate and suitable options for development which may be acceptable and most beneficial to a community or people.

[12] Planning commission, RGoB, Guidelines for the preparation of the Tenth Plan 2007-2012, March 2006

5.5 Institutionalizing Community Participation in Urban Planning and Development

23. Participation of communities in public policies and planning is becoming increasingly important at all levels with most development interventions designed to encourage citizens of all kinds to participate in public life. City governments are the closest layers of government to citizens. For them to be more effective, they must involve citizens more closely in decisions that affect their lives. Involvement of citizens in developing urban policies, intervention plans and becoming a part of operations and management of services is however both complex and potentially conflictive, requiring an enabling environment and a set of processes, to deliver its full potential benefits. Participatory processes require that all actors and stakeholders bring with them their knowledge, experience, specific concerns and needs which can be taken into account in the design of planning and implementation frameworks.

Stakeholder mapping

24. Cities have several actors and stakeholders (residents, administrators, civil society, etc.). As a consequence of increasing segregation, several groups in cities have become characterized by social exclusion. These need to be mapped with an assessment of their relative distance from the decision-making bodies. For e.g. minority groups such as the Lhotsampas and / or other people living in slum settlements, especially those in informal sector employment will largely be at the fringes of any process of interaction. Stakeholder maps with levels of influence must be prepared for each city and will serve as the starting point of any community participation process.

Community participation framework for urban areas of Bhutan

25. Community participation is about putting people at the center and to change the paradigm from exclusion to inclusion. Its main objectives are to create opportunities for a dialogue between community representatives and the executive, to provide the tools of development to the people who can then make use of these instruments for changing their own lives. In the context of Bhutan, the following tracks will have to be pursued:
    - Organization and mobilization at the community level, in particular among the low income and less represented communities to pursue the overarching national agenda for achieving Gross Domestic Happiness
    - Developing institutional arrangements at the levels of the Dzongkhags and Urban Local Bodies for promoting interaction between people and service providers
    - Linking up to the process of decentralization being planned in the country.

Framework for Interactions at the Community Level

26. The following actions need to be pursued at the community level:
    a. Mobilize and organize local communities into groups and federations of residents. This is required separately for both the HIGs (where not already organized) and the poor.
    a. *Community structures at the village or neighborhood level* should have representation of all groups in the area, especially women and youth groups. Although in the context of Bhutan, women are generally empowered and not necessarily a marginalized community (incidence of violence against women are increasingly being reported). Youth group representation is critical as many more are disaffected due to rising unemployment and demand for white collar/formal employment. The nature of the groups may vary from self-help or savings and credit groups, basic service related groups, livelihood groups, housing cooperatives etc.

b. *Civil society organizations with capacity to mobilize* will be required to facilitate the community mobilization process and use participatory tools for community engagement. At present the civil society in Bhutan is government driven and /or weak. Not many groups were found in Thimphu with capacities to work with local communities on a broad range of issues. RGoB was in the process of approving the legislation that would permit civil society movement to be initiated in the country. This legislation may need to be pursued to allow more and more community development NGOs in the cities.

c. *Platforms for engagement* will have to be facilitated where the networked communities will engage with city administrators. The aim is to provide an opportunity to bring these networked communities together, share experiences, discuss their problems, develop local action plans, and role in urban public management.

d. *Addressing Housing and Tenure Issues* in the cities will be critical for a sustainable solution to slums. A special committee will need to be constituted that will specifically discuss issues of housing for the slum dwellers. This committee will comprise members from the slum dwellers federations/groups, members of the departments in the Ministries, and all related town planning departments /divisions. The latter must be part of the group, as master plans must provide for space for social housing. The Slum level housing committee must be linked to the national and city level structures.

Framework for Interactions at the City Level

27. The following actions need to be pursued at the city level:

e. *Setting up of Community Development Cells (CDCs) in all Dzongkhags* will be required. These will be staffed with a Community Development Officer at the senior most level with adequate funds for the process, whose task will be to monitor and support the process of inclusion. Such cells will be formed at the national level in the DUDES, in Thimphu Municipal Corporation and all other Thromde Tshodues to be formed, and in all Dzongkhags, starting with those having high levels of urban populations. CDCs will provide the community-government interface across all sectors including health, education, basic services, etc. and for all socio economic groups.

f. *Platform for dialogue* Regular meetings of the federated community structures with the CDCs will help to develop the TORs for their engagement, development of community level action plans and implementation and monitoring strategy.

g. *CDC will develop municipal action plans for the poor* which will bundle up the various community action plans, identify the required resources for their implementation in the budgets of the different departments, set up the monitoring systems for their implementation both at the community and city level, develop action plans for capacity building at all levels etc.

h. *Grievance Redressal Systems* will be set up by all the CDCs in the TCC and all other Dzongkhags with proposed CDCs. The redressal systems will use both office based and technology based systems for complaint registration and follow up (IT or mobile technology). While these will be useful for the literate and high income groups, separate systems will have to be planned for the poor.

i. *Web Linked Community Based Information Systems* will be developed for the poor. CBISs are pro poor instruments for planning and monitoring of service delivery. These will be GIS based information systems in harmony with the city property tax or other maps. They will comprise both quantitative and qualitative indicators from the information generated through the participatory community organization process. These will be connected

through the cyberspace with access generated for the poor for grievance redressal.

j. *Baseline Monitoring and Evaluation Systems* An integrated BME plan would be developed by the CDCs to measure achievements against agreed upon indicators developed using the participatory processes described above. This would require baseline data development on the select indices, a monitoring plan and system, impact assessment studies and capacity building for data utilization.

k. *Convergence* Interventions across sectors would need to be harmonized. For this, at all levels (national, district and city) convergence committees may be established to discuss, plan and review implementation and to address cross cutting themes. Such synergy will ensure cost effectiveness and service delivery efficiency. Some departments that must be represented in this committee include health, education, environment, water supply and sanitation, etc.

l. *Social Housing and tenure* issues will require more critical thinking as this is imperative if in the long term Bhutan must have slum free cities/towns and a high GDH quotient. A national level Task Force will be required to examine the key issues regarding housing of the poor. The task force will examine / review the existing master plans for housing space, assess impact on people's livelihood, access to basic and social services, review housing legislations, develop a housing policy and plan for implementation, address bottlenecks in land titling, develop housing credit funds for the poor, examine rental and land markets etc.

5.6 Contours of the Proposed Municipal Legal Framework

28. Although the system of local governance in rural areas (Dzongkhags and Geogs) is by now quite consolidated, Bhutan is presently debating the nature and contents of an enabling legal framework for creation, regulation, and sustaining an effective system of local governance in the urban areas. Institutional and legal framework is presently in an evolutionary process.

Rationale of local government

29. Institutions of local government are said to be the best form of government primarily because of its close interface with the local citizenry. This particular characteristic of local government makes it subject to the close public gauze that enhances local government accountability. In fact the local government is the only institution of self-government of the local communities, by the local communities and for the local communities. Local governments are, therefore, expected to provide effective, efficient, equitable, and responsive governance and delivery of basic urban infrastructure and services to the local communities. Attributes of decentralisation, local governance and delivery of local services entail strengthening of institutional capacity of urban local self-government institutions in ample measure. Designing of an enabling legal framework for urban local governance will, therefore, need to keep in mind the much needed institutional capacity of the urban local government institutions. Institutional capacity, amongst other things, is largely driven by (i) the nature of executive system, (ii) nature and extent of autonomy granted to the ULGUs, (iii) nature and extent of local government functional domain and assignment of expenditure responsibility, (iv) tax authority corresponding to the assignment of expenditure responsibility, (v) expertise and skills available through staffing and personnel system, (vi) participatory processes for the local communities' involvement in local plans, programmes and activities, (vii) system of accountability, and (viii) external environment.[13]

[13] Davey, Kenneth (1989). Strengthening Municipal Government, Discussion Paper, Washington D.C.: The World

New wave of decentralization

30. Bhutan is swept by a new wave of decentralization that is manifested in the draft Constitution of Bhutan, the Ninth Plan Document, major political reform that is presently in the process of being introduced in Bhutan for switch over to the new Democratic Constitutional Monarchy form of government at the national level, and the instrumentalities of governance under a Democratic Constitutional Monarchy system. In the wake of decentralization initiatives, people's participation in their own development has been a key policy. DYTs and GYTs together have become instrumental in involving the people in political, social, and economic decision making that is helping them create their own capacities for setting their own priorities.[14] Administrative and financial powers and human resources have been devolved from the central government to the Dzongkhag administration. Devolved democracy has been further strengthened through delegation of functions and devolution of authority from Dzongkhags to the Geogs. DYTs and GYTs have institutionalized changes in decentralization process that has led to handing over of greater authority, resources and responsibility to the sub-national bodies. However, in this entire process, decentralization, devolution, and empowerment of people in urban areas have not yet actualised. This is one of the driving forces for putting in place decentralized system of local governance in urban areas.

31. Decentralisation initiative in Bhutan is driven also by the draft Constitution of Bhutan that envisages decentralisation and devolution of power and authority to elected local governments for facilitating direct participation of people in the development and management of their own socio-economic and environmental well-being.[15] The draft Constitution provides for creation of local government in all the 20 Dzongkhags (districts) across the country. The draft Constitution provides for the following objectives for the local government institutions:

- Provide democratic and accountable government for local communities.
- Ensure the provision of services to the communities in a sustainable manner.
- Encourage the involvement of communities and community organisations in matters of local governance.
- Discharge any other responsibilities as may be prescribed by law made by Parliament.

32. According to the provisions in the draft Constitution, the system of local government is to consist of (i) Dzongkhag Tshogdu (District Council), (ii) Geog Tshogde (Block Council), and (iii) Thromde Tshogde (Municipal Council) in urban areas. Dzongkhag Tshogdu is to be constituted of Gups (elected heads of Geog), and Mangmis (elected Assistant Gups) from the Geogs, and two elected representatives form each Thromde. It will be chaired by an indirectly elected Chairperson. Geogs are to consist of Tshogpas to be elected from the Chiwogs into which a Geog is to be subdivided for election purposes. Gup, the elected head of Geog is to be elected directly. A Thromde is to be constituted of members to be elected from the local electoral constituencies and is to be headed by a directly elected Thrompon.

33. The draft Constitution gives constitutional guarantee to the institutions of local government through the following Constitutional mandates. It provides that the local government shall be:

Bank.

[14] Royal Government of Bhutan (Planning Commission), Ninth Plan, op.cit., p.22.
[15] Article 22, The Constitution of the Kingdom of Bhutan, Draft of Tsa Thrim Chhenmo as on 18th August 2005.

- Supported by the Government in the development of administrative, technical and managerial capacities and structures, which are responsive, transparent, and accountable.
- Entitled to levy, collect, and appropriate taxes, duties, tolls, and fees in accordance with such procedures and subject to limitations as may be provided for by Parliament by law.
- Entitled to adequate financial resources from the Government in the form of annual grants.
- Allocated a proportion of national revenue to ensure self-reliant and self-sustaining units of local self-government.
- Supported by the Government to promote holistic and integrated area-based development planning, and
- Entitled to own assets and incur liabilities by borrowing on their own account subject to such limitations as may be provided by Parliament by law.

34. A new framework for local government is also required in view of the switchover of the RGoB to a Democratic Constitutional Monarchy system. A review of the Good Governance Report of 1999, suggests[16] (i) enactment of umbrella legislation for local government in the wake of the proposed switchover, (ii) enhancing administrative and management capacities of the local government officials, (iii) upgrading of Thimphu and Phuentsholing Thromdes (Municipal Corporations) as autonomous corporations keeping in view its population size, resources, and capacity for undertaking urban development plans and programmes, (iv) amendment in the Thromde Act (Municipal Corporation Act) for defining the following:
    - Thromdes' status within the structure of local governments;
    - Its status/responsibilities vis-à-vis the Dzongkhag administration/management of public utility services, educational institutions, and health services;
    - Mayor's position vis-à-vis the Dzongdags (head of DYTs); and
    - Functioning of Thromdes based on its size, resources, and capacities.

    These serve as the mandate for redesigning a new system and structure of local government in Bhutan.

Quest for a new local government structure and system

35. Presently, the system of local government obtaining in rural areas is disaggregated at the Dzongkhag level. GYT in the Geogs within a Dzongkhag has an organic link with the DYT through representation of Geogs on the DYT. A Dzongkhag also has urban areas that are represented in the DYT through an elected Tshogpa (elected member); provision of rudimentary urban services are looked after by the Engineering Cell located in each Dzongkhag for design and development of projects costing up to Nu 20 millions. Projects costing more than this are designed and supported by the MoWHS and other line ministries of the RGoB such as Ministry of Education (for educational projects), health (for health projects) and so on. The system of local government in Dzongkhags is presently within the purview of the Ministry of Home and Cultural Affairs (MoHCA). Governance in large urban centres such as Thimphu and Phuentsholing is performed by a municipal corporation form of urban local government. This is presently within the Ministry of Works and Human Settlement (MoWHS). Thus the responsibility for rural and urban local government is located in two different ministries.

36. The existing system of local governance also depicts a dichotomous approach to governance of urban areas. Whereas local governance in large urban areas like Thimphu and Phuentsholing is created and regulated by the BMA, local governance in towns have a different arrangements; these form part of the

[16] Royal Government of Bhutan, Good Governance Plus in Pursuit of Gross National Happiness, 2005

Dzongkhags and exist parallel to the Geogs. But whereas Geogs have separate formal representative local government headed by a Gup, towns do not have representative government.

37. The Policy Planning Division (PPD), MoWHS is presently deliberating on finding a sustainable solution to the governance of towns as well especially keeping in view the Constitutional requirement of creating Thromde Tshogde. Accordingly, urban centres with a population of 1,500 to 9,999 are suggested to have Thromde Chhungwa (Town) that will have not more than seven elected members on the municipal Committee. These are suggested to be headed by an indirectly elected Chairperson; executive functions are to be performed by an appointed Town Commissioner. It also suggests an organic link of the Thromde Chhungwa with the Dzongkhag Tshogdu through representation on it by two directly elected representatives.

38. An urban centre with a population of 10,000 and more is suggested to have a Thromde Chhewa (city) as independent and autonomous form of local government. Following the Constitutional provisions, Thromde Chhewa is to be headed by a directly elected Thrompon and will have up to 10 elected members. Executive functions are to be performed by an appointed City Commissioner. By virtue of its large population and autonomous form of government, Thromde Chhewa is not to be represented on the Dzongkhag Tshogdu. It will not have any link with the district government (Dzongkhag Tshogdu).

39. Creation of viable system of local government in urban areas is presently constrained by two factors. First, Bhutan does not yet have a defined set of criteria for designating a settlement as urban. It has not yet developed the criteria for creation of various form of local government in different size categories of urban areas. Criteria for constituting a municipal corporation in large urban centre (that itself is not defined) is conspicuously absent in the existing BMA. Therefore, developing criteria for declaration of towns of different size categories and another set of criteria for creation of different forms of urban local government is imperative.

40. The PPD has tried to develop criteria for declaring an urban centre as Thromde. Accordingly, 75 percent of the following criteria are to be met for an urban centre to be designated as a Thromde:

    a. A minimum population of 1,500 persons.
    b. A population density of 1,000 persons or more per sq. kms.
    c. More than 50 percent of population should depend on non-primary activities.
    d. The area of the urban centre should not be less than 1.5 sq kms, and
    e. The area should have potential for future growth particularly in terms of its revenue base.

    Developing criteria for municipalisation and the consequent creation of local government in Bhutan becomes a complicated exercise largely because of a very large number of urban centres belonging to very small size category of towns. Besides the capital city of Thimphu and the border town of Phuentsholing, the number of towns with a population of 5,000 to 9,999 is only three. 21 towns have a population of 1,500 to 4,999. As many as 35 towns have less than 1,500 population. Thus as many as 56 towns have less than 5,000 population. This gives rise to the issue of viability of Thromdes to be created in all urban centres across the country. Bhutan does not have as yet established and tested norms and standards for providing different core urban services like water supply, sewerage, drainage, street lighting, solid waste management that could be used to make a judgement about financial viability of a municipality to be created and

for identifying the threshold population for creating viable units of local self-government. It is, therefore, suggested that objective norms and standards for (i) provision of basic urban infrastructure and services and (ii) operations and maintenance of the created infrastructure should be developed for different size category of towns on a priority basis. This will also help in making the people realise the costs for providing the basic infrastructure and service that would need to be recovered from them.

41. The Constitutional provision notwithstanding, it will not be prudent *prima facie* to incorporate municipal government in all the towns. The new Thromde Act of the Kingdom of Bhutan that is approved by the National Assembly provides for creation of four types of local government. These are (i) Gyelong Thromde in towns with a population of 10,000 and above, (ii) Dzongkhag Thromde in size category of 5,000 to 9,999, (iii) Yenglag Throm in a size category of 1,500 to 4,999, and (iv) Geog Throm in a size category of 100 to 1,500 population. However , the Act provides for creation of only Gyelong Thromde and Dzongkhag Thromde; the remaining two other types of local government are to form part of the rural local government that takes care of governance of Dzongkhag and and Geog respectively. In view of the new legal framework only towns with a population of more than 5,000 qualify for creation of the first two types of local government mentioned earlier.This will qualify three towns (Wangdue with a population of 6,714, Gelephu with a population of 9, 199, and Trashigang with a population of 5,952) to have autonomous urban local government that will not have any organic link with the Dzongkhag Tshogdu.

42. It needs to be mentioned that the National Urbanisation Strategy for Bhutan has identified three towns to be designated as regional centres for giving a fillip to urbanisation, canalisation of urbanisation, and deflecting the influx of population away from concentrated urbanisation in Thimphu and Phuentsholing. Of the three towns mentioned above, only Gelephu happens to be one of the three regional centres. In view of the pivotal role to be played by the regional centres, it is suggested that the two remaining regional centre towns that qualify for creation of Yenlag Throm according to the new law. They are not supposed to be autonomous form of local government according to provisions in the new Act. Nevertheless, in view of catalytic role to be played by the regional centres, these two local government units will need to be given autonomy at par with that of Dzongkhag Thromde. These are Jakar in the Dzongkhag of Bumthang and Gyalposhing in the Dzongkhag of Monger. The remaining towns should have structures similar to the Geogs linked organically with the governance of Dzongkhag. Financing of services in these towns will continue to be within the existing framework of DYT.

Chief executive of Thromde

43. The draft Constitution provides that the Thromde will be headed by a Thrompon who will be directly elected by the electorate of the Thromde. The New provides for Thrompon as the chairperson and political executive of the Thromde Tshogdu and the Thromde Tshogde. S/he is to be directly elected by thye voters. This very well conforms to the provisions in the draft constitution of Bhutan All the executive functions of Gyelyong Thromde and Dzongkhag Thromdes to vest in the Thrompon who will be accountable to the Corporation Committee. The executive functions will be, however, performed by an appointed Municipal Commissioner who will be accountable to the Mayor. These two forms of local government in urban areas will not be organically linked with the Dzongkhag Tshogdu.

5.7 Thimphu's Role in the BNUS

5.7.1 Population and Primacy

44 The Draft BNUS highlighted the skewed pattern of distribution of the urban population in the nation and the relative concentration of the nation's urban population in Thimphu City, making it a primate city. Since the primary aim of the BNUS was to achieve a balanced urban development at the regional level, other counter magnets were proposed. The Draft BNUS also identified 'national/regional Growth Centers' in the eastern part of the country to facilitate a relatively more balanced distribution of urban population by 2020.

45 In the two large urban cities, Thimphu and Phuentsholing, a high proportion of the employed population is civil servants. The pull factor for rural-urban migration in these regions at least, may be related to the administrative decisions to locate the government offices in these two cities[17]. Spatial distribution of government offices will be one strategy for mitigating migration to these two cities[18].

46 At present based on the published information of the Census 2005 the capital city of Thimphu houses approximately 40 % of the nation's urban population. Over 70% of the Dzongkhag population resides in the city. The city will house approximately 88% of the nation's urban population by the year 2020 if the current growth rates were to continue. Thus a proactive intervention is desirable in the context of the nation's overarching aim of balanced regional development.

47 If the recommendations of the BNUS were to be implemented and the population of the city capped as per the recommendations, the population of the city will reach a maximum of 26% of the total urban population of Bhutan, by 2020.

48 The city's population is 79,185 based on the 2005 census. This is nearly 4 times the next sized city (Phuentsholing's popln. = 20,537). That implies that Thimphu is a primate city. The draft BNUS recommends Thimphu's desirable population by 2020 as 120,000 which will be only twice the targeted size of the second largest city (Gelephu – 60,000) in 2020. Thimphu City will thence be no more a primate city in 2020 and this will lead to a more regionally balanced pattern of resource distribution including human resources.

49 The rationale for the above projections are based on the following:

1) The Royal Government of Bhutan has an overarching policy of an equitable and balanced development for the nation.
2) The limited capacity of land available in Thimphu City to accommodate population without endangering the environment.

5.7.2 Approaches to Land Use

50 Being the capital of the nation and a large city in comparison to the other urban settlements in the country, Thimphu City's development standards may not be replicable in the smaller towns. But some basic experiences may be relevant, particularly space requirements for sewage treatment, landfill, and formulating regulations to protect streams and fragile slopes, planning for higher densities, and heritage conservation measures. The TSP has evolved a locally appropriate land use (or 'precinct') classification, which is a response to the economic and physical environment, the topography and the natural resources, the local

[17] Ninth Plan Main Document (2002- 2007), Planning Commission, RGoB
[18] *Ibid*

existing settlements, the heritage structures and spaces. The density pattern recommended within the city varies from no development (E2) to 650 (UV-1) persons per hectare based on local natural conditions. Following is the list of Precincts designated in the Thimphu Structure Plan:

Table 5.3: Proposed Precinct schedule as per Thimphu Structure Plan:

Land Use Category	**Precincts**	**Activity/Use**
UV - 1	Urban Village Core	High - density, mixed use precinct
UV - 2 (MD)	Urban Village Periphery	Medium - density residential precinct
UV - 2 (LD)	Urban Village Periphery	Low - density residential precinct
UV - 3	Urban Village Enclave	Bagos and unplanned settlement precincts
TV	Traditional Village	Precincts of Traditional Villages
UC	Urban Core	The Thimphu Town Center, a precinct of trade and commerce
UH	Urban Hubs	To be created in the North and South of Thimphu as major entertainment, transport and shopping precincts
NN	Neighborhood Nodes	Convenience shopping, basic services and amenities precincts for the Urban Villages
I	Institutional	Local, National and International Institutions
H	Heritage Precincts	Precincts for scared activities and places of historical importance
D	Dzong Precinct	Precinct for the national icon, a symbol of His Majesty the King and His Holiness the Je Khempo
G - 1	National Open Green Spaces	Precincts of national importance such as a national sports complex, archery ranges, and exhibition areas, etc.
G - 2	Green Space System	Precincts of public assets like parks, gardens, and recreation areas
E - 1	Environmental Conservation Precinct	Enhancement and protection of Thimphu's fragile ecological legacy
E - 2	Forest Environments	Precincts devoted to the natural forest preserves in the "no development zone"
E - 3	Agricultural Environments	Precincts characterized by paddy lands, agricultural areas, flood plains, farming activities.
E - 4	Agriculture based Environments	Precincts characterized by very steep slopes, orchards, green houses, on - farm food processing and research.
SSIC	Satellite Service and Industrial Centers	Precincts characterized by industrial, heavy maintenance, wholesaling and warehousing.
M	Military	Precincts related to national security. These are proposed at the portals of the National Capital Region.
R	Royal Uses	Precincts related to Royal uses
EN	Endowment for the Future	Precincts of land whose use determination is differed to future generations.
CP	Urban Corridor Precinct	A corridor of land, forty - four meters wide running through the city.

51 The city's experience in planning and implementing the TSP's land use / precinct regulations and recommendations for infrastructure provision can be used as a reference base for planning and developing other urban settlements in the nation. For example the existing sewage treatment through lagoons has consumed a land area of 13 acres for providing a capacity that could be adequate to support a maximum population of approximately 15,000.

52 Under the ADB funded UIDP project and the World Bank funded Second Urban Development Project the city will be improved and provided with water supply, sewerage, sanitation, roads, etc. requisite urban infrastructure soon. The experience of implementation of these projects will act as a reference point for the rest of the urban centers in Bhutan. The draft BNUS also suggested various outlines for future development of the city of Thimphu based on its vision for the city to improve its living conditions and sustainability:

1) Plan and facilitate high densities to reduce consumption of agri / horti land
2) Property taxes to be linked to actual values
3) Cost recovery as a policy to finance public services and facilities
4) Encourage CBOs and private sector in infrastructure development and O & M
5) Institutionalizing participation of poor and vulnerable groups
6) Provision of opportunities for livelihoods and access to shelter and basic services for the poor and the vulnerable

5.8 Learning from Thimphu's land pooling experience

53 For the development of new areas as per the Thimphu Structure Plan, a land pooling approach has been adopted, avoiding the financial, social and legal complications of the land acquisition method.

54 There are some issues in implementing the plans. One of them is the legality of the land pooling approach as per an appeal to the court. The process of clarification of the process to the court delayed the implementation of the plan. As per the priorities set by TCC in implementing the LAP's the following LAP's are being implemented at present:

1. Lungtenphu,
2. Babesa,
3. Taba – below road,
4. Dechencholing,
5. Simtokha – workshop area,

55 The methodology used by TCC for prioritizing the implementation of the LAP's is the willingness of the landowners. This was important because land-pooling mechanism does not have a legal status in Bhutan as yet. As per the court verdict, to the petition filed against the planning mechanism, it was directed that, the City Corporation should follow "The Bhutan Municipal Act of 1999", and that it does not empower a land pooling process. The Bhutan Municipal Act of 1999 mentions Land Acquisition as one of the planning mechanisms and not 'Land Pooling'.

56 The Thimphu City Corporation then evolved a strategy wherein it entered into a "Genja" (written agreement) with majority of the landowners (mostly in the south of Thimphu, few in the north) and submitted to the government that as a majority (i.e. almost 80% accepted and agreed on the plans so prepared), it should be permitted to go ahead with land pooling as a planning mechanism and that in the case of landowners not agreeing with land pooling, the property could be acquired as per the Municipal Act. The result of this strategy was that

initially the landowners of Lungtenphu came forward and signed the Genja, and later others in the southern local areas followed the example.

57 Land pooling is considered an appropriate approach for urban development and extension due to the following reasons:

• It can be more 'equitable', since everybody contributes the same percentage of their land towards infrastructure and service provision,

• It can be participatory and no–cost (to the Local Authority) process of getting land for public uses (both for local level as well as for city level) simultaneously,

• Concept more favored by land owners as compared to Land Acquisition where instead of loosing the entire land, only a percentage of land is traded off, so as to enhance the net value of their holding by transforming their land from 'undeveloped' to 'developed'.

• Developed properties are seldom disturbed, except for compound walls, septic tanks and garages – concept of Guided Land Development employed in densely developed areas,

• Excess land and any other legal or social disputes are automatically solved in the process of planning,

58 TCC's experience of the land pooling mechanism is a pioneering attempt in the country and it can form the basis for an indigenous adaptation of the method in other towns in Bhutan.

59 Based on the city's experience of implementing the structure plan till now, the following steps can be taken to refine the land pooling process further :

- An Information Brochure should be prepared by TCC for circulation, to disseminate the approach and mechanism to the people, highlighting the private and public benefits of the approach
- Special concepts like Guided Land Development under the Land Pooling Mechanism should be rationalized and made more acceptable and people friendly
- Primary cutting of roads may be done as soon as plans are finalized and plots handed over – so as to initiate development and mitigate the feeling among landowners of 'loosing the income' from their land,
- A framework for plot allocation should be prepared that explains the procedure clearly and improves its acceptability amongst people. For example: a financial analysis should be made of all the plots in terms of their present status / position and proposed status / position, ensuring that net benefits are obtained by every owner, there by making it easier to obtain a 100% consensus in open public consultation. This will also help in addressing peoples' expectations.
- Based on the final plot allocation the implementing authority in consultation with the people could prepare a development perspective that could guide people towards developing their land for economic benefits and impacts.

5.9 Capacity Building

60. Capacity building entails that an organization should have human, scientific, technological, organizational, institutional and resource capabilities so that it could be positioned to evaluate and address the crucial questions related to policy choices and modes of implementation among development options, based

on an understanding of environment potentials and limits and in view of needs perceived by the people. [19] UNDP, however, looks at capacity building in terms of the following:[20]

- the creation of an enabling environment with appropriate policy and legal frameworks;
- institutional development, including community participation (of women in particular);
- Human resources development and strengthening of managerial systems.

This conceptual overture of capacity building notwithstanding, generally training is thought to be all about capacity building. Enhancing institutional capacity in an organization, in particular means (i) human resource development, the process of equipping individuals with the understanding, skills and access to information, knowledge and training that enables them to perform effectively, (ii) organizational development, the elaboration of management structures, processes and procedures, not only within organizations but also the management of relationships between the different organizations and sectors (public, private and community), and (iii) institutional and legal framework development, making legal and regulatory changes to enable organizations, institutions and agencies perform their functions effectively.[21]

Creating an enabling policy and legal environment: existing policy environment

61. Whereas policy for local governance in urban areas is presently the domain of the Ministry of Works and Human Settlement (MoWHS), legal framework is now contained in the Thromde Act of Bhutan, 2007. This Act contains provisions for creation of autonomous forms of local government, their powers and functions and the sources of revenue and score over the existing BMA, 1999. An evaluation of the new legal framework contained in this law is contained in Annex 13.

62. MoWHS presently has a Department of Corporations that deals with the existing two city corporations of Thimphu and Phuentsholing (Annex 5). With the increase in the number of local government units in urban areas as suggested in the Section on Financing of Services in this Chapter, the policy planning, formulation and implementation with respect to urban local government units will have to be formalized in the MoWHS. The existing Department of Corporation will have to be converted into a broader Department of Municipal Administration (DMA) with a full time Director of Municipal Administration who will be responsible for policies including the legal framework relating to urban local government units. This Department will have to be decentralized at the regional level after creation of five municipal entities as suggested earlier in this Chapter. Decentralized municipal administration department at the regional level will be in a better position to perform the handholding role for promoting, supporting and strengthening of urban governance. The proposed municipal department will also have to coordinate with the Ministry of Finance for putting in place a transparent, objective, and sustainable system of fiscal transfers to the urban local government units. As the existing BMA has gaps and deficiencies, DMA will also

[19] Capacity Building - Agenda 21's definition (Chapter 37, UNCED, 1992.)

[20] http://www.gdrc.org/uem/capacity-define.html

[21] Pellenburg et al (1996). "Building Capacities for Better Cities" Discussion paper for Habitat II, Rotterdam: IHS.

provide an enabling legal framework to the urban local government units by developing a framework for creating different forms of urban Thromde Tshogde in different size categories of towns. Such a framework will have to be based on a set of criteria as is presently being considered by the PPD (Annex 5).

Institutional development

63. Institutional development is another element in capacity building. This is driven by a set of rules, practices, organizational structure, lines of command and communication amongst the different hierarchies and levels in an organization, delegation, appropriate staffing, initiatives and mechanisms for local government accountability. Organization development (OD) encompasses most of these initiatives that are required for institutional development. In order for the these elements to be provided in urban local governments for their institutional development, the proposed DMA in the MoWHS will need to be structured such that it has expertise in Organization Development, HRD, and finance. These expertise's will then provide insights to the urban local government units in putting in place the elements of institutional development mentioned above.

64. One of the important elements of institutional development is the mechanism for local government accountability. Accountability is driven by reporting, disclosure and participatory channels. The proposed DMA would need to ensure that the local government units have annual administration reports. They would need to follow the accounting standards and disclosure norms preferably by adopting the accrual based double entry system of accounting. Audit will have to be internalized besides, of course, the external audit. It will be advisable for the local government units to have an Accounts Committee to be chaired by a Councilor belonging to opposition party.

65. Participatory mechanisms will have to be injected into local governance by creating a community development department in each local government unit and developing the mechanism for linking the community structures with the local government community development department.

Human resource development and training

66. Bhutan has the advantage of being the late starter in the sphere of urban local governance. It is better placed to introduce human resource development (HRD) system in the local government units by creating an HRD unit within each local government unit. The HRD unit will keep a data base on all the employees including the heads of the various local government departments in terms of their qualifications, experience, age, date of appointment, date of annual increment, job description, training courses attended by them, their performance evaluation. Such a data base will be immensely helpful for HRD initiative. The DMA in the MoWHS will as well have to work out an appropriate recruitment and cadre rules for appointment of suitable and qualified personnel.

67. HRD initiative will have to be supplemented by training that is primarily concerned with enhancing of knowledge, skills, and bringing about perceptible changes in the attitude of the functionaries at all levels. This will require the HRD functionary in each local government to go for training needs assessment of local government functionaries periodically, preferably every three years to get an insight into competency gaps. Competency gap will then be used for evolving a training plan for the local government functionaries. Presently, Bhutan does not have a specialized training institution for training of local government officials. To begin with, the institute of management and other vocational institutions could be involved in local government training. Bhutan has a number of internationally funded urban sector projects that invariably have training components. These will come handy in training of local government staff.

Summary of the Final Meeting on the BNUS

This summary of the final meeting on the BNUS held in March, 2007 aptly sums up the various views on the context, guiding policies, key issues, arguments and proposed strategies.
In this summary, the RGoB's views are reproduced along with a short extract of the relevant sections of the Bhutan Vision 2020 as reminded by the Honourable Minister. This summary is followed by the Final BNUS.

RGoB's views

1. The preparation of the BNUS is timely and in keeping with the government's desire/vision for urban development, expressed in Bhutan 2020, which is a very profound, visionary, and well written document prepared by the Planning Commission.

2. The nationwide 2005 Population and Housing Census (PHC) provides important data and information used extensively to prepare the strategy. We now know that the national urban growth rate has been 7% and for Thimphu about 13.5% between 2000 and 2005. Bhutan 2020 predicts that by 2020 more than 50 percent of the total population will be living in urban areas. But as per the 2005 census and the BNUS report which is based on it, this percentage is likely to go up to 73. That poses a major challenge to the government. One of the major challenges we have been facing is employment, gainful employment for our youth, particularly our educated youth.

3. The second major problem is urbanization. Government's policy has always been to promote balanced and equitable economic development (BEED), to promote planned urban centres and nice cities. If we are not able to foresee our future, then it will be difficult for us to realize the government's policy of BEED. Among others, this will also have impacts on poverty, especially in terms of provision of basic services and facilities. We must realize that urban planning and urban infrastructure development is very difficult and expensive.

4. Bhutan 2020 has also set targets, for instance, preparation of Urban Development Plans, for instance for Thimphu and Phuentsholing and other major urban centres and also the formulation of growth centres strategies which according to the Bhutan 2020 is supposed to have been completed by the 8th FYP in 2002. BNUS can be considered as an important step towards this end, together with the Thimphu Structure Plan and the Thimphu City Development Strategy.

5. In keeping with the long term government's policy of BEED and also to ensure Thimphu growth takes place in a planned/controlled manner, we have a number of measures, policy instruments and regulations put in place. Two examples towards this end include, under the Development Control Regulation of Thimphu City prepared as part of Thimphu Structure Plan replacing Building Regulation, one - restrictions under the plot coverage, and two - building height restrictions. Ultimately such measures are geared towards controlling the population growth in Thimphu and controlling the rapid growth of the City.

6. For definition/designation of cities and urban areas in our context, we need to take into account our peculiar condition – small country, small population, rugged terrain, lack of favourable space for urban expansion, and also our unique approach to development, which has been drawn from the experiences from outside and avoid mistakes they have made, and also take into account our own strength and plus

points, our past traditional practices. All these were kept in mind in drafting the BNUS.

7. We have tried to define urban areas in our own way which may not necessarily be in conformity with practices elsewhere. We have a hierarchy of urban centres such as national cities, regional growth centres, dzongkhag towns, satellite towns and geog towns. For the time being, regional growth centres have been left out and replaced by national cities in the hierarchy, but in the strategy it remains since some of the national cities can ultimately turn into regional growth centres, for instance Gelephu-Sarpang.

8. Geog towns have been included in the hierarchy because we are already implementing the concept of Integrated Geog Development Centres through collaboration with the Ministry of Agriculture and Ministry of Home and Cultural Affairs where all service facilities for the geog including the market is to be located. Basically this is to support the approach already taken by the government aimed eventually at discouraging rural-urban migration and reducing pressure on main urban areas. Rururbanization – taking urban facilities to rural areas – if geog centres develop, the need for developing satellite towns may be much lesser.

On local autonomy and governance structure, it was clarified that there is no need to debate since the provisions under the Constitution provides the broad framework to address this issue. It was further clarified that the Municipal Act 1999, realising its loopholes, is under revision in the form of Thromde Act 2007 which will address issues related to local governance and autonomy. As regards the municipal facilities' charges, the Municipal Act 1999 applied only to Thimphu and since 2006 to Phuentsholing and not to any other municipalities. It was also mentioned that most of the contents of the BNUS matches well with the current thinking and discussions of the government. The identification of major towns in the south is in keeping with the recent concept of Comprehensive Economic Zones in the South which are to be export oriented, and could "gamble on other's money".

Hon'ble Minister's reference from Bhutan 2020 relating to Urbanization Strategy

9. The face of our nation is rapidly changing. Increasing numbers of people are choosing to leave their rural homes and to migrate to urban centers. We are not yet well equipped to deal with this rapid movement of population, being still uncertain of the specific constellation of factors that are fuelling the process, which may vary in different parts of the nation, and of the longer-term consequences, both positive and negative, that the process will have in both urban and rural areas. We cannot wait to acquire of full understanding, nor can we allow our urban centers to be overwhelmed by the uncontrolled effects of rapid urbanization.

10. Of the initiatives required to deal with this situation, two are of crucial importance. The first is to ensure that we retain our commitment to improving the standard of living and quality of life in rural area, thereby reducing the 'push' factors in migration. Farming and related activities must become more profitable and young people must perceive farming not as a subsistence activity they associate with 'backwardness' but as a field of opportunity. The continuation of the focus on rural development and the further commercialization of agriculture are thus essential components in our urbanization strategy.

11. The second major initiative is the preparation of a growth centre strategy that identifies migration alternatives to Thimphu and Phuensholing, both of which are currently growing at rates which may soon prove to be unsustainable. The growth centre strategy must meet a number of basic requirements.

12. First, and most obviously, the locations selected for growth centers must provide the physical space to accommodate a growing population.

13. Second, the locations selected must have an economic base that establishes the conditions required for self-sustaining growth. This required us to take special account of the resource endowments of potential locations and of the possibilities of translating these endowments into tangible development potential that can be exploited in the short and medium term.

14. Third, full and proper consideration must be given to the potential environment impacts of alternative locations so as to ensure that growth centers do not result in unacceptable environmental damage, for example damage that could arise from the exploitation of resource potential.

15. Fourth, the growth centre strategy must be reinforced by programmes aimed at developing the physical infrastructure, especially roads, power, water and telecommunications, required to exploit resource endowments and achieve self-sustaining growth.

16. Fifth, the growth centers selected must serve as focal points for the provision of social infrastructure and serves that are associated with expanded choice and the quality of life.

17. Sixth, the centers should serve as focal points for government services and for programmes for the decentralization of government administration from Thimphu to lower levels.

18. Given resource scarcities, it will neither be feasible nor desirable to seek to develop more than three or four regional growth centers. Highest priority should be accorded to the development of a growth centre in eastern Bhutan, where the distances to Thimphu and Phuentsholing are great and the density of population high, giving the region a high potential as a 'sending' area. Available resources will need to be concentrated in a small number of locations in order to achieve economies of scale, rather than spread too thinly over a large number of centres where returns will be lower and more unpredictable. Preference will need to be given to the expansion of existing centers rather than the creation of new settlements, provided that the minimum requirements and basic conditions can be fulfilled.

19. The preparation of a growth centers strategy is now in hand and will form part of a larger strategy for the balanced development of human settlements in Bhutan. It is clearly of the utmost importance that the strategy be finalized and implemented at the earliest opportunity if the many potential negative effects of rapid urbanization are to be minimized.

20. These strategies must effectively address problems relating to land markets, land registration, affordable housing and urban services that are already in existence and they must encompass measures to prevent the emergence of the slums and squatter settlements that are familiar in many other developing countries. For both Thimphu and Phuentsholing it will be necessary to think imaginatively in terms of alternatives to continuous urban growth, with its possible negative implications for the quality of both the built and natural environment. We should give consideration, for example, to such concepts as 'rururbanization' that targets townships in the vicinity of the towns as future focal points for a pattern of urban growth in which the benefits are more broadly-based and equitably shared. Above all, it is imperative that we learn from past mistakes and do not repeat them in other urbanizing areas.

21. Our future strategies for human settlement development must give greater priority to achieving improvements in the quality of urban design and planning. Some towns, notably Phuentsholing, having grown without the benefit of development plans and may soon reach a stage where, from an urban planning and design perspective, they are beyond repair. In seeking to achieve improvements in the quality of the built environment, we must draw inspiration not only from modern textbooks on urban planning but also from the wisdom and imagination of our traditional architects and craftsmen, promoting standards of urban design and architecture that are consistent with a distinctive Bhutanese identity.

Annexures

Annex1

Table : Projected population in Bhutan, 2020 by Dzongkhags

Dzongkhag	Total Population			Urban Population			Rural Population		
	Popln.,2005	Natural increase per annum	Projected popln. 2020	Urban Popln.,2005	Natural increase per annum	Projected popln. 2020	Rural Popln. 2005	Natural increase per annum	Projected popln. 2020
Western region									
Thimphu	98,676	1.33%	120,339	79,185	1.40%	97,616	19,491	1.04%	22,763
Chhukha	74,387	1.02%	86,669	32,926	1.12%	38,901	41,461	0.95%	47,779
Samtse	60,100	1.20%	71,900	10,139	1.32%	12,341	49,961	1.18%	59,573
Paro	36,433	1.01%	42,338	2,932	0.96%	3,386	33,501	1.01%	38,951
Haa	11,648	1.04%	13,605	2,495	1.22%	2,991	9,153	0.99%	10,611
TOTAL	281,244	1.17%	334,776	127,677	1.31%	155,203	153,567	1.05%	179,615
Central-western region									
Wangdue	31,135	1.34%	38,003	7,522	1.80%	9,830	23,613	1.19%	28,198
Punakha	17,715	1.18%	21,112	2,292	0.79%	2,580	15,423	1.23%	18,527
Dagana	18,222	1.70%	23,453	1,958	1.40%	2,411	16,264	1.73%	21,036
Tsirang	18,667	1.41%	23,019	1,666	2.84%	2,536	17,001	1.27%	20,544
Gasa	3,116	1.17%	3,709	402	1.26%	485	2,714	1.16%	3,227
TOTAL	88,855	1.39%	109,257	13,840	1.68%	17,776	75,015	1.33%	91,457
Central-easter region									
Sarpang	41,549	1.45%	51,566	12,596	1.70%	16,209	28,953	1.34%	35,351
Bumthang	16,116	1.10%	18,984	4,203	1.60%	5,329	11,913	0.92%	13,667
Zhemgang	18,636	1.40%	22,970	3,386	1.20%	4,047	15,250	1.45%	18,926
Trongsa	13,419	1.43%	16,601	2,695	1.77%	3,509	10,724	1.34%	13,094
TOTAL	89,720	1.37%	110,099	22,880	1.61%	29,083	66,840	1.29%	81,009
Eastern region									
Samdrupjongkhar	39,961	1.44%	49,514	10,964	2.36%	15,562	28,997	1.09%	34,117
Mongar	37,069	1.49%	46,291	7,153	1.58%	9,044	29,916	1.47%	37,236
Trashigang	51,134	1.25%	61,621	6,816	1.46%	8,470	44,318	1.22%	53,159
Trashiyangtse	17,740	1.50%	22,176	3,018	1.31%	3,668	14,722	1.54%	18,515
Pemagatshel	13,864	1.17%	16,519	2,287	1.64%	2,921	11,577	1.08%	13,601
Lhuentse	15,395	1.27%	18,602	1,476	1.10%	1,738	13,919	1.29%	16,870
TOTAL	175,163	1.37%	214,689	31,714	1.78%	41,310	143,449	1.28%	173,474
Bhutan	**634,982**	**1.28%**	**768,727**	**196,111**	**1.45%**	**243,266**	**438,871**	**1.21%**	**525,570**

Annex 2

Computing the CDI

The computation of CDI goes through the following steps. First, any indicator j for dzongkhag i with respect to variables $k = 1,2,..,m$ is estimated as

$$I_j^i = \frac{1}{m}\sum_{k=1}^{k=m}\frac{\left(\max x_k - x_{jk}\right)}{\left(\max x_k - \min x_k\right)}$$

where $\max x_k$ and $\min x_k$ represent maximum and minimum values of the variable k across the dzongkhags. Thus, I_j^i measures deprivation of a dzongkhag relative to the best among all the dzongkhags and scaled to the max-min range. I_j^i can take value between 0 (no deprivation) and 1 (maximum deprivation).

For ranking purposes the depravation is subtracted from 1 to know the relative level of provision.

The second step is to define an average deprivation indicator for each dzongkhag. This is done by taking simple average of indicators $j = 1,2,...,n$ as given under:

$$I^i = \frac{1}{n}\sum_{j=1}^{j=n} I_j^i$$

Finally, the composite development index for dzongkhag i is computed by subtracting the average deprivation index from one:

$$CDI^i = (1 - I^i)$$

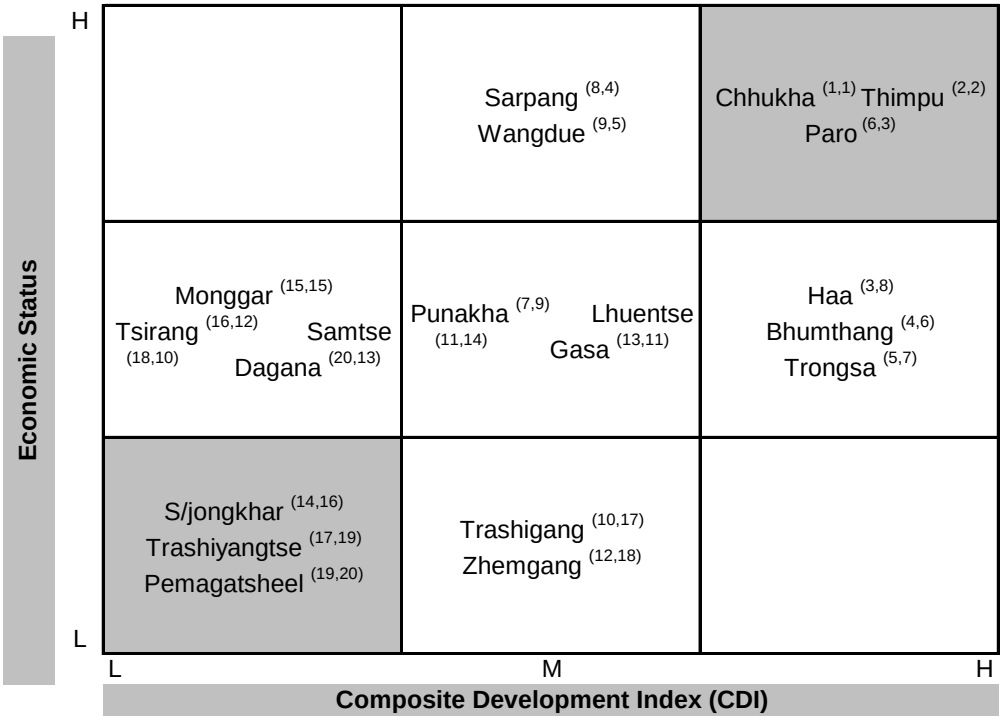
Table A presents ranking of the dzongkhags by various indicators. It also shows ranking by CDI values. Figure A shows the comparative position of the dzongkhags on two dimensions, one of which represents composite development index.

Table A: Ranking of dzongkhags by various indicators

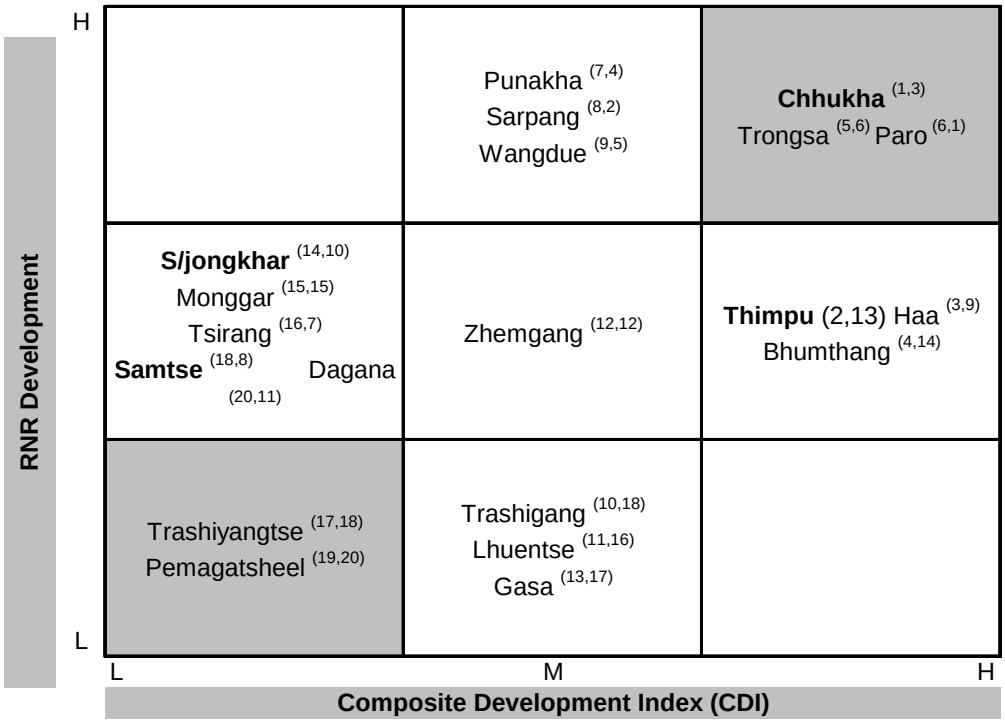
		RNR	Rank	IND	Rank	EMP	Rank	E&W	Rank	C&B	Rank	HLT	Rank	EDU	Rank	CDI	Rank
1	Bumthang	0.283	14	0.043	10	0.670	1	0.770	4	0.483	3	0.400	8	0.551	8	0.459	4
2	Chhukha	0.469	3	0.617	1	0.608	3	0.737	5	0.469	4	0.379	13	0.389	16	0.525	1
3	Dagana	0.298	11	0.024	13	0.467	15	0.180	19	0.243	19	0.123	20	0.504	10	0.263	20
4	Gasa	0.206	17	0.000	20	0.664	2	0.000	20	0.600	1	0.441	6	0.611	4	0.362	13
5	Haa	0.318	9	0.022	14	0.595	4	0.820	3	0.434	6	0.621	1	0.453	13	0.467	3
6	Lhuentse	0.213	16	0.009	19	0.548	6	0.564	13	0.241	20	0.440	7	0.667	1	0.384	11
7	Mongar	0.261	15	0.043	9	0.464	16	0.556	14	0.281	16	0.296	19	0.550	9	0.351	15
8	Paro	0.492	1	0.062	8	0.514	8	0.836	2	0.432	7	0.384	12	0.417	15	0.449	6
9	Pemagatshel	0.052	20	0.018	16	0.203	20	0.645	9	0.328	13	0.374	14	0.615	3	0.32	19
10	Punakha	0.433	4	0.027	11	0.482	12	0.728	6	0.288	15	0.498	4	0.466	12	0.417	7
11	S/jongkhar	0.298	10	0.104	4	0.345	18	0.568	12	0.383	10	0.359	16	0.431	14	0.356	14
12	Samtse	0.332	8	0.140	3	0.451	17	0.500	16	0.249	17	0.334	17	0.333	20	0.335	18
13	Sarpang	0.482	2	0.073	6	0.511	9	0.680	7	0.392	8	0.390	10	0.374	17	0.415	8
14	Thimphu	0.291	13	0.525	2	0.500	10	1.000	1	0.385	9	0.491	5	0.368	19	0.509	2
15	Trashigang	0.184	18	0.064	7	0.498	11	0.675	8	0.349	11	0.388	11	0.566	7	0.39	10
16	Trashiyangtse	0.120	19	0.012	18	0.473	13	0.630	10	0.244	18	0.306	18	0.600	5	0.341	17
17	Trongsa	0.390	6	0.018	15	0.561	5	0.512	15	0.493	2	0.523	2	0.646	2	0.449	5
18	Tsirang	0.339	7	0.016	17	0.470	14	0.371	18	0.448	5	0.396	9	0.371	18	0.345	16
19	Wangdue	0.392	5	0.087	5	0.527	7	0.611	11	0.312	14	0.365	15	0.476	11	0.396	9
20	Zhemgang	0.295	12	0.025	12	0.334	19	0.442	17	0.334	12	0.512	3	0.598	6	0.363	12

Figure A: Comparative position of dzongkhags on two dimensions

CDI & economic status

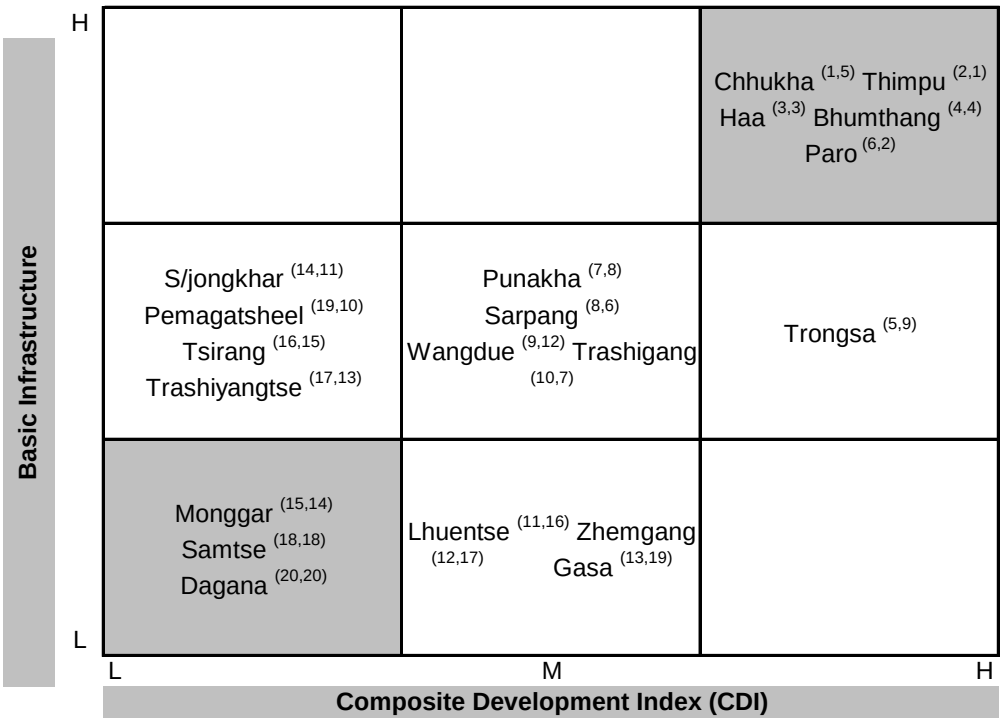


CDI & RNR development

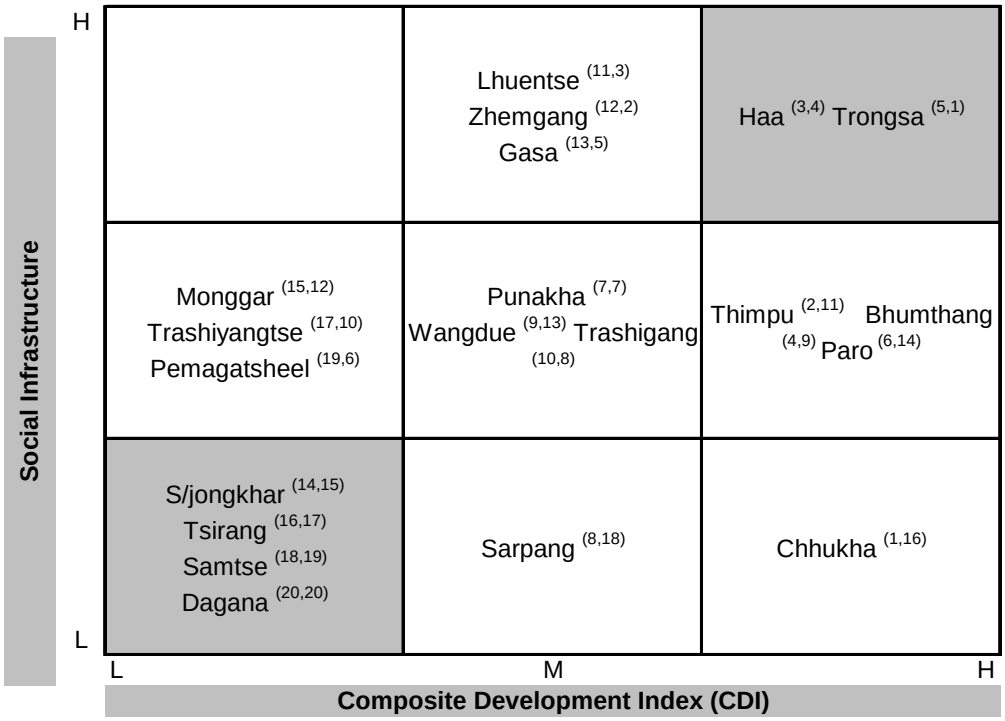


Note: Chhukha, Thimpu, Samtse and S/jongkhar have high concentration of industrial licenses.

CDI & basic infrastructure

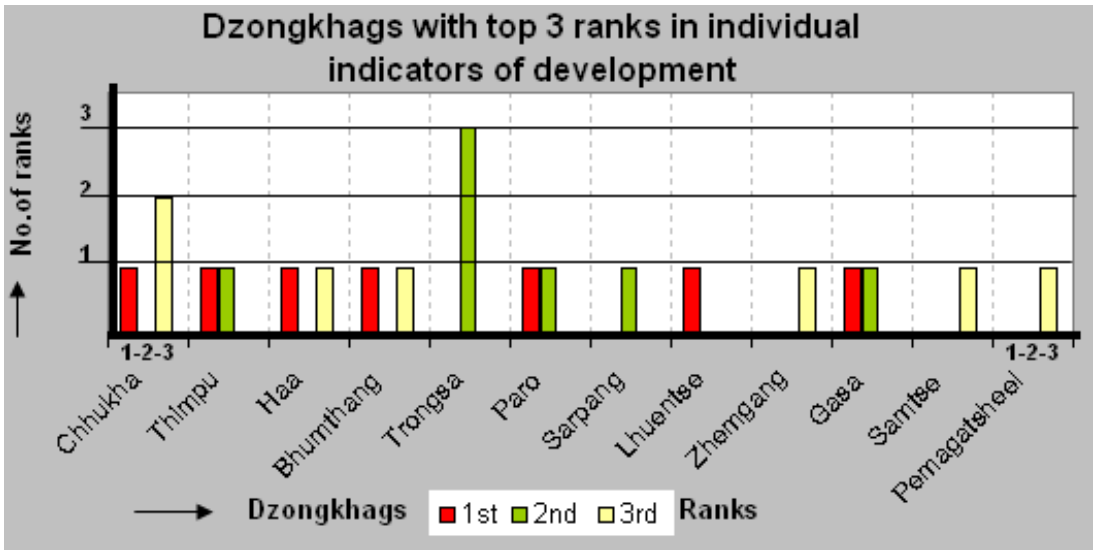


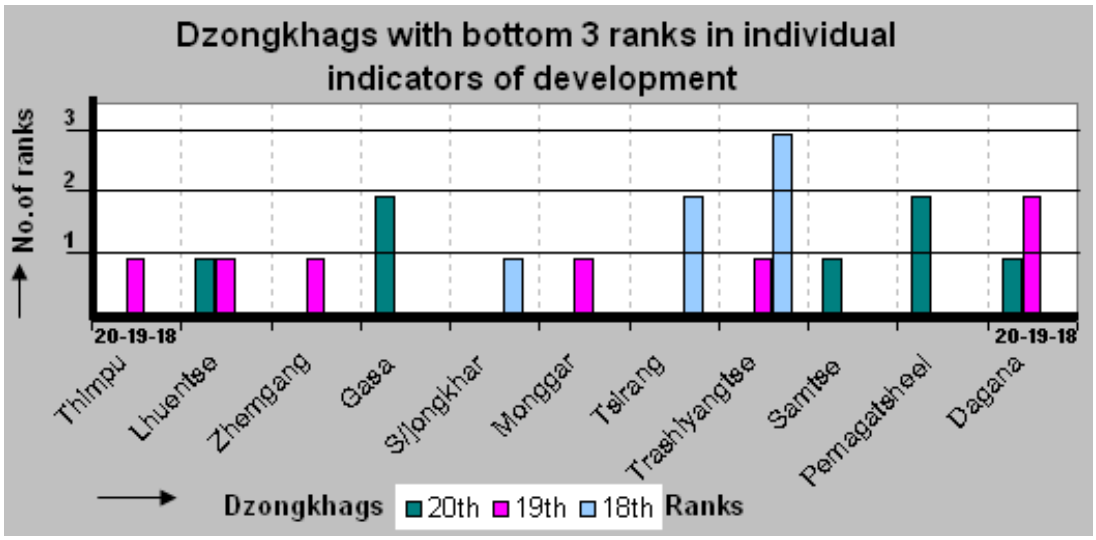
CDI & social infrastructure



Annex 3

Ranking of the Dzongkhags based on CDI and the top/low most ranking dzongkhags





Graphs above show the best and worst performing dzongkhags across chosen indicators

Annex 4

Ranking criteria for Towns (Indices 1-10)

	Weightings	5	4	3	2	1
1	**Functional Category**	National capital	Main Town + Commercial+ Administration	Main Town + Commercial	Administration town	Important Town(Trade, Industry, Military, Education)
2	**Economic Features**		Industries and Trade	Market	Transport Junction/gate way or important connection	Religious/Tourism
3	**Area(Sq. Km.)**			>5 Sq Km	1.5-5 Sq Km	<1.5 Sq Km
4	**Population**			>10000	1500-10000	<1500
5	**Density**				>1000	<1000
6	**Land Available for Future development**			Available-Known	Available-value not known	Not available
7	**Connectivity to international markets and services**			Border Town	Well connected-directly	Connected-indirectly
8	**Major proposed projects**			Airport	Industrial Estate	Rail Connection/High way
9	**Natural setting/terrain**			Flat terrain	Slight slope-good for development	Hill top
10	**Location within Dzongkhag/ Accessibility**				Central	Peripheral

Annex 5

Legal Framework for the Urban Local Government Units

Local Government Autonomy

BMA does not provide autonomy to the Municipal Corporation (MC) due to the (i) provisions in the Charter, (ii) system appointed members in the Committee, and (iii) the Committee being chaired by an appointee from the government. These need to be addressed by inserting provisions in the legal framework for (i) autonomous decision making process and procedure by the Committee, (ii) political executive system wherein the elected Mayor will preside over the Committee and will be the chief executive of the MC, and (iii) dispensing with the provision of nominated members in the Committee. Such an executive system will make the appointed Thrompon vested with the responsibility of performing executive functions (not having executive powers) and making him/her responsible to the Mayor and the Committee.

Local government Function

Legal framework for local government functions would need to be revised for clarifying functions of different tiers of government and devising mechanisms for rationalizing the existing functional overlapping and conflicting provisions. LAs are vested primarily with functions that are in the nature of provision of infrastructure and utility services and its operations and maintenance.

We feel that instead of looking at functions in a piecemeal manner, there is a need for rationalizing the local government functional domain. This could be done by dividing functions into three categories such as (i) Core Local Government Functions, (ii) Agency Functions and (iii) Transferred Functions. Core local government functions should comprise of the traditional local government functions such as basic infrastructure, services and amenities (such as water supply, sewerage, storm water drains, street lighting, solid waste management, and public health) and operations and maintenance of these by the local government units. Revenue income accruing to local government units from various sources should be used for financing of these functions. Agency functions could include functions that are local in nature but are performed by other public, private or non-government agencies. Such functions should be entrusted to local government units as agency functions and funded by the agencies/departments entrusting the discharge of these functions to local government units. Transferred functions could include such functions that are in nature of local functions but performed by central/provincial government departments and are transferred to LAs due to localized nature of such functions. Such functions would need to be transferred to LAs along with the funds that go to finance performance of these functions.

Instead of looking at functions in a piecemeal manner, there is a need for rationalizing the local government functional domain. One prudent way to do this is to develop a typology of local government functions with accompanying financing arrangements

Revenue Assignment and Tax Authority

Some of the deficiencies in the existing devolution to the MC have been already alluded to earlier in this Annex. It needs to be mentioned that unlike several countries both in the developed and the developing, Bhutan does not have a composite tax on lands and

buildings with defined base that could have imparted buoyancy to the tax. The existing separate tax on land and a separate tax on buildings would need to be converted into a composite tax on lads on building popularly known as the Property Tax (PT) with defined base for its administration. One of the suggestions for base of this tax is to make the capital value as the base of the proposed PT. The reason given is that such base will be in conformity with land management issues and the valuation of land in terms of the market value. It needs to be emphasized that all the developing countries have been trying to grapple with capturing the market value without much success largely because a competitive real estate market is non-existent that could provide the market evidence for the obtaining value. Developing countries across the world have distorted land and real estate market that does not enable getting at the capital value. Rental value system as well is infested with a host of valuation problems largely due to the prevalence of Rent Control Acts that provide for determination of fair/standard rent. In view of these, Bhutan should move on the unit value system of PT as in India where some of the states aggrieved by the Rental Value System of PT have moved on to the Unit Value. Base of the Pt is determined on the basis of a standard value per square feet of land. The standard unit value itself varies in different zones of the town/city into which they are divided; the unit rate declining with the increase in distance from the core of town.

Besides the standard zonal rate the lands and building have to pay surcharges or additional levies on the basis of (i) location, (ii) quality of construction, (iii) age of buildings, and (iv) land use. All these parameters are divided into more than one grade for introducing element of progressivity in the rates. Each grade of these parameters is assigned values that decline in the subsequent grades. Such a system of PT becomes fairly transparent and objective that becomes instrumental in reducing the scope of subjective elements in valuation and assessment of PT and corrupt practices.

Refurbishing of the existing Land Tax and the Building Tax would need to be accompanied by giving the local government units autonomy to set their own rates. Autonomy to set various tax rates and user charges is another ingredient of tax authority. A level of government should have autonomy to decide its own rates of taxes, fees, user charges and even fines that it wishes to levy. Setting these in the enabling laws militates against the ethos of self-government. To begin with, the local government should have autonomy to set their own rates within a range of minimum and maximum rates that should be provided for in law. Autonomy for choosing the rate within these limits could be left on to the LAs. In order to prevent profligacy and use of populist measures, the law could provide for central government approval in case the local government units intend to reduce the tax rate.

Tax Collection

It is felt that the law should contain provisions for imposition of a panel rate of interest on tax arrears. It would need to be fairly high so that it could act as a deterrent for non-compliance. It would be also worth considering that the term “movable property” used in the three laws could be defined to include the bank account. Attachment of bank account, wherever provided for in law or Rules, has led to prompt payment of tax arrears. Also, in case of litigation the law should have a provision requiring the taxpayers to first deposit the tax before entering into litigation. It would be advisable to introduce a system of self-assessment for payment of PT. The legal framework should place the onus on the property owners for filing an annual return of their properties along with self-assessed tax. Panel provisions would need to be provided for in the law for non-compliance to self-assessment and filing of wrong self-assessment.

Incentives to tax collectors and taxpayers, taxpayer friendly payment systems, strict implementation of filing of returns of lands and buildings to be provided for in the law and using it for introducing a system of self-assessment, high penal rate of interest on tax arrears and provision for attachment of bank accounts are likely to enhance tax collection

3 Public-Private Partnership

Public-Private Partnership constitutes an important element of local government capacity building and enhancing efficiency and effectiveness in delivery of services. Much of these, obviously require to be put in law and hence these issues should very much form part of the legal framework of local governance. An important aspect of mitigating the problem of (i) accessibility to skills, (ii) effective, efficient and responsive delivery of services, and (iii) constraints on the availability of financial resources is privatization and contracting out of local services. The existing BMA provides for entering into contract with any promoter or individual. This would need to be specified in terms of forms of privatization and/or management contract.

Participatory Process for Governance

In order to introduce participatory processes that strengthens accountability of local government as well, every local government electoral ward will need to have a Ward Committee that will form an important link between the local communities and the local government. The Ward Committee will be chaired by the elected Councilor from the Ward and it will have representation of civil society of the Ward on the Ward Committee. The Ward Committee will be devolved with such functions that affect the lives of the people in the Ward on a daily basis such as collection of garbage, repairing of licking water taps, broken drains etc. redress of citizens' grievances etc. Nomination of civil society representatives or the focus groups provides a mechanism to put in place participatory structures in local government that also ensures accountability. The Ward Committees should have a panel of community representatives. This would build a system of local government with greater transparency and responsibility to the public.

An appropriate structure, therefore, would need to be created in the legal framework of local governance for community participation that will promote accountability and transparency. This could be also in the form of Ad-hoc subject/sectoral committees (public health, solid waste management, sanitation, etc.) as mentioned above for each principal local government department. The local government units would create Community Development Departments (CDD). The CDD should be headed by a qualified community development officer who would create residents' associations or neighborhood development committees in each Ward and link them with the community development department of LAs for participation. NGOs could be identified and put in place on a neighborhood basis (one NGO for a number of Wards) to mobilize participation. Such a system would be instrumental in promoting participatory development and getting the much desired feedback and suggestion of the local communities in relating the plans, programmes, activities and budgets of local governments with the felt needs of local communities. It could as well be used for involving the neighborhood committees in enhancing tax collection by giving them some incentive for enhancing tax collection. It needs to be mentioned that the three ways of building participatory process for municipal governance and management discussed above are not exclusive.

Even though institutions of local government have the closet interface with the citizens, people's participation is conspicuously absent. This has largely alienated the local communities from local government and governance.

These participatory processes, in order to be implemented effectively, would need to form part of the legal framework for local governance.

Participation of people in local government affairs would need to create appropriate participatory structures and processes as delineated in this Annex

Local Government Accountability

Even though local government institutions are said to be highly communitarian that make them subject to intense public gaze, lack of accountability has become a common phenomenon across South Asia. The existing legal framework of local government in Bhutan does not have even a rudiment of accountability. The Chairman of the Committee is not elected but appointed by the government.

A formal system of redress of citizens' grievance (RCG) with respect to local services constitutes an important element for promoting accountability. Citizens' charter is an important pre-requisite for putting in place an RCG structure. Citizens' Charter is a useful instrument for the citizens to be aware of their rights and avenues available to them for address their grievances within a pre-determined time frame. This would need to be considered in Bhutan as well.

There are a number of innovative good practices abroad both in developing and developed countries for RCG. Some of the LAs have put in place a time-bound system of redress of citizens' grievance within a strict framework of punitive measures as part of the citizens' charter. In case the grievance is not redressed within the prescribed time frame, the LA has to pay the penalty to the complainant. The penalty paid is recovered from the salary of the staff accountable for it. Some of the LAs abroad have introduced a system of sanction of building plans across the counter provided that the papers are complete, it is signed by a licensed surveyor or an architect and the applicant is agreeable to pay a marginally higher fee for availing of fast track service. Such a system has largely addressed corrupt practices involved in getting the building plan sanctioned.

E-governance is yet another effective mechanism for ensuring accountability especially if it is interactive.

These are new emerging areas of local governance for ensuring accountability that would need a receptivity to be formalized as part of the legal framework.

Local government accountability requires to (i) give representation of civil society groups on Standing Committees and subject Committees as provided for in the existing laws, (ii) review of the existing system of local elections, (iii) putting in place a formal structure for redress of citizens' grievances, and (iv) promoting an interface with the citizenry

Annex 6

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Various other unpublished documents/printed communications provided by the DUDES, PPD-MoA, PPD-MoWHS and DoC-MoHCA

Annex 7

List of people met /or attended the presentations and discussions relating to the project

Sl.No	Name	Organization/Designation
1	Tshering Dorji	Secretary, MoWHS
2	Dawa Tshering	Director General, Dept. of Forest, MoA
3	Mr. Karma Phuntsho	Head, PPD, Ministry of Agriculture
4	Wangdi Gyalthsen	Executive Director, CDB
5	Phuntsho Wangdi	MD, NHDC
6	Meghraj Adhikari	Chief Town Planner, UPDD, DUDES, MoWHS
7	Mr. Ichharam Dhulal	UISD/DUDES, MoWHS
8	Mr. Dungkar Drukpa	Project Coordinator, PPD, MoWHS
9	Ms. Dorji Yangki	Head, DoCAH, DoC, MoHCA
10	Mr. Kezang	Head, PPD, MoIC
11	Latha Chhetri	UPPD, DUDES, Sr. Urban Planner
12	Tashi Wangmo	UPPD, DUDES, Sr. Urban Planner
13	Geley Norbu	UPPD, Urban Planner
14	Tashi Dorje	NSB
15	Phuntsho	Mongar Dzongkhag
16	Dechen Singye	JE, Trongsa Dzongkhag
17	Yeshi Dorji	Survey Engineer/ Dept. of Survey and Land Records.
18	Dorji Khandu	JE, Tsirang Dzongkhag
19	Chophel Dorji	Municipal Engineer, Sarpang
20	Kuenga	JE, Wangdue
21	Budhiman Pradhan	AE, Zhemgang
22	Om Nath Giri	DE, Thimphu
23	Drakpa Wangdi	AE, Chhukha
24	Tshering Phuntsho	Dy. Chief Urban Planner TCC
25	Karma T. Wangchuk	Architect Urban Designer
26	Dorji Wangmo	PPD, MOIC
27	Demar	PPD, MoA
28	Sonam Desel	PPD, MoWHS
29	Chimmi Dolkar	Gyaltshen Consultancy
30	Shanti Ram Katel	Gyalthsen Consultancy
31	Richard Geier	STA/EUSPS
32	Karma Tshering	Head, IIDD, DOI, MTI
33	Naichu	Offtg. Secretary General BCCI
34	Kesang Jigme	PPD, MoWHS
35	Jamyang Dorji	BCCI

Many other officials at the Dzongkhag offices were met with and consulted during the 10 day field visits to the various towns.

Annex 8

Approximate Cost Projections for budget planning purposes across dzongkhags –population-wise (Calculated at Million Ngultrums.)

SL. No.	Region	Dzongkhags	Urban Population			Unit of 3000 pop.	Adjusted	BHU	School	Water Sup.	Roads/ Parkings	Electrical Services	Drainage	Sewerage	Solid Waste	Amenities	Total Cost /Dzongkhag
			2005	2020	increase			8.8	59.2	30.1	89.2	25.8	12.6	102.7	2.3	39.4	
1	Western	Chhukha	32,926	52,500	19,574	6.5	7.0	62	414	211	624	181	89	719	16	275	**2,590**
		Haa	2,495	4,000	1,505	0.5	1.0	9	59	30	89	26	13	103	2	39	**370**
		Paro	2,932	7,000	4,068	1.4	1.0	9	59	30	89	26	13	103	2	39	**370**
		Thimphu	79,185	120,000	40,815	13.6	14.0	123	828	421	1,248	362	177	1,438	32	551	**5,180**
		Samtse	10,139	29,000	18,861	6.3	6.0	53	355	180	535	155	76	616	14	236	**2,220**
2	Central Western	Dagana	1,958	8,500	6,542	2.2	2.0	18	118	60	178	52	25	205	5	79	**740**
		Gasa	402	600	198	0.1	0.0	-	-	-	-	-	-	-	-	-	**-**
		Punakha	2,292	5,000	2,708	0.9	1.0	9	59	30	89	26	13	103	2	39	**370**
		Tsirang	1,666	20,000	18,334	6.1	6.0	53	355	180	535	155	76	616	14	236	**2,220**
		Wangdue	7,522	13,000	5,478	1.8	2.0	18	118	60	178	52	25	205	5	79	**740**
3	Central Eastern	Bumthang	4,203	20,000	15,797	5.3	5.0	44	296	150	446	129	63	514	11	197	**1,850**
		Sarpang	12,596	68,000	55,404	18.5	19.0	167	1,124	572	1,694	491	240	1,952	43	748	**7,030**
		Trongsa	2,695	5,000	2,305	0.8	1.0	9	59	30	89	26	13	103	2	39	**370**
		Zhemgang	3,386	10,000	6,614	2.2	2.0	18	118	60	178	52	25	205	5	79	**740**

SL. No.	Region	Dzongkhags	Urban Population			Unit of 3000	Adjusted	BHU	School	Water Sup.	Roads/ Parkings	Electrical Services	Drainage	Sewerage	Solid Waste	Amenities	Total Cost /Dzon
4	Eastern	Lhuentse	1,476	8,000	6,524	2.2	2.0	18	118	60	178	52	25	205	5	79	**740**
		Mongar	7,153	30,000	22,847	7.6	8.0	70	473	241	713	207	101	822	18	315	**2,960**
		Pemagatsel	2,287	11,000	8,713	2.9	3.0	26	177	90	267	77	38	308	7	118	**1,110**
		S/jongkhar	10,964	22,000	11,036	3.7	4.0	35	237	120	357	103	51	411	9	157	**1,480**
		Trashigang	6,816	14,000	7,184	2.4	2.0	18	118	60	178	52	25	205	5	79	**740**
		Trashiyangtse	3,018	9,000	5,982	2.0	2.0	18	118	60	178	52	25	205	5	79	**740**
5	Nation	Nation	196,111	456,600	260,489			**775**	**5,206**	**2,647**	**7,846**	**2,272**	**1,113**	**9,039**	**201**	**3,463**	**32,562**

Note:-
Source of information:
HIDP, Ministry of Health
SPBD, Ministry of Education
Water Supply Section, DUDES
City Corporation, Thimphu
Paper for Industrial Estate (residential areas)-Ministry of Trade and Industries

Annex 9

Development Profile of less developed Dzongkhags

Dzongkhags (Rank)	Development Profile
Dagana (20) Area: 1,389 sq km Population: 18,222 Net migration: (-) 4,289	▪ RNR development is moderate ▪ Accounts for 2.1 percent of the total industrial licenses; business is mainly limited to cottage industries and construction activities by petty contractors. ▪ Ranks low in terms of employment. Farming and livestock is source of income for 56 percent of the population. ▪ Only 18 percent of population has electricity as main source of lighting. Besides, about 44 percent population is still not connected with piped water supply. ▪ Ranks very low in terms of communication and banking facilities. ▪ Ranks lowest in terms of basic health facilities and services. ▪ However, ranks moderately in terms literacy rate and education facilities.
Pemagatshel (19) Area: 518 sq km Population: 13,864 Net migration: (-) 6,101	▪ Least RNR development ▪ Accounts for 1.7 percent of the total industrial licenses; business is mainly limited to cottage industries and construction activities by petty contractors. ▪ Ranks low in terms of employment. About 46 percent of the employed population is engaged in non-agriculture activities. ▪ More than half of the population does not have electricity supply. However, 86 percent of the population gets piped-water supply. ▪ Ranks moderately in terms of communication and banking facilities. ▪ Ranks moderately in terms of basic health facilities and services. ▪ Ranks third in terms literacy rate and education facilities.
Samtse (18) Area: 1,582 sq km Population: 60,100 Net migration: (-) 4,497	▪ RNR development is moderate ▪ Accounts for 3.4 percent of the total industrial licenses; 5 large, 3 medium and 23 small scale production and manufacturing units are located; other business is mainly limited to cottage industries and construction activities by petty contractors ▪ Despite the presence of several manufacturing units, only 35 percent of the employed population is engaged in non-agriculture activities. Farming and livestock is source of income for 45 percent of the population ▪ Ranks quite low in terms of basic infrastructure. About 40.5 percent of the population has electricity supply, while two-third population receive piped water supply ▪ Also, ranks very low in respect of communication and banking facilities ▪ In terms oh health and education facilities, ranks very low
Trashiyangtse (17) Area: 1,438 sq km Population: 17,740 Net migration: (-) 6,271	▪ Very low RNR development ▪ Also ranks very low in terms of industrial development. Accounts for 1.2 percent of the total industrial licenses; business is mainly limited to some cottage industries and construction activities by petty contractors. ▪ Ranks better in terms of employment. Farming and livestock is source of income for 45 percent of the population. ▪ Ranks moderately in terms of basic infrastructure. About 45 percent of the population has electricity supply, while 86 percent receive piped water supply. ▪ Ranks very low in respect of communication and banking facilities. ▪ Also, ranks very low in terms of basic health facilities and services. ▪ However, ranks fifth in terms literacy rate and education facilities.
Tsirang (16) Area: 639 sq km Population: 18,667 Net migration: (-) 6,175	▪ RNR development is moderate ▪ Very low industrial development. Accounts for 1.5 percent of the total industrial licenses; 1 small scale 8 cottage production and manufacturing units are located; other business is mainly limited to cottage level services and construction activities by petty contractors. ▪ Ranks low in terms of employment. Farming and livestock is source of

Dzongkhags (Rank)	Development Profile
	income for 56 percent of the population. ▪ Ranks quite low in terms of basic infrastructure. Only 14 percent of the population has electricity supply, while little over two-third population receive piped water supply. ▪ Communication and banking infrastructure is good (fifth rank). ▪ Ranks moderately in terms of basic health facilities and services. ▪ But ranks very low in terms literacy rate and education facilities.
Mongar (15) Area: 1,947 sq km Population: 37,069 Net migration: (-) 7,453	▪ Very low RNR development ▪ Moderate industrial development. Accounts for 3.7 percent of the total industrial licenses; 3 small scale 26 cottage production and manufacturing units are located; other business is mainly limited to cottage level services and construction activities by petty contractors. ▪ Ranks quite low in terms of employment. Farming and livestock is source of income for 39 percent of the population. Non-agriculture employment is 41 percent. ▪ Ranks very low in terms of basic infrastructure. Only 40 percent of the population has electricity supply, while 81 percent population receive piped water supply. ▪ Ranks very low in respect of communication and banking facilities. ▪ Also, ranks very low in terms of basic health facilities and services. ▪ However, ranks moderately in terms literacy rate and education facilities.
S/jongkhar (14) Area: 2,308 sq km Population: 39,961 Net migration: (-) 2,935	▪ RNR development is moderate ▪ Industrially well developed. Accounts for 4.6 percent of the total industrial licenses; 3 large scale, 1 medium scale, 5 small scale and 41 cottage production and manufacturing units are located; other business is mainly limited to cottage level services and construction activities by Class C and D (petty) contractors. ▪ In terms of employment, it is moderately placed. Farming and livestock is source of income for 38 percent of the population. Non-agriculture employment is 46 percent. ▪ Ranks moderately in terms of basic infrastructure. About 37 percent of the population has electricity supply, while 84 percent receive piped water supply. ▪ Ranks moderately in respect of communication and banking facilities. ▪ Ranks very low in terms of basic health facilities and services. ▪ Also, ranks poorly in terms of literacy rate and education facilities.

ANNEX 10 Towns in Bhutan by Dzongkhag and Region 2005

Region	Type of Town	S. No.	Urban Area	Dzongkhag	DUDH data, 2000 Popln. 2000	Popln. 2005	Change : 2000 to 2005	Annual growth rate %	Remark
Western Region	DH / MT	1	Thimphu	Thimphu	43,762	79,185	35,423	12.6%	
				Dzongkhag total	43,762	***79,185***	***35,423***	12.6%	
	MT	1	Gedu	Chhukha	3,138	4,288	1,150	6.4%	Tsimasham Qualifies for agglomerated with Chhukha as the distance bet'n them is 9Km. (2000 popln.of Tsimasham is 797, there is no record of 2000 popln of Chhukha)
	MT	3	Tsimalakha	Chhukha	4,215	2,361	-1,854	-10.9%	
	MT	4	Phuntsholing	Chhukha	12,625	20,537	7,912	10.2%	
		5	Dala	Chhukha	1,215	1,652	437	6.3%	
	DH / MT	6	Chhukha (Tsimasham)	Chhukha		4,088	4,088		
				Dzongkhag total	***21,193***	***32,926***	***11,733***	9.2%	
	DH / MT	1	Samtse	Samtse	3,403	4,981	1,578	7.9%	
		2	Gomtu	Samtse	913	4,254	3,341	36.0%	
		3	Sipsu	Samtse	172	904	732	39.4%	
				Dzongkhag total	***4,488***	***10,139***	***5,651***	17.7%	
	DH / MT	1	Tshongdue (Bondey)	Paro	4,205	2,932	-1,273	-7.0%	Distance between Tshongdue and Bondey of 3Km. Qualifying for agglomeration
				Dzongkhag total	***4,205***	***2,932***	***-1,273***	-7.0%	
	DH / MT	1	Haa Town	Haa	2,625	2,495	-130	-1.0%	
				Dzongkhag total	***2,625***	***2,495***	***-130***	-1.0%	
		13	**Region's Total**		76,273	127,677	51,404	10.9%	
Central Western Region	DH / MT	1	Damphu	Tsirang		1,666	1,666		
				Dzongkhag total	***0***	***1,666***	***1,666***		
	DH / MT	1	Wangdue	Wangduephodrang	6,208	6,714	506	1.6%	
	ST	2	Nobding	Wangduephodrang	97	473	376	37.3%	
	ST	3	Rurichu	Wangduephodrang	28	335	307	64.3%	
				Dzongkhag total	***6,333***	***7,522***	***1,189***	3.5%	
	DH / MT	1	Daga dzong town	Dagana	1,044	1,146	102	1.9%	
		2	Dagapela town	Dagana	768	145	-623	-28.4%	
		3	Sunkosh town	Dagana	132	115	-17	-2.7%	
		4	Drujegang	Dagana		552	552		
				Dzongkhag total	***1,944***	***1,958***	***14***	0.1%	
	DH	1	Gasa Town	Gasa	327	402	75	4.2%	
				Dzongkhag total	***327***	***402***	***75***	4.2%	
			Punakha (all)	Punakha	5,520		-5,520	-100.0%	
	DH / MT	1	Khuru	Punakha		2,292	2,292		
				Dzongkhag total	***5,520***	***2,292***	***-3,228***	-16.1%	
		10	**Region's Total**		14,124	13,840	-284	-0.4%	
Central Eastern Region	DH	1	Jakar	Bumthang	954	772	-182	-4.1%	
		2	Batbalathang	Bumthang		221	221		
		3	Chamkar	Bumthang		1,617	1,617		
		4	Dekiling	Bumthang		1,045	1,045		
		5	Jalkhar Town	Bumthang		548	548		
				Dzongkhag total	***954***	***4,203***	***3,249***	34.5%	
	DH / MT	1	Sarpang	Sarpang	2,753	2,619	-134	-1.0%	
		2	Gelephu	Sarpang	6,927	9,199	2,272	5.8%	
		3	Lhammoizingkha/Kalikhola	Sarpang	899	778	-121	-2.8%	
				Dzongkhag total	***10,579***	***12,596***	***2,017***	3.6%	
	DH / MT	1	Trongsa Town	Trongsa	2,674	2,695	21	0.2%	
				Dzongkhag total	***2,674***	***2,695***	***21***	0.2%	
	DH / MT	1	Zhemgang	Zhemgang	1,878	2,332	454	4.4%	
	MT	2	Tingtibi	Zhemgang	970	675	-295	-7.0%	
		3	Panbang	Zhemgang	887	379	-508	-15.6%	
				Dzongkhag total	***3,735***	***3,386***	***-349***	-1.9%	
		12	**Region's Total**		17,942	22,880	4,938	5.0%	
Eastern Region	DH / MT	1	Lhuentse	Lhuentse	860	1,175	315	6.4%	
		2	Autsho	Lhuentse	262	301	39	2.8%	
				Dzongkhag total	***1,122***	***1,476***	***354***	5.6%	
	DH / MT	1	Mongar	Mongar	2,599	3,502	903	6.1%	Distance between Lingmethang and Gyelpozhing of 17Km. Qualifying for agglomeration
		2	Gyelpozhing (Lingmethang)	Mongar	3,720	2,832	-888	-5.3%	
		3	Drametse	Mongar	752	541	-211	-6.4%	
				Dzongkhag total	***7,071***	***6,875***	***-196***	-0.6%	
	DH / MT	1	Pemagatshel Town	Pemagatshel	1,582	1,066	-516	-7.6%	
	ST	2	Kaynadang	Pemagatshel	48	69	21	7.5%	
		3	Nangkor	Pemagatshel	1,015	672	-343	-7.9%	
	ST	4	Kherigonpa	Pemagatshel	41	141	100	28.0%	
	ST	5	Mongling	Pemagatshel	24	66	42	22.4%	
		6	Yalang	Pemagatshel	218	35	-183	-30.6%	
		7	Khothakpa	Pemagatshel		238	238		
				Dzongkhag total	***2,928***	***2,287***	***-641***	-4.8%	
	DH / MT	1	Sandrupjongkhar (Deothang)	Sandrupjongkhar	6,446	8,596	2,150	5.9%	Distance between Sandrupjongkhar and Deothang of 18Km. Qualifying for agglomeration
		3	Nanglam	Sandrupjongkhar	768	1,018	250	5.8%	
		4	Samdrupchoeling/Bangtar	Sandrupjongkhar	375	393	18	0.9%	
		5	Jomotsangkha/Daifam	Sandrupjongkhar	667	957	290	7.5%	
				Dzongkhag total	***8,256***	***10,964***	***2,708***	5.8%	
	MT	1	Khaling	Trashigang	2,041	1,349	-692	-7.9%	Distance between Trashigang Town and Rangjung of 16Km. Qualifying for agglomeration
	MT	2	Wamgrong	Trashigang	1,440	581	-859	-16.6%	
	DH / MT	3	Trashigang Town (Rangjung)	Trashigang	3,149	3,016	-133	-0.9%	
	MT	5	Kanglung	Trashigang	2,144	1,717	-427	-4.3%	
		6	Resarbu	Trashigang		153	153		
				Dzongkhag total	***8,774***	***6,816***	***-1,958***	-4.9%	
	DH / MT	1	Yangtse & others	Trashiyangtse	1,026	2,735	1,709	21.7%	
	ST	2	Duksum	Trashiyangtse	342	283	-59	-3.7%	
				Dzongkhag total	***1,368***	***3,018***	***1,650***	17.1%	
		26	**Region's Total**		29,519	31,436	1,917	1.3%	
		61	**GRAND TOTAL**		**137,858**	**195,833**	**57,975**	**7.3%**	

Note : DH : Dzongkhag Headquarter
MT : Main Town as per DUDH report
DH / MT : Dzongkhag Headquarter and Main Town
ST : Satellite Town

Source: Technical Report Danida Ref. No.104.Bhutan.1/Urban, Draft "National Urban Policy" Phase 1 , Dec, 2001 (est. by DUDH.)
Bhutan Housing and Population Census 2005

Annexure 11 : Detailed Weightings for Main Towns in Bhutan and Resultant Rankings for Development Potential

			Sources	Rapid Survey	Rapid Survey and Secondry sources	Survey records: DUDES	PHCB, 2005	Derived from row F & G	Secondry Sources and Rapid survey	Discussions during the Rapid Survey	Secondry sources and discussions during the Rapid survey	Secondry sources and discussions during the Rapid survey	Agricultural landuse map: MoA	Infrastructure Facilities based on the Land compensation Act, DUDES												
Ranking	Dzonkhag	Town	Category	Main Economic Features	Area(Sq. Km.)	Population	Density	Major proposed projects	Natural setting/terrain	Land Available for Future development	Connectivity to international markets and services	Location within Dzonkag/Accessibility	Health facilities	Education Facilities	Banks	communication	Recreation/sports facilities	Vegetable Markets	Fire station	Water Supply	Public toilets	Sewerage facility	Shops	Hotels	Public Transport(no. of depa	**Net Weightings**
1	**Thimphu**	Thimphu	5	3	3	3	2	1	2	3	2	2	3	4	1	3	1	1	1	2	1	1	3	3	3	**53**
2	**Sarpang**	Gelephu	3	3	3	2	2	5	3	3	3	1	3	1	1	3	1	1	1	2	1	0	3	2	3	**50**
3	**Chhukha**	Phuentsholing	3	7	3	3	2	0	3	1	3	1	3	2	1	3	0	1	1	2	1	1	3	2	3	**49**
4	**Samdrupjongkhar**	Samdrupjongkhar	4	4	1	2	2	1	3	1	3	1	2	2	1	3	1	1	1	2	1	0	3	2	3	**44**
5	**Samtse**	Samtse	4	4	2	2	2	1	2	2	3	1	3	2	1	3	1	1	1	1	1	0	1	1	1	**40**
6	**Paro**	Tshongdue	4	1	1	2	2	0	2	2	2	2	3	3	1	3	1	1	0	2	1	0	2	2	1	**38**
7	**Bumthang**	Bhumtang	4	4	3	2	0	0	2	2	2	2	3	4	1	3	0	0	0	1	1	0	1	1	1	**37**
8	**Mongar**	Mongar	2	3	1	2	2	0	1	1	2	2	2	3	1	3	1	1	1	1	1	0	2	2	2	**36**
10	**Trongsa**	Trongsa	4	3	2	2	2	0	1	3	2	2	2	2	1	3	1	0	0	1	1	0	1	1	1	**35**
13	**Samtse**	Gomtu	1	4	1	2	2	0	2	2	2	1	5	1	1	3	1	1	1	1	1	0	1	1	1	**35**
9	**Samdrupjongkhar**	Nanglam	1	4	1	1	2	2	3	2	3	1	3	3	0	2	1	0	0	1	1	0	1	1	1	**34**
11	**Tashigang**	Trashigang	4	0	1	2	2	0	1	1	2	1	3	2	1	3	1	1	1	1	0	0	2	2	3	**34**
12	**Wangdue**	wangdue	4	3	2	2	2	0	1	1	2	1	2	4	1	3	1	1	0	1	1	0	0	1	1	**34**
14	**Samdrupjongkhar**	Deothang	1	1	1	2	2	0	2	3	2	1	5	4	1	3	1	0	0	1	0	0	1	1	1	**33**
15	**Tsirang**	Damphu	4	1	1	2	2	0	2	3	2	2	3	1	0	3	1	1	0	1	1	0	1	1	1	**33**
16	**Trashiyangtse**	Yangtse	4	1	2	2	2	0	2	2	1	2	2	1	0	3	1	0	0	1	1	0	1	2	1	**31**
17	**Chhukha**	Chhukha	2	1	0	2	1	0	2	0	2	2	3	3	1	3	0	1	0	2	1	0	2	2	1	**31**
18	**Punakha**	Khuru	4	1	1	2	2	0	2	2	2	1	2	3	1	3	1	1	0	1	0	0	0	1	1	**31**
23	**Sarpang**	Sarpang	2	1	1	2	2	0	2	3	2	1	3	2	1	2	1	1	1	1	0	0	0	1	1	**30**
20	**Haa**	Haa	4	1	1	2	2	0	1	1	1	1	3	3	1	3	0	0	0	1	1	0	1	1	1	**29**
21	**Zhemgang**	Zhemgang	2	3	1	2	2	0	1	1	1	1	2	3	1	3	1	0	0	1	1	0	1	1	1	**29**
22	**Dagana**	Daga	4	0	1	1	2	1	2	2	1	2	2	2	1	3	0	0	0	1	0	0	1	1	1	**28**
26	**Zhemgang**	Tingtibi	3	4	1	1	1	2	2	2	1	1	3	2	0	2	0	0	0	1	0	0	1	1	0	**28**
19	**Lhuentshe**	Lhuentshe	2	1	1	1	2	0	1	1	1	2	2	3	1	3	1	0	0	1	1	0	1	1	1	**27**
24	**Tashigang**	Kanglung	1	1	1	2	2	0	2	2	2	1	3	4	0	2	1	0	0	1	0	0	1	0	1	**27**
25	**Pemagatshel**	Nangkor/Pemagats	4	0	0	2	0	0	1	1	1	1	2	4	1	3	1	0	0	1	1	0	1	1	1	**26**
27	**Sarpang**	kha	1	3	1	1	2	0	2	2	3	1	1	1	0	3	0	0	0	1	0	0	1	1	1	**25**
28	**Mongar**	Galeposhing	1	2	2	2	2	1	3	2	2	2	0	0	0	2	0	0	0	0	0	0	0	0	0	**21**
29	**Lhuentshe**	Autsho	1	1	1	2	2	1	2	2	1	2	0	0	0	2	0	0	0	0	0	0	0	0	0	**17**
30	**Gasa**	Gasa	4	1	1	1	2	0	1	1	1	2	0	0	0	2	0	0	0	0	0	0	0	0	0	**16**

Annex 12 The Proposed National Urban System

S.No.	Hierarchy	Sub-total																			
I	**Nation**		**BHUTAN**																		
	Urban Popln. 2005	196,111	196,111																		
	Exp. Popln. 2020	463,600	463,600																		
	Addl. Urban Popln. 2005 to 2020	267,489	267,489																		
II	**Regions (4 Nos.)**		Western Region					Central Westen Region					Central Eastern Region				Eastern Region					
	Urban Popln. 2005	196,111	127,677					13,840					22,880				31,714					
	Exp. Popln. 2020	463,600	212,500					30,100					103,000				118,000					
	Addl. Urban Popln. 2005 to 2020	267,489	84,823					16,260					80,120				86,286					
III	**Dzongkhags (20 Nos.)**		Thimphu	Chhukha	Paro	Haa	Samtse	Wangdue	Punakha	Dagana	Tsirang	Gasa	Sarpang	Bhumtang	Zhemgang	Trongsa	Samdrupjo nkhar	Mongar	Trashigang	Trashiya ngtse	Pemagatshe l / Nangkor	Lhuentse
	Urban Popln. 2005	196,111	79,185	32,926	2,932	2,495	10,139	7,522	2,292	1,958	1,666	402	12,596	4,203	3,386	2,695	10,964	7,153	6,816	3,018	2,287	1,476
	Exp. Popln. 2020	463,600	120,000	52,500	7,000	4,000	29,000	13,000	5,000	8,500	3,000	600	68,000	20,000	10,000	5,000	46,000	30,000	14,000	9,000	11,000	8,000
	Addl. Urban Popln. 2005 to 2020	267,489	40,815	19,574	4,068	1,505	18,861	5,478	2,708	6,542	1,334	198	55,404	15,797	6,614	2,305	35,036	22,847	7,184	5,982	8,713	6,524
1	**Cities of national importance (Seven-Eight Nos.)**		**Thimphu**	Phuntsho ling			Samtse						**Gelephu , Sarpang**	Jakar, Dekiling, Batbalathan g, Chamkhar & Jalkhar			Nanglam depending on developme nt in next few years	Gelepos hing, Mongar				
	Urban Popln. 2005	121,414	79,185	20,537			4981						9199	4,203			1018	2291				
	Exp. Popln. 2020	290,000	120,000	30,000			20,000						60,000	20,000			20,000	20,000				
	Addl. Urban Popln. 2005 to 2020	168,586	40,815	9463			15019						50,801	15797			18,982	17709				
2	**Dzongkhag centres (16 Nos.)**			Chhukha	Paro	Haa		Wangdue	Punakha / Khuru	Dagana	Damphu	Gasa	Sarpang		Zhemgang	Trongsa	Samdrupjo nkhar	Mongar (3502)	Trashigang	Trashiya ngtse	pemagatshel /Nankor	Lhuentse
	Urban Popln. 2005	44,392		2855	2362	2495		6714	2292	1147	1666	402	2619		2332	2695	5952	3502	2383	2735	1,066	1175
	Exp. Popln. 2020	67000		5000	5000	4000		10000	5000	2500	3000	600	5000		5000	5000	10000	5000	5000	7000	5000	5000
	Addl. Urban Popln. 2005 to 2020	42,708		2145	2638	1505		3286	2708	1353	1334	198	2381		2668	2305	4048	1498	2617	4265	3,934	3825

3	**Medium Towns (12 Nos.)**	21,144		Gedu			Gomtu			Daga			Lhamoizingkha		Tingtibi		Deothang		Kanglung		Nangkor	
	Popln. 2005			4288			4254			1146			778		675		2,644		1717		672	
				Tsimalakha													Nanglam					
	Popln. 2005			2361													1,018					
				Dala													Jomotsangkha/Daifam					
	Popln. 2005			1,652													957					
	Urban Popln. 2005	21,144		8301			4254			1146			778		675		3,601		1717		672	
	Exp. Popln. 2020	50,000		15000			6000			3000			3000		3000		14000		3000		3000	
	Addl. Urban Popln. 2005 to 2020	28856		6699			1746			1854			2222		2325		10,399		1283		2328	
4	**Small Towns (23 Nos.)**	17376		Tsimasham	Bondey		Sipsu	Nobding		Dagapela					Panbang		Samdrupchoeling	Dramitse	Khaling	Duksum	Kaynadang	Autsho
	Popln. 2005			1233	570		904	473		145					379		393	541	1349	283	69	301
								Rurichu		Drujegang								Lingmethang	Rangjung		Kherigonpa	
	Popln. 2005							335		552								819	633		141	
										Sunkosh									Wamrong		Mongling	
	Popln. 2005									115									581		66	
																			Reserboo		Yalang	
	Popln. 2005																		153		35	
																					Khothakpa	
	Popln. 2005																				238	
	Urban Popln. 2005	10308		1233	570		904	808		812					379		393	1360	2716	283	549	301
	Exp. Popln. 2020	36,500		2,500	2000		3000	3000		3000					2000		2000	5000	6000	2000	3000	3000
	Addl. Urban Popln. 2005 to 2020	26192		1,267	1430		2096	2192		2188					1621		1607	3640	3284	1717	2451	2699
5	**Geog Nodes (IGCs) about 50 nos.**	25,000	10 geogs	10 geogs	10 geogs	5 geogs	16 geogs	15 geogs	9 geogs	11 geogs	10 geogs	4 geogs	15 geogs	4 geogs	8 geogs	5 geogs	11 geogs	16 geogs	16 geogs	8 geogs	7 geogs	8 geogs

Annex 13

The Thromde Act of the Kingdom of Bhutan, 2007

An Evaluation

Enactment of the Thromde Act of Bhutan (TAKM) and its approval is the culmination of a series of initiative on decentralization that began with the coronation of the former King in 1974. TAKM is going to repeal the Bhutan Municipal Act of 1999, which officially governs the sole formally created Municipal Corporation of Thimphu through a Charter that extended the provisions of BMA to the Thimphu City Corporation (TCC) in 2003 in accordance with the provisions of the BMA of 1999. The new Act contains a framework for urban governance that is supported by instrumentalities of representative and autonomous municipal governance to be constituted in large and medium towns of Bhutan. The Act, in the present form, envisages implanting a new system of urban governance that will be free from aberrations that characterize the existing local government structure and processes of municipal governance in the national capital. TAKM differs from the existing urban governance framework in the following respects:

First, unlike BMA that has a provision for issuing of a Charter for extending the MBA provisions, the new Act is to come into force through a notification. Hopefully, unlike the Thimphu Charter, the notification will not contain any constraining provisions for creating local government institutions such as Gyelyong Thromde and Dzongkhag Thromde.

Second, following the principle of representative character of local government, it does not have provisions for appointing nominated members on the Tshogdu or Tshogde as is the case with the existing Thimphu Municipal Corporation.

Third, unlike the BMA, it does not provide for an appointed Thrompon that bureaucratises an otherwise representative institution of local government.

Provisos contained in the TAKM are analysed below in greater detail.

Types of Local Government and the Criteria for their Creation

The Act provides for establishment of the following types of local government in urban settlements with a term of office of five years.

(i) Gyelyong Thromde,
(ii) Dzongkhag Thromde,
(iii) Yenlag Throm, and
(iv) Geog Throm,

TAKM contains provisos for Geylyong Thromde (GT) and Dzongkhag Thromde only; the two other types of local government are perhaps to form part of the rural local government that takes care of governance of Dzonkhag and Geog. Lack of formal definition of urban areas and the criteria for creation of local government institutions in urban areas has been a constraining factor in Bhutan. TAKM now takes care of the criteria for creation of local government in urban areas. The criteria includes: (i) population of the area, (ii) density of population, (iii) area of the Thromde or Throm, (iv) revenue generated for maintenance of services, (v) percentage of population in non-

agricultural activities, and (vi) trade and commercial significance. The Act says that a "majority of these criteria" will be required to be taken for creation of urban local government. Criteria prescribed for different types of local government to be created in different types of areas are mentioned below:

Criteria for Creation of Different Types of Local Government in Urban Areas

Gyelyong Thromde	Dzongkhag Thromde	Yenlag Throm	Geog Throm
A population of 10,000 and more	Population of 5000 to 9,999	A population of 1,500 to 4,999	A population of 100 to 1,500
A density of 1,000 per sq km.	Density of 1,000 persons or more per sq km	-	-
An area of more than 5 sq kms	An area of more than 1 sq km	-	-
More than 50% of population dependent on non-primary activities	More than 50% of population dependent on non-primary activities	More than 50% of population dependent on non-primary activities	More than 50% of population dependent on non-primary activities
Revenue base sufficient to finance services	Dzongkhag administrative significance*	Has service jurisdiction of more than one Geog	-

* All Dzongkhag headquarters Throms shall be eligible to be declared as Dzongkhag Thromde

Even though the Act has tried to address the criteria for creation of local government in urban areas, the criteria appear to be indeterminate even now. Sufficient revenue base for financing of services, for example, is not defined. It does not contain any norm for financing of municipal services that could provide objective and transparent indicator with regard to revenue base that the Act requires being "sufficient to finance services". This, revenue as one of the criteria is still vague and discretionary. Another example of undefined criterion is "trade and commercial significance of the concerned urban settlement". There is not mention of any objective indicator for this either. Bhutan will therefore have to evolve norms for financing of services on a per capita basis both for capital investments and operation and maintenance related to different size categories of urban settlements that could serve as an objective criterion for creating local government.

The Council

Each GT will have a Thromde Tshogdu and each DT will have a Thromde Tshogde as the highest decision making body corporate. Thromde Tshogdu will constitute of a directly elected chairperson called the Thrompon, 10 to 7 elected Thuemis and an appointed Thromde to be appointed by the government as the Member Secretary of the GT. Likewise, Thromde Tshogde is to be constituted of a directly elected Thrompon as the Chairperson of the Thromde Tshogde, 10 to 7 elected Thuemis, and a Municipal Engineer who will act as ex-officio Executive Secretary and Member Secretary. The aberration created under the existing BMA and the Charter has thus been addressed by the new Act by providing for a political executive. It, however, needs to be noted that population of GT is supposed to be more than that of the DT. Nevertheless, the Act provides for equal number of elected Thuemis in the case of both GT and DT which is not related to size in terms of population. The Act should have provided for a norm regarding elected Thuemis related to different size categories of

local government units. Larger the size category of town, larger should be the number of elected Thuemis.

Powers and functions of the Council

The local government units, under the new law, are devolved with both mandatory and discretionary functions. Mandatory functions are in nature of both general and specific functions. The Act devolves a very large range of functions to be performed by them that includes virtually every aspect of urban life such as provision of basic services including water supply and sanitation, urban planning and development, acquisition and regulation of land, cultural and urban forestry. This is largely due to unitary nature of the RGoB. A welcome provision in the Act relates to entrusting local government units with functions relating to both provision of civic services, urban planning (approval of land use and development plans) and regulation including regulation of urban land and administration of entire urban land. To this extent, it makes a welcome departure from the Indian practice of compartmentlisation of urban development into operations and maintenance (the domain of ULBs) and capital development programmes (domain of the Urban Development Authorities that does not exist in Bhutan).

Dissolution

The Act is quite explicit in creating, developing and building strong institutions of local self government in Bhutan. This is evident also from provisions relating to dissolution of local government councils. According to provisos in the Act, the local government units can be dissolved either on the basis of a report to be submitted by the Minister for Urban and Municipal Administration or on a petition by 25% of the number of votes cast in the last regular election. The Act requires conducting of fresh election within 30 days from the date of dissolution of the council. The RGoB will, however, have to guard against the authority given to the Minister for dissolution of local government units in an autocratic manner. The Act could have also provided for recall of Thrmpon and the Thuemis

Thrompon

Besides ensuring laying of sound democratic foundation for urban local government in Bhutan, the Act also has provisos for ensuring qualitative local political process by providing for eligibility criteria for the candidates aspiring to become a Thrompon. These include (i) an age limit of 25 to 65 years and (ii) possessing a university degree. S/he can be removed from office by the Minister of Urban Development and Municipal Administration provided two-thirds of the total members of Thromde Tshogdu or Thromde Tshogde move a resolution for removal. Another positive feature of the Act is that it does not want the process of urban governance to be politicized; it does not provide for contesting of local elections by political parties.

Proviso with regard to by-election of Thuemis consequent upon removal of a Thuemis seems to be somewhat unusual. Once elected through a by-election, s/he is to hold office for another five years. This suggests that s/he will not need to contest the election again once the prescribed term of office of the Council expires and fresh elections are held for reconstitution of a new Council. Usually, the term of office of the local representatives elected through by-election happens to be co-terminus with the remaining life of the Council.

Though the Act provides for removal of Executive Secretary by the government on a resolution by two-thirds of the total number of Thuemis at a special meeting, the Act

does not provide for recall or removal of Thuemis. Proviso relating to recall of elected representative and even the Thrompon promotes their accountability.

A separate Chapter in the Act on duties and functions of the Ministry of Urban and Municipal Administration (MoUMA) is another positive feature of the Act. The Act requires the MoUMA to be responsible for framing of national urban policies and strategies, review and approval of urban development plans, recommending to the government for declaration of an urban area as GT, DT, YT and Geog Throm and to carry out planning audit in any Thromde.

Delivery of Services

The Act provides for operations and maintenance of services through contracting out to private parties, firms, community organisations, or companies on approval by the Thromde Tshogdu/Tshogde. This is quite innovative aspect of the new law.

Tax Authority

The Act devolves tax authority including powers to borrow only to the GT and DT. Devolving of authority to borrow entails that the RGoB will have to put in place a system of credit rating for urban local government in case the local government units have to borrow from the capital market of Bhutan. The government is to give them grant for special responsibilities and the services to be provided on behalf of the government. They are also entitled for getting capital grants. The Act has provision for allocation of a proportion of the national revenue to ensure self reliance and sustainability of Thromde. Lest the local government units become profligate in using these assured funds, the Act should provide for incentive grant for either enhancing their own revenue or for reducing wasteful expenditure and expenditure on establishment

The Act does not mention the type of budgetary practice the local authorities should follow except that this will be “in accordance with financial management practices as provided for in the relevant public finance law, rules and regulations”. Budget of the Thimphu Municipal Corporation, for example, consists of a mere few pages in the form of tables; it does not say anything about the actual for the past couple of years nor any policy statement, plans and programmes, and schedule of rates proposed for the new fiscal. It does not contain even a rudiment of the concept of budget as a tool of organisational policy, plans and programmes.

The Act devolves Thromde with taxes, fees, tolls, charges and penalties. A welcome provision in the Act relates to autonomy given to the Thromde for levying and collecting tax and non-tax sources at a rate approved by the Thromde Tshogdu or Thromde Tshogde.

Tax and Non Tax Sources: The Act has improved upon the tax and non-tax sources devolved to Thromde under the BMA, 1999. In addition to the tax sources contained in the BMA, TAKM has added three more levies (see table given below). These are (i) Vacant Land Tax, (ii) Advertisement Tax, and (iii) Betterment Levy. An impressive range of local fiscal tools devolved to the municipality notwithstanding, some of them do not have an explicitly defined base. Land Tax and Urban House Tax are examples. Unlike several countries both in the developed and the developing, Bhutan does not have a composite tax on lands and buildings with defined base that could have imparted buoyancy to the tax. However, unlike the existing BMA, TAKM provides for levy of Tax on Advertisement.

The new Act has retained the legacy of the BMA by providing for separate tax on land and a separate tax on houses. It was time that following the practice in other countries, Bhutan as well moves on to a system of composite Property Tax on lands and buildings with unit values as its base for making the system transparent, objective, and simple. This could have facilitated introduction of a much desired system of self-assessment based payment of Property Tax.

Tax and Non-Tax Sources of Revenue in the Bhutan Municipal Act, 1999 and the Thromde Act of Bhutan, 2007

.S.N.	Bhutan Municipal Act, 1999		The Thromde Act of Bhutan, 2007	
	Tax Sources	Non-Tax Sources	Tax Sources	Non-Tax Sources
1	Land Tax	Land Development and Sub-division Fee	Land Tax	Land Development and Sub-division Fee
2	Urban House Tax	Land Demarcation Fee	House Tax	Land Demarcation Fee
3	Under Development Land Tax	Building Plan Processing Fee	Vacant Land & Under Development Tax	Building Plan Processing Fee
4	Property Transfer Tax	Land Registration Fee	Property Transfer Tax	Land Registration Fee
5	Entertainment Tax	Site Plan Fee	Entertainment Tax	Site Plan Fee
6	-	Vehicle Parking Fee	Advertisement Tax other than advertisement in news papers, print, radio and internet	Vehicle Parking Fee
7	-	Market Vendor Fee	Betterment Tax on increase in land value caused by development or any improvement work	Market Vendor Fee
8	-	Advertisement Fee	-	Advertisement Fee
9	-	Water & Sewerage Charges (including pipe realignment & connection Fee)	-	Water & Sewerage Charges (including pipe realignment & connection Fee)
10	-	Fines & penalties	-	Toll Fee
11	-	Environmental Surcharge	-	Essential Surcharges
12	-		-	Other Service Charges

Tax Collection

The Act is too much obsessed with penal provision for tax collection. It should have provided for a package of incentives for prompt payment of taxes to be followed by stern penal provisions including high compound rate of interest on tax arrears.

Land Management

The Act has exemplary provisions for management of land such as resuming of land allocated by Thromde but not developed within five years, and banning creation of land parcels below 13 decimals.

A special peculiarity of the Act is that definitions of words and expressions contained in the Act are provided for in the last Section (Section 134). Usually, definitions precede the operational sections; these do not follow them. Giving definitions at the end of the Act makes it inconvenient for the readers and users to refer to them.

In sum, the Thromde Act of the Kingdom of Bhutan is a progressive piece of legislation for creating and sustaining institutions of local self-government in urban settlements. It has broken new grounds for making them thrive as vibrant democratic institutions of governance in urban settlements. It has also tried to avoid the pitfalls and aberrations in the existing Bhutan Municipal Act. Munch will, however, depend on the policy stance of the RGoB. Hopefully, it will not follow avoidable precedence in the case of Bhutan Municipal Corporation through a Charter and subsequently through an amendment in the BMA that provided for nominated members to the Committee of the Bhutan Municipal Corporation with an intention of placing the elected members in a minority.

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Annex 14

Minutes of meetings and records - All milestone workshops

Minutes of the Meeting
Key issues discussed and listed during 1st Workshop on National Urbanisation Strategy
Bhutan National Urbanization Strategy (BNUS, TCDS and TSOE)
World Bank Project funded by Cities Alliance.
15th May 2006, 2:30 pm
Venue: Conference Hall, Ministry of Works and Human Settlements

Key Strategies –
1. Rural (rur-urbanisation) urban development
    1. Rural development
    2. Balanced regional development
    3. Infrastructure development

2. Develop growth centers
    1. Growth rate – 300% increase in some towns???
    2. Redistribution of resources – even after development – will the migrants actually return to their homes/villages??
    3. Migration pattern
    4. Dichotomy of rural and urban
    5. Investment on rural housing program??? Impact??
    6. The various Acts and Rules in the Kingdom
    7. Study the relation btw various settlements
    8. Rural service centers or Growth centers? Define the distinction.
    9. Definition of an Urban area
    10. No actual information on urban poverty.
    11. Have we over-emphasised on Thimphu taking the central role for Urbanisation?
    12. Creation of jobs that urban centers will face.
    13. Floating population of Thimphu? The impact it has on the real population of Thimphu.
    14. Rural facilities situated within urban areas?
    15. Could the Urban strategy look into how we can restrict the growth rate in Thimphu?
    16. Investing upgrading existing Urban areas or investing extension of growth areas
    17. Opportunities for new urban areas. Is there an ideal location for urban area?
    18. Is the Urban Strategy looking only at urban growth areas or all urban centers?
    19. Would easier access to road increase migration instead?
    20. More lucrative to work in Thimphu even in a low paid job
    21. Govt. putting a lot of money into rural infrastructure knowing 50% increase of population in urban areas?
    22. Woolah factor – increase in migration? Woolah is voluntary labor service (no wages for such work)
    23. Infrastructure development – will it actually give reasons for people to stay back?
    24. Why Thimphu has not urbanized 100%?

25. Moving of facilities to other areas.
26. Relation/coordination/cooperation between Ministries.
27. Rural service centers being developed in a Plan (5th?) – did not work properly.
28. Empirical studies on migration patterns
29. Urban poor – fiscal policies may increase this population
30. In the recommendations – issues for prioritization
31. Due to limitation factors – focus down to 3 or 4 growth centers. However, what is the impact this will have on the other towns?

List of Participants for the 1st Workshop on National Urbanisation Strategy

No.	Name	Designation	Organisation
1.	Lyonpo Kinzang Dorji	Minister	MoWHS
2.	Mr. Lhab Tshering	Secretary	Planning Commission
3.	Mr. Richard Geier		Danida EUSPS
4.	Mr. Sangay Dorji		Survey & Land Records
5.	Ms. Elda Solloso	Urban Planner	World Bank
6.	Mr. Dungkhar Drukpa	Sr. Planning Officer	PPD, MoWHS
7.	Mr. Kinzang Norbu		DUDES
8.	Mr. Tshering Phuntsho	Sr. Town Planner	TCC
9.	Mr. Sonam Tashi	Town Planner	TCC
10.	Mr. Meghraj Adhikari	Chief Town Planner	DUDES
11.	Mr. P. Wangdi		NHDC
12.	Mr. R. Dorji		DUDES
13.	Mr. Bhimlal Suberi		PPD, MoIC
14.	Mr. Nima Wangdi	Thrompon	TCC
15.	Mr. Dawa Wangchuk		PPD, MoE
16.	Mr. Naichu		BCCI
17.	Ms. Dorji Wangzom		UPDD
18.	Mr. N. Pradhan		EUSPS
19.	Mr. T. Anand Mohan		EUSPS, Samtse
20.	Mr. Karma Phuntsho		PPD, MOA
21.	Mr. Tashi Norbu Sherpa		Mongar DEC
22.	Ms. Tashi Wangmo		UPDD, DUDES
23.	Mr. Sangay Tenzin		Samtse Dzongkhag
24.	Ms. Pema Chokey		Trashigang Dz.
25.	Mr. Karma T. Wangchuk		DUDES
26.	Dr. P.K. Choudhary	Urban Economist	IPE, India
27.	Professor Ravi Anand	Team Leader	IPE, India
28.	Mr. Shantiram Katel	Engineer (Local)	Gyaltshen Consultancy
29.	Ms. Chimmi Dolkar	Local Socio Economist	Gyaltshen Consultancy

Minutes of the Meeting
Presentation for the draft Bhutan National Urbanization Strategy

Bhutan National Urbanization Strategy (BNUS, TCDS and TSOE)
World Bank Project funded by Cities Alliance.
10th August 2006, 10:00-13:00 session 1
Venue: Conference Hall, Ministry of Works and Human Settlements

The project coordinator for this project, Mr. Dungkhar began with an introductory note. He gave a brief description of the three components under the project, the Bhutan National Urbanization Strategy, Thimphu City Development Strategy and the Thimphu City State of Environment, that were being carried out by Infrastructure Professional Enterprise Pvt. Ltd, Delhi in association with Gyaltshen Consultancy, Thimphu.

The Hon. Zhabtog Lyonpo then welcomed all the participants. Lyonpo explained to the participants (especially to new participants) the purpose of urbanization, Vision 2020, future of Bhutan and rapid growth of urban population. Lyonpo stressed on the importance of this project and the support that the Ministry would need from all stakeholders, especially the Dzongkhags and also the private sector. Lyonpo felt that due to rapid urbanization and the increase in rural-urban migration, there would be many issues to look into. The need to accommodate the increase in urban population was also another important issue that the Government would have to consider.

Lyonpo expressed hope that to a large extent, this exercise would determine how and where such urban growths could take place. Lyonpo felt that through various instruments, policy measures and the Government's policy of balanced development, growths in certain centers could be controlled and factors like employment and economic activities were important to facilitate such developments.

Professor Ravi Anand, team leader started the presentation by welcoming all participants and explaining the main aim of the workshop, which was to:

1. Discuss the existing scenario and the future prospects of Bhutan's urbanization,
2. Identify regional growth centers as this was one of the main focus in the Terms of Reference
3. Discuss the National Urbanization Strategy's spatial framework and supporting policy and institutional strategies.

He then demonstrated different scenarios taking into consideration the current growth rates (population, urban population and rural population) and also the migration patterns. He illustrated seven different situations in the urban population ranging from the current growth rate of 7.3% down to 5%, 4%, 3% and 2% keeping the annual population growth rate at 1% over the next fifteen years. He felt that that the two most likely scenarios would be the 4% or 3% increase in the urban population assuming an annual increase in the total population at 1%, however he brought to the notice of the participants that if the current rate of growth was to continue, over 73% of the total population would be urban in the coming time.

There was proper planning required for the additional rural population and ways to increase services in rural areas. In the last workshop (for the inception phase), the issue of urban development versus rural development had been raised since there was increase in population in both areas. Professor felt that this was not a conflicting issue,

although the concern for land in rural areas (farmland) was there. However, he had been informed by the Ministry of Agriculture that 16% of the total land is cultivable of which only 7.5% is under cultivation so there is potential cultivable land available in some Dzongkhags (mainly in Sarpang and Samdrup Jonkhar)

The team leader then illustrated though various maps, regional characteristics of Bhutan. He specifically demonstrated different figures showing each regions contribution towards urban population, urban population growth and the urbanization levels.

Before continuing with the potential Regional centers, team leader asked participants for comments.

Lyonpo initiated the discussion by bringing up the issue of the 73% increase in the urban population. Lyonpo felt that unless planned, the concern for a balanced rural and urban development would always remain. Lyonpo questioned on the issue of cultivable land, and the impact that the growth in urban centers would have on such lands. Professor clarified this by saying that with very preliminary calculations carried out; however based on his understanding only a very insignificant size of land compared to the total land was required for this. However, detailed calculations would be carried out for the next stage.

Mr. Richard, DANIDA asked for clarifications on the rural populations that had been shown in the presentations. He added that the tendency for fertility ratio to decrease resulting from increased rural-urban migration and also for migration to decrease as rural population further decreased.

Mr. Karma Tshering, JD, IIDD wanted to know why the increase in population was calculated for 7.3% and if future changes in policies had been considered. He also wanted to know the age group of the actual migrants and also the age groups of the particular urban settings. This he felt could actually explain the reason for such migrations taking place. Hon. Lyonpo explained that migrations were taking place amongst the educated youth who did not want to return back to their villages/towns. This was mainly due to lack of employment, education and social facilities in the rural areas.

Looking at the population growth patterns of Thimphu and Bumthang, Mr. Tshering Phuntsho, TCC felt that these observations needed to be properly observed and analyzed. He knew regarding Thimphu, that urban boundary was expanded in 2000 and many rural population were then included as urban population. He felt that this could have played a major role in the sudden change in Thimphu's overall urban population.

Mr. Richard then gave an alternative for regionalization – suggesting if a North – South zoning would be preferred. Lyonpo explained that the current Zoning system was more appropriate as it was geographically segregated during the 7th Five Year Plan. This was based on natural setting and watersheds. Also during that period, there were a lot of communication difficulties between dzongkhags so the current regional zoning was preferred.

Mr. Ashish, Urban Planner presented the evaluation criteria for the potential regional centers. They were assessed on the basis of:

1. The indicators (comprising of existing situations, development potential at the regional level and existing infrastructure facilities)
2. The rankings (of main towns)

3. The potential regional centers (the top ten rankings)
4. The prioritized regional centers (the three priority regional centers)

After explaining the calculations carried out such divisions, he came up with three potential regional centers, namely Gelephu, Gyalposhing and Bumthang. Gelephu and Gyalposhing had already been identified by the Government. Bumthang, he explained was a major connection to the East, had high potential for tourism and ample land for development. However, more information was needed on the other dzongkhags/towns as the questionnaires sent to all Dzongkhags had still not returned.

Professor Anand continued the presentation with the spatial frameworks and the supporting policy and institutional strategies. He began by explaining the alternative frameworks that could be considered for the national urbanization strategy, namely the:

1. Regional Center Framework
2. Dzongkhag Center Framework
3. Small towns Framework
4. Geog Centers Framework
5. Corridors Framework

He felt that it would be advisable to integrate all the above frameworks instead of having them as individual alternative frameworks. The hierarchy of such a framework could be looked at to accommodate future growth in the urban population.

Professor concluded with the supporting policy, institutional and financial Strategies:

1. Policy
    a. All public sector projects to be prioritized for location in regional centers
    b. Private Sector projects in the regional centers to be facilitated with incentives such as special clearances
    c. Legal Framework for Urban Planning and Management (Planning Act) to be developed
    d. Guidelines to be developed for public private partnership for urban development and management
    e. Housing Policy to be formulated with focus on low-income group, including banking, land market, land tenure and development standards
    f. Options to resolve conflict (between agricultural use of land and urban use of land) with strategies as farm subsidies, dual use urban agriculture/recreation?

2. Institutional
    a. DUDES to have regional offices manned by qualified planners in the regional centers
    b. Special development authorities may be formed in these regional centers as SPVs. They may be empowered to oversee public private partnerships for urban development and management

3. Financial
    a. Priority allocation of budget in national plans to regional centers
    b. Facilitate priority funding in the regional centers by International agencies
    c. Limited financial autonomy to be conferred to the regional centers

Dasho Tshering Dorji, Secretary, MoWHS then informed the Consultants that requests keep coming up from Dzongkhags identifying various corridor towns to be identified as urban settlements. On this the Professor said that there needs to be a difference in the definition between a growth center and a service centers, assuming that most of these small centers would be service centers with just the basic services available.

Mr. Adhikari, Chief Town Planner, stated that there was a conflict in the Institutional arrangements since coordination between Ministries and other agencies was a major problem.

Mr. Karma Wangchuk, DUDES then brought up the topic of the corridor scenario by taking Lobesa as a major example. He stated that some of these de facto towns along the highways could remain or be removed in light of the Road Act, which specifies a certain RoW.

New roads to villages economically affected towns like Ranjung since this meant that villagers did not need to go to a particular town to buy their basic necessities. Another issue was the impact that new bypasses being constructed from one town to another will have on some towns. For example, the bypass between Nangar to Ura and the implications it would have on Bumthang. Another example was the bypass between Nanglam and Gyalposhing and the implications that it would have on Samdrupjongkhar and Kanglung. Mr. Karma Wangchuk also argued whether traders would actually stop over at Gyalposhing. He compared Gyalposhing to Chimakothi, which is like a drive-through to other towns. Hon. Lyonpo supported this argument on the new bypasses and the negative and positive impacts it would have on particular towns.

Mr. Richard suggested a second National City, which would serve equally to Thimphu and Gelephu seemed like the next best city.

Hon. Lyonpo concluded the workshop by requesting Consultants to come up with a good Urbanisation Strategy. He felt that no urban development should be done in an uncontrolled and ad-hoc manner and that through promotion of development of other regional growth centers/Dzongkhag centers, the pressure on certain urban centers can be eased. He then thanked all participants for their contribution and reminded the Dzongkhag representatives of the afternoon's session with the Consultants. He requested them to put forward their arguments on their Dzongkhags being the next regional growth center.

Discussion with the District Engineers on the Presentation for the draft Bhutan National Urbanization Strategy

Bhutan National Urbanization Strategy (BNUS, TCDS and TSOE)
World Bank Project funded by Cities Alliance.
2:30 - 4:30, session 2
Venue: Conference Hall, Ministry of Works and Human Settlements

The presentation was followed by the lunch hour and the second session with the Dzonkhag engineers was started at 2:30 as scheduled. Planning officers from the planning and policy division (PPD), MoW&HS also attended the session.

Ashish R. Ghorpade welcomed the participants and thanked them for the participation. Prof. Ravi Anand asked the engineers to voice their concerns and put forward their suggestions on the last presentation especially with respect to urban areas in their districts.

District engineer, Thimphu dzonkhag, suggested that Lobesa and khasajabshu, should be included in the list of satellite towns. Prof Anand enquired about the reason for peoples interest in the areas being converted to urban and the engineer explained that it had mainly to do with provisions under the road act.

The district engineer, Pemagatshel reconfirmed that the town was scheduled for relocation and suggested one of existing Nankor and Yalang two new satellite towns as a possible choice, and suggested that the chosen town would then become the primary town for the dzonkhag. He informed that Tshebar and Yurung had been recently approved as satellite towns.

The assistant engineer for the wandue dzonkhag voiced his concerns about the relocation site for the town being away from the highway (Bajo) and that may affect the town's economy in times to come. He did not have any suggestions to tackle the same. He informed that Nobuding and Rurichu were the satellite towns in the dzonkhag.

Assistant engineer from the Chukha dzonkhag informed that Phoensholing was the main commercial city for the dzonkhag and Tsimasham was the dzong town with market activities. Darla, Gedu and Chukha were the satellite towns for the dzonkhag.

The district engineer of Trirang Dzonkhag mentioned that the town had a lot of potential for development though there were a few constraints like water supply and power supply but a new substation was under construction and a potential water source was located 2-3 km away from the town kuchikhola. He thought that there was a lot of potential for agro-processing units, tourism and commerce in Damphu and the coming up of the airport at Galeplu will certainly have a positive impact. In future satellite towns could be developed at chanche and mendegaun both of which have few shops and may develop further.

The assistant engineer from Zhemgang dzonkhag mentioned that the town had potential for development as an ecotourism area, where the weather is good and proximity to Galephu may act as an advantage. The main constraint for development is water supply as the nearest source is located at least 19 km away from the present settlement. He mentioned that Tintibi, Panbang and Buli were few other settlements with urban

character. He mentioned that though Tintibi had a lot of potential and developed flat land available the owners are not settling on the site as they are waiting for the better conditions when it will be more suitable to invest in a house or shop.

The assistant engineer from Sarpang mentioned that most of the issues were already discussed in the previous presentation and that the other towns besides gelephu were sarpang, lamizonkha and settlements such as Kumbling and chuzagang should be included as satellite towns.

The assistant engineer from Trongsa mentioned that though the town had good potential for growth due to its connectivity and some tourism sites but the terrain and soil quality made it difficult to construct build spaces in the area. He mentioned that though tashiling was being considered a satellite town, kingraptel and langathel could be developed as service centers based on morning presentation.

The district engineer for Mongar mentioned that Galepoishing had a lot of potential for development as a lot of developable land was available away from the town limits though it was discussed in the morning's presentation that most of the land was taken up by the high school and power project. However he mentioned that he would rate both monger and Galepoishing as equal in terms of growth potential.

Dr. Gangadhar Jha discussed with the engineers the issues in service provision, tax collection and investment for capital and maintenance works. The engineers brought to his notice that often the funds allocated for works are much less than required and they have to request re-appropriation to go forward with emergency needs. The engineers also suggested that making local city governance independent from the center may be thought as a long term plan as it will require a lot of awareness and capacity building and of course the size of the settlements and other local conditions will have to be kept in mind.

Following this Mr. Ashish again thanked the participants for coming and invited them for further discussions by sharing with them the project office contact number. Prof. Anand also thanked the participants for coming and sharing their views.

Minutes of the Meeting
Discussion with the working group for the draft Bhutan National Urbanization Strategy

Bhutan National Urbanization Strategy (BNUS, TCDS and TSOE)
World Bank Project funded by Cities Alliance.
17th August 2006, 15:30-17:00
Venue: Conference Hall, Ministry of Works and Human Settlements

Professor Ravi Anand started this workshop by explaining that this was a follow-up of the Interim Workshop held on the 10th of August 2006. He said that this was an attempt to make a little more detailed analysis of most of the observations that were raised during the Interim workshop.

This presentation would highlight the following points:

1. A lot of alternatives were to be explored especially for the growth rate and this discussion has been expanded on the future prospect
2. Discussion and identification on the regional growth center
3. Discuss the National Urbanisation Strategy's spatial framework and supporting policy and Institutional strategies.

A chart showing the current population scenario with the growth rate at 1.3% and urban population growth rate at 7.3 % was shown. Since 7.3% was felt too high to keep in mind for the next 15 years, the team had to rethink a more likely scenario. Therefore an age-sex structure was shown which implies a fall in the natural birth rate for both males and females leading to a likely decrease in the existing 1.3% overall growth. A chart showing the natural increase Dzongkhag wise highlighted natural increase in the Urban areas in comparison to rural areas in the future because of the high migration. In 13 Dzongkhags, the natural increase in urban population is higher than the rate of natural increase rural population. Highest increase in the natural increase was shown in Dagana at 1.7%, and a high increase in rural population was seen as the main factor. Highest increase in the urban population is in Tsirang at 2.84%. Lowest growth rate in urban area was 0.79% in Punakha and 0.95% (rural) in Chhukha.

The study showed that in the Eastern region, all Dzongkhags have lost population because and 50% of the other Dzongkhags have lost population to migrations. However, if we were to assume only a natural increase and no migration, then population in the East was nearly at par as with the West. The imbalance caused here is solely due to high migration, reason being employment and family movement.

In order to accommodate 1.8 to 3.6 hundred thousand added population, town densities were taken in consideration. Different scenarios were shown taking small, medium and large towns into consideration and different amount of land for residential purposes. The following land was shown required:

Total area of country = 38,816 Sq. Km = 38,816,000 ha
1% of this area = 388 Sq. Km = 38,800 ha

Additional urban population to be accommodated = 3.6 hundred thousand
At existing densities (20 pph) land required = 18,000 ha (about 0.5% of the land)
At 50 pph., land required = 7,200 ha (about 0.2% of the land)

At 100 pph., land required = 3,600 ha (about 0.1 % of the land)
At 200 pph., land required = 1,800 ha (about 0.05% of the land)

This is an actual quantifiable issue and it shows the amount of land required from the agricultural area. At this, Mr. Richard inquired on existing information on the current land designated for urban area.

Regional characteristics were charted and mapped to show loss in population. The Eastern region was shown to have the highest loss. Unless a regional center was set up in the East, migration was still going to take place in the future and this would create an imbalanced regional growth. There is a mixed interpretation on the different Dzongkhag population. For example, even though Trashigang has a high population, there is a high out-migration. Then there were in-migrations to other Dzongkhags like Punakha which did not contribute much to the total population.

A graphic interpretation showed that majority of the Dzongkhag total population was less than 20,000. This implied that some of these places would not be able to support regional growth centers unless they have a 75% - 80% urbanization level. Mr. Richard then inquired if Professor meant that places with less than 20,000 population should not be considered as an urban growth center. Professor then stated that although it was possible, it would be difficult as it meant that Dzongkhags would need to be urbanized to a level of 75-80%.

The rationale for Potential regional growth was a balanced equitable regional development which is away from Thimphu and Phuentsholing and allowed for a possible second national city which complimented the National City and supported private section participation towards development. A major urban center in the East was also another option. Another rational was a planned development leading to better quality of life instead of an adhoc urban center.

There were four pointers showing potential regional centers, namely:

1. The indicators (of development potential at the regional level)
2. The rankings (of the main towns)
3. The potential regional centers (the top ten rankings)
4. The prioritized regional centers (the three priority regional centers)

Mr. Ashish gave an updated version of the rankings after he had received more information from the different Dzongkhag engineers.

This led to a prioritized listing of the three regional growth centers:

1. Gelephu : Proposed international airport, trade gateway, proposed rail link, proposed industrial estate
   SECOND NATIONAL CITY – "Private Sector" (Manufacturing, Trade and Transport functions)

2. Gyalposhing – Though the main town does not score high on the ranking exercise (mainly due to non-availability of the status of the infrastructure), proposed highway connection to Nanglam, good water supply, availability of land for development and better accessibility.
   EASTERN REGIONAL CENTER – A counter magnet for the major migration witnessed by the region's towns.

3. Bumthang: Major connection to the eastern side, tourism-based industry potential (climate, culture and religion), many cottage industries, ample land available for development. The proposed bypass Naglam-Ura is just 12 km away and most public transport will still pass through Jakar.
   CENTRAL EASTERN REGIONAL CENTER – Tourism focus and gateway to the East

The national urban system designed shows alternative frameworks.

1. The National Cities – could have two cities, Thimphu and Gelephu
2. The Regional Centers framework – could have five, including Phuenthsoling and Samtse
3. The Dzongkhag Centers framework – would also get second priority to developing
4. The Geog Centers Framework
5. The Corridors Framework

Out of 140 geogs, at least 50 small urban centers could be named as integrated geog centers (as already defined by the Ministry of Agriculture). These would be the smallest towns that could come up over the next 15 years, against the 62 towns already identified. By trying to allocate the implied added population of 3.6 hundred thousand to different towns allows for a proper calculation on the land requirements in those areas.

Dr. Gangadhar Jha mentioned the current government thinking of establishing Thromde Chungwa and Thromde Chhewa for different categories of population but suggested that the population categories being considered are completely unviable as the towns with less than 5000 population will not be able to able to sustain local government structures. He suggested that the towns in 5000-9999 category to be considered for thromde Chhungwas and as only three towns qualify in that category, to also include the two towns identified as regional hubs, adding the total number of thromde chungwas including Thimphu and Phensholing to be seven in the country and the remaining towns to be left as Tshodgu towns under the Dzonkhag administration.

Mr. Richard pointed out that this was an acceptable suggestion and more suitable in the local conditions but that the concerned ministry for this decision will be the department of local governance at the MoHCA. Since there was no representation from the concerned ministry, Mr. Adhikari said that we hope that we will receive comments from them on the report.

Mr. Adhikari argued for a regional balance taking the three identified regional urban centers. He felt that geographically these places were situated close to each other and it may not lead to a proper regional balance. Professor felt they could look at the map with other facilities like National parks and protected areas which lead to a lot of untouched area. This can be over-laid by industrial areas, mines and protected areas and put in topographic information. This could lead to a composite map which can have settlements and then fine-grain which can then define a balanced distributed urban development since the country's topography and geography does not allow for an even spread of towns all over the country.

For a regional balanced development, the only growth center we can have is Damphu which has already been demarcated and Punkaha and Wangdue which did need pushing since they were located too close to the Capital.

Mr. Tshering inquired on the regional center versus the 56 urban centers and the relation between the two. He also wanted to know whether the corridor concept development has been dropped from the study and Professor clarified on that saying that this was one of the visions in the 2020 and that it would be covered in the study.

Mr. Richard said that in Thimphu, building plots were already being created to cover half of the additional population. He felt that in the future, Thimphu would still be a very effective magnet and that smaller towns would need to have strong economic justifications to attract people away from Thimphu. At this Professor felt that the Government should go beyond identifying Gelephu as the next regional center as this would not be strong enough to stop people migrating to Thimphu. Gelephu could be the next National City as it could facilitate its own trade and manufacturing activities. However, Mr. Richard asked whether the Government had the resources and economic activities to be distributed to other areas. Professor gave examples of India where the Private sector played a big hand in the development and how the Government was gaining out of this participation.

Mr. Adhikari was concerned about the limited land that was available for development since it would deprive agricultural activities and also urban infrastructure was expensive. Since land was the key factor here, he suggested about 40 to 50 small urban settlements, which could save the agricultural land for the next 10 or 20 years. To resolve this issue, Professor stated two options:

1. See was how much land was really required and enforcing a minimum density instead of a maximum density if grants were to be given for services.
2. Giving services to smaller towns so that the people did not migrate into concentrated urban development.

Mr. Kezang, MoIC inquired on the time frame for the National Urbanisation which the Professor said that it was till 2020, where, after that it would be stabilized and there would be no extra demand on the population. He also wanted to know what strategies are being looked at for developing these centers or whether there would there be just a one-time investment approach. Professor said that it would be like a one packaged approach which should be completed within the next 3-5 years. He hoped that the 10th Five Year Plan would focus mostly on this strategy. Mr. Kezang also suggested a shifting of the capital. However, Professor felt that this would have costly implications and it was solely on the part of the Government to make such decisions.

Mr. Naichu, BCCI said that the Consultants needed to look at the different development plans that Ministries would have for these geog/service centers. He felt that these centers might have a substantial impact depending on its size, location, land available and the distance from the road. He also felt that Private-Public partnership was a good suggestion but in details were needed to be looked at in some areas since this was only one of the tools towards development.

Mr. Karma Phunsho, head, PPD, MoA questioned on the Urbanization strategy and the economic implications it would have on the other sectors if agricultural land was used for urban development. Professor felt this would be difficult to calculate unless a proper working group was formed. He also asked how big these regional centers would grow, since he felt that it was mainly economic generators that would be the pulling factor.

Mr. Adhikari said that this was not a new study being conducted and that the National Urbanisation Strategy has somehow been going on for sometime. The only difference was that this time approaches were being consolidated and directed.

He thanked the Professor for the good presentation and all participants for their contribution towards this study.

List of attendees

No.	Name	Designation/Office
1.	Mr. Naichu	Offtg, Secretary, BCCI
2.	Mr. Kezang	Head, PPD, MoIC
3.	Mr. Richard Geier	EUSPS, DANIDA
4.	Mr. Meghraj Adhikari	UPDD/DUDES, MoWHS
5.	Mr. Ichharam Dulal	UPDD/DUDES, MoWHS
6.	Mr. Tshering Phuentsho	Dy. Urban Planner, TCC
7.	Ms. Sonam Desel	EAO, PPD, MoWHS
8.	Mr. Karma Phunsho	Head, PPD, Ministry of Agriculture
9.	Mr. Rahul Nawle	Urban Planner, IPE
10.	Dr. G. Jha	Consultant, IPE
11.	Mr. Ashish Rao	Consultant, IPE
12.	Professor Ravi Anand	Team Leader, IPE
13.	Ms. Poornima	Asst. to Team Leader, IPE
13.	Mr. Shanti Ram	Consultant, Gyaltshen Consultancy
14.	Ms. Chimmi Dolkar	Consultant, Gyaltshen Consultancy

Minutes of the Meeting
Final Consultative Workshop on Bhutan National Urbanization Strategy

Bhutan National Urbanization Strategy (BNUS, TCDS and TSOE)
World Bank Project funded by Cities Alliance.
9th November 2006 – 9:30 am
Venue: Conference Hall, Ministry of Works and Human Settlements

The workshop was chaired by the Secretary, Dasho Tshering Dorji. He started the workshop by welcoming all participants and introducing the project and the purpose of the study conducted by the Consultants. He requested the participants to contribute their views and comments since this was the final consultative meeting.

Professor Ravi Anand started the presentation by welcoming all participants and expressing his gratitude towards all participants who had steered this study. He gave an initial understanding of the project and the related concerns. He also explained the three levels of analysis of the existing urban trends which was at the regional, Dzongkhag and town level. He said that this was made much easier because of the 2005 Census study which was referred to frequently during the course of this study.

The contents of the workshop was

- Bhutan's urbanization – existing scenario and future prospects
- Identifying the National towns of the Regional Growth centers
- The Proposed National Urbanisation Strategy Spatial Framework and the Policy of the Institutional Framework required for putting it into implementation

The following issues were brought up by participants during the consultative workshop:

1. Migration patterns which were not only one way and Mr. Richard explained that by stating "everyone" wants to come to Thimphu would not be exactly correct. Professor explained that this was the net migration and this kind of migration pattern from the East towards the West of Bhutan.

2. Coming up with some strategy which could help in de-congesting Thimphu or Phuentsholing since these two towns was already an established economic base in terms of population and activities. So an alternative could be to develop other towns which may not necessarily act as a magnet but could control the migration into Thimphu or Phuentsholing.

3. Population projections for Thimphu was also questioned which one participant felt that this would lead to a lop-sided strategy and would affect future donor assisted projects. Professor said that this was so because the Royal Government specifically asked for a pro-active approach.

4. One participant questioned on the credibility of the data used and Professor replied by saying that the only available data was from the Government sources and he requested for better data which was comparable and acceptable. A suggestion made by another participant was using proxy data. Although proxy data was used during the study, Professor said that it was used only for analysis

at town level and for the Dzongkhag and Regional analysis, the team depended on the 2005 Census data.

Mr. Ashish then presented the section on a balanced equitable regional development, looking at a possible second National City, major urban centers in the East and also planned development leading to a better quality of life.

Bumthang on the Central Western region which ranked better than Trongsa in terms of industrial and employment. Sarpang in Central Western ranked high in terms in RNR and economic development. Based on our analysis, there was a need to improve the social infrastructure development.

5. Placing Thimphu's education level at number nineteen out of the twenty Dzongkhags was a concern since number alone was not a factor. Most participants felt that this information could be looked at again.

6. Mr. Richard asked whether this project was to locate growth centers in areas that are most developed or to use the growth centers to raise the development of that particular Dzongkhag. Professor clarified by saying that a combination of both the logics was being used. Since the West already had highly developed Dzongkhags, he felt that there was no need to concentrate anymore on the West. The report has eliminated any inputs from the Government since it can grow on its own and interventions were needed to curb this growth. However, rankings in the Eastern region was low so this study looked into what were the possible potentials and would go to a third level analysis looking at actual towns with proper services, opportunities and land available.

7. One participant raised the issue of connectivity which he felt played an important role while selecting a second National City. He said that while identifying any town/city, one priority to be considered was the accessibility to a larger population or region.

8. Mr. Lam Dorji from RSPN asked on the importance of RNR in the Composite Development Index (CDI) while deciding the urban growth center. Professor explained that the CDI was used in this study to help in the strategy-building and in ranking the hierarchy for development.

9. While selecting towns, the normal practice is to go by its functional type of outreach and the economic activities that these towns have to offer. So, Mr. Phuntsho Wangdi asked which practice this project followed.

10. Mr. Rajni felt that the decision seems to have already been made regarding the selection of the two major cities. Since Thimphu was already there, the need for Gelephu to be the next national town seems quite not possible.

11. Mr. Karma Ura raised the issue of classification and whether there was an actual need to classify towns or regions according to the different criteria in the hierarchy table. He felt that a city was a city under one particular jurisdiction and had reservations on whether it was beneficial to declare so many towns. He also felt that a thromde and geog should be on par and be kept at the GYT level.

12. Since this is a Policy document, Professor Ravi felt that the Western region did not need too much focus as this region could develop on its own. There was a lot of effort needed for the other regions like Gelephu.

Strategies in terms of policy implementations made were:

- All public sector projects to be located on a priority basis in the regional centers
- Incentives for private sector projects located in this areas
- Legal framework for urban planning and Management
- Develop guidelines for public-private partnership for urban development and management
- Formulate housing policies with focus on low-income group

13. Mr. Richard felt that by phrasing “All public sectors” made this statement a bit too drastic and asked whether this line could be re-phrased since there would other towns that would require these services too. Professor said that this sentence was used just to make felt the importance of its priority.

Dr. Jha carried on the presentation with the Policy and Institutional Framework. He felt that while looking at a particular system of governance to introduce in Bhutan, it was quite complicating since there were a number of constraints:

- The country was in a state of evolving
- There was a large number of small towns
- There were no available norms or standards in providing costs for particular services
- No proper definitions for towns or centers.

14. Mr. Richard said that in Bhutan there were several towns that had local governance but had a population much less than 5,000. Dr. explained that may be these areas were local governance only in paper but in reality a local governance should operational, functional and providing all the services. However, in Bhutan, there was an institutional mandate to create local governance.

15. Dr. also suggested that having about seven local governance would be sufficient to drive this urbanization strategy. Towns with a population over 10,000 will have municipal corporations and the remaining towns to have a structure similar to geogs.

16. Mr. Phuntsho Wangdi felt that term “Limited financial autonomy” did not give a positive outlook so he suggested using “appropriate” in place of “limited”.

17. Mr. Rinchen felt that the statement “there is no definition” for a town/urban center was not right. The Ministry had already identified a set of criteria that defined a town. However, Dr. Jha said that criteria and definition were not the same.

Dasho Tshering said that urbanization will take place irrespective of any kind of interventions. The RGOB believes that by 2020, more than 50% would be living in urban areas but in reality, if the current growth rate continues than the urban population would reach about 80%. So this study was initiated to look at criteria that could identify regional

growth centers that may not exactly act as a magnet but could control the mass migration to the Western region.

18. Mr. Richard felt that this study should argue strongly for a counter weight city which may not necessarily be called the second National City but a city that would act as an alternative magnet.

19. Mr. Rajni argued for political interventions which could actually attempt to move some organizations/agencies that need not necessarily be based in the Capital city. He felt that with advance information technology, communication was made much easier.

20. Mr. Adhikari felt that this workshop seems to be heading towards a philosophical development of dichotomy between urban and rural.

21. The director for DUDES, Mr. Rinchen commended the Consultants on the good work done on analyzing the available statistics but he felt that further research was needed to look at potential areas that could offer various activities/services with good access. Dasho Tsering Dorji supported this argument by saying that the study should look into potential areas that could attract a population. He also felt that most of the powers could be delegated at the Dzongkhag/Regional level and questioned on necessity of the all Central Ministries being based in Thimphu. He advised the Consultants to look into the services rendered by each of the ministries and see whether any particular Ministry could function outside of Thimphu.

Dasho Tshering Dorji explained that participants were invited to this workshop to give their views and any practical problems faced specially at the Dzongkhag level. He thanked the participants for their contribution.

SL. No	Names	Organization
1	Kinga Dorji	Wangdue Dzongkhag
2	Karma Tenzin	Lhuntshi Dzongkhag
3	Tikaram Kafley	Sarpang Dzongkhag
4	Dechen Singye	Trongsa Dzongkhag
5	Drakpa Wangdi	Chukha Dzongkhag
6	Kingang Wangckuk	Pemagatshel Dzongkhag
7	Nado Regay	Paro Dzongkhag
8	Chador Phuntsho	Mongar Dzongkhag
9	Budhiman Pradhan	Zhemgang Dzongkhag
10	K. Penjor	Zhemgang Dzongkhag
11	Iccharam Dulal	DUDES/UISD
12	Kunzang Lham	PCS
13	Chedu Jamtsho	NSB
14	NL Rai	DOR, MOWHS
15	M.B. Mongar	Goe yong
16	Naichu	BCCI
17	Richard Geier	DUSPS
18	Karma T. Namgyal	Bumthang Dzongkhag
19	G.S.V Poornima Rao	IPE

20	S.R.Katel	Gyaltshen Consultancy
21	Sonam Tobgye	Gyaltshen Consultancy
22	Thukten choda	UPPD
23	Namgang Tshering	Dagana
24	Meghry Adhikari	DUDES
25	Ugyen M Tenzin	UPDD/DUDES
26	Tashi Wangmo	UPDD/DUDES
27	Dorji Wangzon	UPDD/DUDES
28	Latha Chhetri	UPDD/DUDES
29	P wagdi	NHDC
30	Dr. G Tha	Consultants (IPE)
31	Mr. Rahul Newle	Consultants (IPE)
32	Prof. Ravi Anand	Team Leader (IPE)
33	Karma Yangzom	Local consultant Gyeltshen
34	Chimmi Dolkar	Gyaltshen Consultancy
35	Lam Dorji	RSPN
36	Ugyen Lhendup	RSPN
37	Karma Ura	Paldrug Zhibjug Tewa
38	Rajni Chavda	Rajni Chavda, planner Architects , UK

Minutes of the Meeting
Tripartite meeting and discussion workshop on Bhutan National Urbanization Strategy

Bhutan National Urbanization Strategy (BNUS, TCDS and TSOE)
World Bank Project funded by Cities Alliance.
March 23 2007 – 10:30 am
Venue: Conference Hall, Ministry of Works and Human Settlements

Minutes

List of Participants is attached as *Annexure 1*.

1. Introduction

The workshop was organized to have a final discussion on the BNUS and TCDS before it is finalized and put up for government approval. The participants include Consultants, the World Bank and various representatives from the government agencies. About nine consultations have taken place prior to this workshop.

2. Remarks by the Hon'ble Minister, Ministry of Works and Human Settlement

The Hon'ble Minister, Ministry of Works and Human Settlement, welcomed the participants and emphasized that the workshop is important since urbanization concerns all of us and our future. Lyonpo went on to mention that:

1. Instead of repeating what has been said in earlier workshops, Lyonpo would like to remind what Bhutan 2020 contains in terms of national urbanization strategy. The preparation of the BNUS is timely and in keeping with the government's desire/vision for urban development, expressed in Bhutan 2020 which is a very profound, visionary and well written document prepared by the Planning Commission. In order to understand the full context of the urbanization strategy, Lyonpo felt that it is important to remember what Bhutan 2020 contains since it provides a broad framework of where Bhutan would like to be in 2020.

2. From Bhutan 2020 (Chapter 6 – Balanced and Equitable Socio-Economic Development, Section 2: Urbanization Strategy), Lyonpo mentioned that this section (attached as *Annexure 2*) broadly defines what we desire to achieve through the BNUS.

3. The nationwide 2005 Population and Housing Census (PHC) was timely because without this important data and information it would have been difficult to prepare the strategy. The PHS provided a very good basis for the BNUS work. We now know that the national urban growth rate has been 7% and for Thimphu about 13.5% between 2000 and 2005. Bhutan 2020 predicts that by 2020 more than 50 percent of the total population will be living in urban areas. But as per the 2005 census and the BNUS report which is based on it, this percentage is likely to go up to 73. That poses a major challenge to the government. One of the major challenges we have been facing is employment, gainful employment for our youth, particularly our educated youth.

4. The second major problem is urbanization. Government's policy has always been to promote balanced and equitable economic development (BEED), to promote planned urban centres and nice cities. If we are not able to foresee our future, then it will be difficult for us to realize the government's policy of BEED. Among others, this will also have impacts on poverty, especially in terms of provision of basic services and facilities. We must realize that urban planning and urban infrastructure development is very difficult and expensive.

5. Bhutan 2020 has also set targets, for instance, preparation of Urban Development Plans, for instance for Thimphu and Phuentsholing and other major urban centres and also the formulation of growth centres strategies which according to the Bhutan 2020 is supposed to have been completed by the 8th FYP in 2002. BNUS can be considered as an important step towards this end, together with the Thimphu Structure Plan and the Thimphu City Development Strategy.

6. In keeping with the long term government's policy of BEED and also to ensure Thimphu growth takes place in a planned/controlled manner, we have a number of measures, policy instruments and regulations put in place. Two examples towards this end include, under the Development Control Regulation of Thimphu City prepared as part of Thimphu Structure Plan replacing Building Regulation, one - restrictions under the plot coverage, and two - building height restrictions. Ultimately such measures are geared towards controlling the population growth in Thimphu and controlling the rapid growth of the City.

7. For definition/designation of cities and urban areas in our context, we need to take into account our peculiar condition – small country, small population, rugged terrain, lack of favourable space for urban expansion, and also our unique approach to development, which has been drawn from the experiences from outside and avoid mistakes they have

made, and also take into account our own strength and plus points, our past traditional practices. All these should be carefully borne in mind in drafting the BNUS.

8. We have tried to define urban areas in our own way which may not necessarily be in conformity with practices elsewhere. We have a hierarchy of urban centres such as national cities, regional growth centres, dzongkhag towns, satellite towns and geog towns. For the time being, regional growth centres have been left out and replaced by national cities in the hierarchy, but in the strategy it remains since some of the national cities can ultimately turn into regional growth centres, for instance Gelephu-Sarpang.

9. Geog towns have been included in the hierarchy because we are already implementing the concept of Integrated Geog Development Centres through collaboration with the Ministry of Agriculture and Ministry of Home and Cultural Affairs where all service facilities for the geog including the market is to be located. Basically this is to support the approach already taken by the government aimed eventually at discouraging rural-urban migration and reducing pressure on main urban areas.

10. Rurabinization – taking urban facilities to rural areas – in the past we have regional urban centres, for instance, Ranjung in Trashigang District. What actually happened was that with the improvement in rural accessibility, such centres has decreased in their importance as commercial centres since with access, rural inhabitants can purchase their basic requirement from the rural areas. Therefore, if geog centres develop, the need for developing satellite towns may be much lesser.

11. While the MoWHS is taking the lead in the urbanization strategy, it is the fundamental responsibility of all the sectors to ensure that we get the strategy right. It is after all our future, our unavoidable future. We should not look at urbanization per see but very much a part of overall economic development and something that should be collectively owned and supported, especially by such sectors as agriculture, industries, power, etc.

Hon'ble Lyonpo concluded his remarks by soliciting the wholehearted support of all the sectors appealing the participants to take the ownership of the strategy, and hoping that we will be able to finalize and get the approval of the government at the earliest possibility.

3. Presentation by the Consultants

Prof. Ravi Anand, Team Leader, IPE Consultants, made a brief presentation on the BNUS drafted by the consultants (briefed from the main draft BNUS report).

4. **Presentation by the World Bank**

Mr. Songsu Choi, Lead Urban Economist, The World Bank, then presented the Bank's comments. Details on this is attached as *Annexure 3*.

5. **Discussions**

Lyonpo made the following comments to the above two presentations:

1. On the regional growth centre, Sarpang and Gelephu may be shown as one growth centre instead of being shown as two separate growth centres since they will ultimately get merged, considering the high potential of Gelephu for future growth.

2. The potential growth of **Nganglam** as a major growth centre in future has been overlooked and will **definitely need to be reconsidered in the final report** (Lyonpo has made this comments several times – could not be emphasized further!). In view of a major cement plant coming up in Nganglam, and the Gyelpozhing-Nganglam road that will redirect the flow of traffic to Lhuentse, Mongar, Pemagatshel and even most parts of Trashigang, Nganglam will definitely grow as a major regional urban centre. The government is also making serious efforts to develop Nganglam.

3. On local autonomy and governance structure, it was clarified that there is no need to debate since the provisions under the Constitution provides the broad framework to address this issue. It was further clarified that the Municipal Act 1999, realising its loopholes, is under revision in the form of Thromde Act 2007 which will address issues related to local governance and autonomy. As regards the municipal facilities' charges, the Municipal Act 1999 applied only to Thimphu and since 2006 to Phuentsholing and not to any other municipalities.

4. On urban population growth, Lyonpo clarified that despite the best efforts of the government through improved education system and strong emphasis on rural development, for instance the establishment of Rural Development Centre in Zhemgang, it has not be possible to stop rural urban migration and urban population growth. Instead, one of the main causes of rural urban migration, ironically, has been the success of our education system. There is hence a need for critical understanding of this situation.

5. On the need to revise the current taxation policy in order to be able to generate revenue to support the operation and maintenance of urban infrastructures and various service facilities, Hon'ble Lyonpo clarified that the municipal service charges are decided by the respective City Committees. National taxation policy has to be decided by the Parliament. Taxes paid by rural people, though many types, are peanuts compared to what the urban people pay in actual monetary terms. In a way, people in Bhutan have been spoilt by the provision of free services by the government.

The Chief Town Planner, DUDES mentioned that it may not be correct to say that the growth rate from the year 2000 to 2005 is very high since the municipal boundary has increased from 8 km^2 in 2000 to 26 km^2 in 2005. He also suggested that planning processes of the past should be reviewed to get a better idea.

For development of geog centers, key players such as agriculture and home and culture will have to …..

The alarming prediction that by 2020 about 73 percent of population may be living in urban areas is something that seems to have no immediate solution. For instance, rough estimates show that even to build a town of about 30,000 people, it will require about US$ 1 billion. There is no way the government can afford that, unless perhaps if the private sector come forward.

The strategy seems to focus too much on trying to keep the rural population in rural areas or for that matter to keep people away from coming to Thimphu and other major urban areas. While population may be a very important factor causing rapid urbanization, there is also a need to consider some other factors. There are areas which have locational advantages, for instance, Gelephu because of its location near the border, has better economic opportunities, and government could build on that to facilitate its growth. The government should focus on enabling role in the form or rules and regulation, but otherwise should not come up with such concepts of hierarchy of urban areas. Realistically they look more unmanageable than possible.

In the urban context this is the first time that such a comprehensive study has been undertaken bringing out a lot of interesting issues.

Decrease in interest rate for construction loan fueled construction in Thimphu and perhaps contributed to rapid growth of Thimphu city…

It was also mentioned that most of the contents of the BNUS matches well with the current thinking and discussions of the government. The identification of major towns in the south is in

keeping with the recent concept of Comprehensive Economic Zones in the South which are to be export oriented, and could “gamble on other’s money”.

One major problem with Thimphu seems to be that it is too small. There still seems to be a situation where if you require a special medical treatment, you have to go out. As long as one is doing that you are conceding a major economic advantage to someone else. One just couldn’t afford to continue that.

Next steps:

1. Try to get further feedback from various sectors
2. Send them to the consultants
3. Send them to the Bank for their review and comments
4. Submit to the government for approval

Mr. Songsu agreed that the Bank will come up with their strategy which can be included as part of the main document.

Thimphu City Development Strategy

The strategy looks more like an implementation plan than a strategy. As a strategy, there should be clear vision. It should, for instance, indicate whether development should be from core to the periphery or otherwise.

Since Thimphu Structure Plan is referred repeatedly, perhaps it would be better to include a summary of the same in the strategy.

Specific issues such as sewerage, solid waste management (including e-waste), water supply, mass transport (strengthening of the existing city buses along with adequate infrastructure development) etc., could be addressed through specific projects, for instance BUDP2 under World Bank funding and UIDP under ADB funding.

The strategy could focus more on problems and issues, side effects of developments and how to address it.

Current management/policy rules out the extension of municipal boundary especially if more agricultural land are to be included.

Important and relevant need for Thimphu city include reconsolidation of service facilities, location addresses, etc.

Annexure 1: List of Participants

1. Lyonpo Kinzang Dorji, Hon'ble Minister, Ministry of Works and Human Settlement
2. Mr. Rinchen Dorji, Director, DUDES, MoWHS
3. Mr. Bharat Tamang, Head, PCD, DoE, MTI
4. Mr. Meghraj Adhikari, CTP, UPDD, DUDES, MoWHS
5. Mr. Tshering Wangdi, Chief Engineer, DoR, MoWHS
6. Mr. Tshering Phuntsho, Dy. CTP, TCC
7. Mr. Tashi Jamtsho, Planning Officer, PPD, MoA
8. Ms. Dorji Wangmo, Planning Officer, PPD, MoIC
9. Mrs. Kunzang Lhamu, Dy. Chief Planning Officer, Planning Commission Sectrtariat
10. Mr. Choiten Wangchuk, Chief Planning Officer, MoF
11. Mr. Ichharam Dhulal, USID, DUDES, MoWHS
12. Mr. Tashi Tshering, Sr. Architect, DoI, MTI
13. Mr. Karma Wangchuk, Urban Designer, DUDES, MoWHS
14. Mr. Tashi Phuntsho, Information Officer, PPD, MTI
15. Mr. Kesang Jigme, Planning Officer, PPD, MoWHS
16. Mrs. Kesang Deki, Urban Planner, TCC
17. Mr. Rahul, TCC
18. Mr. Dungkar Drukpa, Sr. Planning Officer, PPD, MoWHS
19. Mr. Songsu Choi, Lead Urban Economist, The World Bank
20. Prof. Ravi Anand, IPE, India
21. Mr. Ashish Ghorpade,, IPE, India
22. Mr. SK Choudury, IPE, India
23. Ms. Chhimi Dolkar, Gyeltshen Consultancy
24. Mr. Shanti Katel, Gyeltshen Consultancy

Annexure 2: Hon'ble Lyonpo's reference from Bhutan 2020

2. URBANIZATION STRATEGY

223. The face of our nation is rapidly changing. Increasing numbers of people are choosing to leave their rural homes and to migrate to urban centres. We are not yet well equipped to deal with this rapid movement of population, being still uncertain of the specific constellation of factors that are fuelling the process, which may vary in different parts of the nation, and of the longer-term consequences, both positive and negative, that the process will have in both urban and rural areas. We cannot wait to acquire of full understanding, nor can we allow our urban centres to be overwhelmed by the uncontrolled effects of rapid urbanization.

224. Of the initiatives required to deal with this situation, two are of crucial importance. The first is to ensure that we retain our commitment to improving the standard of living and quality of life in rural area, thereby reducing the 'push' factors in migration. Farming and related activities must become more profitable and young people must perceive farming not as a subsistence activity they associate with 'backwardness' but as a field of opportunity. The continuation of the focus on rural development and the further commercialization of agriculture are thus essential componets in our urbanization strategy.

225. The second major initiative is the preparation of a growth centre strategy that identifies migration alternatives to Thimphu and Phuensholing, both of which are currently growing at rates which may soon prove to be unsustainable. The growth centre strategy must meet a number of basic requirements.

226. First, and most obviously, the locations selected for growth centres must provide the physical space to accommodate a growing population.

227. Second, the locations selected must have an economic base that establishes the conditions required for self-sustaining growth. This required us to take special account of the resource endowments of potential locations and of the possibilities of translating these endowments into tangible development potential that can be exploited in the short and medium term.

228. Third, full and proper consideration must be given to the potential environment impacts of alternative locations so as to ensure that growth centers do not result in unacceptable

environmental damage, for example damage that could arise from the exploitation of resource potential.

229. Fourth, the growth centre strategy must be reinforced by programmes aimed at developing the physical infrastructure, especially roads, power, water and telecommunications, required to exploit resource endowments and achieve self-sustaining growth.

230. Fifth, the growth centers selected must serve as focal points for the provision of social infrastructure and serves that are associated with expanded choice and the quality of life.

231. Sixth, the centres should serve as focal points for government services and for programmes for the decentralization of government administration from Thimphu to lover levels.

232. Given resource scarcities, it will neither be feasible nor desirable to seek to develop more than three or four regional growth centres. Highest priority should be accorded to the development of a growth centre in eastern Bhutan, where the distances to Thimphu and Phuentsholing are great and the density of population high, giving the region a high potential as a 'sending' area. Available resources will need to be concentrated in a small number of locations in order to achieve economies of scale, rather than spread too thinly over a large number of centres where returns will be lower and more unpredictable. Preference will need to be given to the expansion of existing centres rather than the creation of new settlements, provided that the minimum requirements and basic conditions can be fulfilled.

233. The preparation of a growth centres strategy is now in hand and will form part of a larger strategy for the balanced development of human settlements in Bhutan. It is clearly of the utmost importance that the strategy be finalized and implemented at the earliest opportunity if the many potential negative effects of rapid urbanization are to be minimized.

234. These strategies must effectively address problems relating to land markets, land registration, affordable housing and urban services that are already in existence and they must encompass measures to prevent the emergence of the slums and squatter settlements that are familiar in many other developing countries. For both Thimphu and Phuentsholing it will be necessary to think imaginatively in terms of alternatives to continuous urban growth, with its possible negative implications for the quality of both the built and natural environment. We should give consideration, for example, to such

concepts as ‘rurabinization’ that targets townships in the vicinity of the towns as future focal points for a pattern of urban growth in which the benefits are more broadly-based and equitably shared. Above all, it is imperative that we learn from past mistakes and do not repeat them in other urbanizing areas.

235. Our future strategies for human settlement development must give greater priority to achieving improvements in the quality of urban design and planning. Some towns, notably Phuentsholing, having grown without the benefit of development plans and may soon reach a stage where, from an urban planning and design perspective, they are beyond repair. In seeking to achieve improvements in the quality of the built environment, we must draw inspiration not only from modern textbooks on urban planning but also from the wisdom and imagination of our traditional architects and craftsmen, promoting standards of urban design and architecture that are consistent with a distinctive Bhutanese identity.

Annexure 3:

Bhutan National Urban Development Strategy
Thimphu City Development Strategy

World Bank Mission
(March 19-24, 2007)

Aide Memoire

1. Songsu Choi visited Thimphu from March 19 to 24, 2007 on a World Bank mission to participate in a workshop on the draft national urban strategy and Thimphu city development strategy and to discuss main preparation issues for the proposed Bhutan Urban Development Project II. The mission benefited from friendly and serious discussions with the minister, secretary, and other officials of the Ministry of Works and Human Settlements and Thimphu City Corporation, representatives of other ministries who participated in the workshop, and the consultants who helped draft the Strategies. This aide memoire summarizes the mission's key findings and agreements on the next steps for each of the agenda in turn.

National Urban Strategy and Thimphu City Development Strategy

2. A workshop to discuss the draft strategies was held on March 23, 2007. It was chaired by the Minister of works and human settlements, and actively participated by representatives of TCC and various ministries, including those which previously have not taken part, such as the Planning Commission, ministries of finance, energy, trade and industry, and information.

3. Following the consultants' presentation of the draft national urban strategy, the mission made a series of observations, based on the attached (Annex). The mission noted that the consultants have focused on producing a blueprint for a national urban system including a set of growth centers, on the basis of the popular identification of Bhutan's urbanization trends and issues, as well as strategic approaches to them. The mission considered the assessment of the latter essential, and focused its observation on these aspects. Some of the key points the mission made include the following:

a. Using the 2005 census information on migration instead of the 2000 urban population count (whose accuracy, a knowledgeable participant agreed, is questionable), the national urban population growth between 2000 and 2005 to be 4.5%-5% a year, instead of 7.3%. At the lower, still high, rate, the national urbanization level in 2020 would be slightly below 50%. The mission similarly estimated Thimphu's population growth to be less than 4%, which if continued would result in the city population of about 135,000 in 2020.

b. These urban growth trends, while rapid and likely to accelerate, are not cause for great concern. In view of the scarce human resources and rural poverty, in fact, the main concern should be the insufficient speed of urbanization and the underlying development of industries and services, and the insufficient size of Thimphu.

c. Regardless of the need to control Thimphu's growth, there is a need for strong policy responses to precipitous economic and demographic decline of some areas, especially the Eastern region, for social and cultural, as well as economic, reasons. Gewog center development would similarly be justified, although one should recognize that many of them could fall into disuse in the long term while a few could grow into important towns.

d. In general there is little need or feasibility for pyramidal urban hierarchy as proposed by the consultant. Given the limited investment resources as well experiences elsewhere, any development policy and programs should focus on enabling, supporting, and managing market-based developments. Unrealistic and unenforceable controls and programs only exacerbate issues that they are designed to prevent. Outside the western region, areas that are growing strongly and deserve support include Sarpang (including Gelephu), Samdrupjongkar (including Dewathang and Nanglam), and Bumthang areas. It is neither necessary nor feasible to boost growth far above the level achieved without intervention.

e. The strategy should include clear and realistic programs for: increasing cost recovery (the minister informed the mission that this would be carried out, including the revision of land tax rates); for improving capacity for urban and infrastructure management; and inter-ministerial coordination of personnel and investment location decisions (such as the principle of consolidated development Gewog centers).

4. It was agreed that the consultant would incorporate the following before finalizing the report:

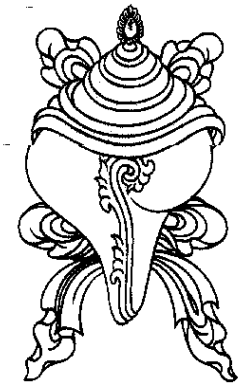
f. Past and future investment and personnel location by public and key private entities;

g. Further analysis and planning of Sarpang-Gelephu and Nanglam;

h. Revision of urban hierarchy to be consistent with the administrative system.

5. It was agreed that the Bank would prepare its own advisory note, taking account of the final report, to be submitted to the council of ministers along with the consultant's final report.

6. The workshop participants expressed less satisfaction with the draft Thimphu City Development Strategy. The mission noted that the work on the Local Area Plans fell short of the expectations of the terms of references. The consultant explained that certain technical aspects have been left out of the scope in view of the limited budget and the relatively recent extensive consultation on the Structure Plan. It was agreed that more work needs to be done to finalize the TCDS, including: the summary documentation of important aspects covered by the Structure Plan, and the investment program.



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