



Statistical Yearbook  
of Bhutan  
2011

National Statistics Bureau  
Royal Government of Bhutan



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## FORWARD

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This Statistical Yearbook (SYB) Publication is the 29<sup>th</sup> edition. It is a comprehensive and systematic compendium of basic statistical information on the country's socio-economic conditions.

The SYB is expected to serve as the principal source of information for planners, policy makers, researchers and academicians both within and outside Bhutan. The compilation is based on information gathered through periodic statistical censuses and surveys, as well as from administrative data maintained by various ministries and agencies.

Every effort has been made to ensure that this publication meets acceptable statistical standards. Data validation, compilation and up-dation protocols have been strictly observed with all the data disseminating/providing agencies. Brief explanatory notes on coverage and data sources, wherever possible, have also been provided for the benefit of the data users.

National Statistics Bureau (NSB) would like to acknowledge the contribution of different ministries and agencies that provided data and information for SYB 2011. In order to improve the quality of the forthcoming issues, we solicit comments and suggestions from the users of this yearbook.

**Director**  
**National Statistics Bureau**

## NOTES FOR USERS

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1. Unless otherwise indicated, the present issue of the Yearbook contains those statistics available as of December 2010.
2. At the beginning of each chapter, general description of the statistics contained therein is given.
3. For some tables, there are footnotes indicating information specific to each figure in the table.
4. Unless otherwise indicated, “Year” refers to the calendar year, and “fiscal year” refers to the 12 months beginning from July to June.

n.a not available

.. rounded to zero

\* sampling error too high for accurate estimation or estimates less than one percent.

() negative numbers

CY calendar year (period from January to December)

FY fiscal year (period from April to March until 1985/86 and from July to June since then, unless otherwise indicated).

5. In some cases, minor discrepancies may occur between sums of component items and totals because of rounding.
6. Detail figures in the tables may not add up to the totals because of rounding.
7. Singular term is most often used to represent plural terms, example: agency for agencies etc.
8. When contents of this book are to be quoted or copied in other publication/report, please give due credit by referring the title of this yearbook (Example) Source: Bhutan Statistical Yearbook 2011, National Statistics Bureau.
9. For additional information on data or for any other queries, please refer to the original source or National Statistics Bureau.

# UNITS OF MEASUREMENT

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## Numbering and Scientific notations (US & scientific Community)

Hundred	= $10^2$
Thousand	= $10^3$
Million	= $10^6$
Billion	= $10^9$
Trillion	= $10^{12}$

### A. Length Measurement

#### 1. Metric equivalents

10 mm	= 1 cm
10 cm	= 1 dm
10 dm	= 1 m
10 m	= 1 dkm
10 dkm	= 1 hm
10 hm	= 1 km

#### Abbreviations

mm	= millimeter
cm	= centimeter
m	= meter
dm	= decimeter
hm	= hectometer

#### 2. British units

12 inches	= 1 foot
3 feet	= 1 yard
5.5 yards	= 1 rod, pole
4 poles	= 1 chain
10 chains	= 1 furlong
8 furlongs	= 1 mile

#### 3. Conversion from British to metric units (lengths)

1 inch	= 2.539998 cm	1 m	= 39.370113 inches
1 foot	= 0.3047997 m	1 m	= 3.280843 feet
1 yard	= 0.9143992 m	1 m	= 1.093614 yard
1 mile	= 1.609343 km	1 k	= 0.6213717 miles
1 nautical mile	= 1.853182 km		

### B. Area measurements

#### 1. British units

144 square inches	= 1 square foot
9 square feet	= 1 square yard
30 1/4 yards	= 1 square rod, pole
40 square rod	= 1 rood
4 roods	= 1 acre
640 acres	= 1 square miles

## 2. Metric units

100 square mm	= 1 square cm
100 square cm	= 1 square dm
100 square dm	= 1 square m
100 square m	= 1 acre
100 square acres	= 1 hectare
100 hectares	= 1 square km

## 3. Conversion from British to Metric units (Area)

1 square yard	= 0.836 square m
1 square feet	= 0.093 square m
1 square inch	= 6.452 square cm
1 square m	= 1.196 square yard
1 square cm	= 0.155 square inch
1 square mile	= 2.590 square km
1 square km	= 0.386 square mile

## C. Weight measurements

### 1. British units

16 dram	= 1 ounce
16 ounces	= 1 pound
28 pounds	= 1 cwt
20 cwt	= 1 ton
14 pounds	= 1 stone

### 2. Metric units

10 mg	= 1 cg
10 cg	= 1 dg
10 dg	= 1 g
10 g	= 1 dkg
10 dkg	= 1 hg
10hg	= 1 kg
100 kg	= 1 quintal
200 m	= 1 carat

### 3. Conversion from British to metric units

1 grain	= 0.0648 g
1 ounce	= 31.103 g
1 g	= 15.432 grains
1 pound	= 0.373 kg
1 tone	= 1.016 metric tones

## D. Conversion of air temperatures

1. Degree Celsius to degree Fahrenheit.  
 $(9 \times T)/5 + 32$ , where "T" is temperature in degree Celsius.
2. Fahrenheit to degree Celsius.  
 $5 \times (T - 32)/9$ , where "T" is temperature in Fahrenheit.

## KEY FACTS ABOUT BHUTAN

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Land area .....	38,394 sq. km.
Forest cover .....	70.5%
Population, 2010 (projected).....	695,822
Population Growth Rate (PHCB 2005) .....	1.3%
Average Household size, (BMIS, 2010) .....	4.6
National Language .....	Dzongkha
National Currency .....	Ngultrum (Nu.)
Hospitals, 2010.....	31
Doctors, 2010 .....	187
Civil servants, 2010.....	23,177
Schools, Institutes, Daycare & NFE centers, 2010 .....	1,582
Teachers (including in institutes & NFE), 2010.....	8,947
Students (including in institutes & NFE), 2010 .....	194,587
Labour Force Participation rate, (LFS 2010) .....	68.6
Unemployment rate, (LFS 2010).....	3.3
Fixed line Telephone subscribers, 2010 .....	26,361
Cellular Mobile subscriber, 2010 .....	165,452
Postal infrastructure, 2010 .....	114
Total road length, 30 June 2011 .....	8,366.2 km
Number of Registered vehicles, 2010 .....	54,123
Electricity generation, 2009/10.....	6,997.6 MU
Electricity exports, 2009/10 .....	5,352.5 MU
Tourist arrivals, 2010.....	27,195
Revenue earned from tourism, 2010 .....	35.98 Mn. US \$
Total Industrial establishments, 2010.....	32,360
Balance of trade, 2009/2010 .....	(13,938.2) Mn. Nu.
Exchange rate (calendar year), Nu. Per US \$, 2010 .....	45.73
Gross international money reserves, 2009/2010 .....	858.4 Mn US \$
Total Tenth Plan budgetary outlay (2008-2013) .....	146,252.2 Mn Nu.
GDP (Current Price), 2010.....	72,477.6 Mn. Nu.
Average inflation rate (year on year), 2010.....	9.10 %
Purchasing Power of Nu., 2010 (base year =2003) .....	0.66 Nu.

## i. Location and Extent

Bhutan is a small and landlocked nation, situated between China (Tibet) and India. It has an area of 38,394 square kilometers with the kingdom's longest east-west dimension stretching around 300 kilometers and 170 kilometers at its maximum north-south dimension. Bhutan is located in the eastern Himalayas and is mostly mountainous and heavily forested. It has 470 kilometers long border with Tibet (China's Xizang Autonomous Region) to the north and northwest and 605 kilometers with the Indian state of Sikkim to the west, West Bengal to the southwest, Assam to the south and southeast, and Arunachal Pradesh to the east. The Indian state of Sikkim separates Bhutan from Nepal, while West Bengal separates Bhutan from Bangladesh. The border with Tibet is traditional following the watershed of the Chumbi Valley in the northwest and the crest of the Himalayas in the north while, the southern border with India was established by treaty with the British in the nineteenth century and basically follows the line made by the Himalayan foothills with the plains.

70.5 percent of the Kingdom is covered with forests; around seven percent with year-round snow and glaciers; nearly three percent is cultivated or Agriculture areas; and four percent as meadows and pastures, while rest of the land is either barren, rocky or scrubland.

## ii. Relief and Surface features

Bhutan is one of the most rugged mountain terrains in the world. It has elevations ranging from 160 meters to more than 7,000 meters above sea level. Bhutan's highest peak Jhomo Lhari, overlooking the Chumbi Valley in the west, is 7,314 meters above sea level; nineteen other peaks exceed 7,000 meters.

In the north, the snowcapped Great Himalayan Range reaches heights of over 7,500 meters above sea level and extends along the Bhutan-China border. The northern region consists of an arc of glaciated mountain peaks with an arctic climate at the highest elevations. Watered by snow-fed rivers, alpine valleys in this region provide pasturage for livestock tended by a sparse population practicing transhumance.

The Inner Himalayas are southward spurs of the Great Himalayan Range. The Black Mountains, in central Bhutan, form a watershed between two major river systems, the Mo Chhu and the Drangme Chhu. Peaks in the Black Mountains range between 1,500 meters and 2,700 meters above sea level, and the fast-flowing rivers have carved out spectacular gorges in the lower mountain areas. The woodlands of the central region provide most of Bhutan's valuable forest production. Eastern Bhutan is divided by yet another southward spur. Western Bhutan has fertile, cultivated valleys and terraced river basins.

In the south, the Southern Hills, or Siwalik Hills, the foothills of the Himalayas, are covered with dense deciduous forest, alluvial lowland river valleys, and mountains that reach to around 1,500 meters above sea level. The foothills descend into the subtropical Plain.



### iii. Climate and Vegetation

The country can be divided into three distinct climatic zones corresponding to the three main geographical divisions. Bhutan's climate is as varied as its altitudes and, like most of Asia; it is affected by the monsoons. Western Bhutan is particularly affected by monsoons that bring between 60 and 90 percent of the region's rainfall. The climate is humid and subtropical in the southern plains and foothills, temperate in the inner Himalayan valleys of the southern and central regions, and cold in the north, with year-round snow on the main Himalayan summits.

Temperatures vary according to elevation. Temperatures in Thimphu, capital of Bhutan, located at 2,320 meters above sea level in west-central Bhutan, range from approximately 14° C to 25° C during the monsoon season of June through September but drop to between about -3° C and 14° C in January. Most of the central portion of the country experiences a cool, temperate climate year round. In the south, a hot, humid climate helps maintain a fairly even temperature range of between 15° C and 30° C year-round, although temperatures sometimes reach beyond 35° C in the valleys during the summer.

Annual precipitation ranges widely in various parts of the country. In the severe climate of the north, there is only about forty millimeters of annual precipitation--primarily snow. In the temperate central regions, a yearly average of around 1,000 millimeters is more common, and 7,800 millimeters per year has been registered at some locations in the humid, subtropical south, ensuring the thick tropical forest. Thimphu experiences dry winter months (December through February) and almost no precipitation until March, when rainfall averages 20 millimeters a month and increases steadily thereafter to a high of 220 millimeters in August for a total annual rainfall of nearly 650 millimeters.

Bhutan's generally dry spring starts in early March and lasts until mid-April. Summer weather commences in mid-April with occasional showers and continues through the early monsoon rains of late June. The summer monsoon lasts from late June through late September with heavy rains from the southwest. The monsoon weather, blocked from its northward progress by the Himalayas, brings heavy rains, high humidity, flash floods and landslides, and numerous misty, overcast days. Autumn, from late September or early October to late November, follows the rainy season. It is characterized by bright, sunny days and some early snowfalls at higher elevations. From late November until March, winter sets in, with frost throughout much of the country and snowfall common above elevations of 3,000 meters. The winter northeast monsoon brings gale-force winds down through high mountain passes.

There is a pronounced difference in the vegetation cover in three different zones of the country and it is mostly due to the prevalence of varied climatic conditions across the kingdom. The southern foothills are mostly covered by the dense and thick deciduous trees while the inner regions are dotted by an infinite variety of plants, flowers and trees including birch, pine, chestnut, oak, apples, peaches and plums are also grown in the fertile valleys. The northern part with the tundra type of climate allows the growth of coniferous trees and other alpine growths like magnolia, rhododendrons, birch, fir, spruce etc... The vegetation is overall expression of various ecological factors, and it is one of the basic analytical tools for developing and understanding the mountain environment.

#### iv. Drainage Pattern

Fed by fresh snow each winter and slow melting in the summer, the glaciers bring millions of liters of fresh water to Bhutan and downriver areas each year. Bhutan has four major river systems: the Drangme Chhu; the Puna Tsang Chhu; the Wang Chhu; and the Amo Chhu. Each flows swiftly out of the Himalayas, southerly through the Duars to join the Brahmaputra River in India. The largest river system, the Drangme Chhu, flows southwesterly from India's state of Arunachal Pradesh and has three major tributaries: the Drangme Chhu, Mangde Chhu, and Chamkhar Chhu. These rivers form the Drangme Chhu basin. In the Duars, where eight tributaries join, the Drangme Chhu is called the Manas Chhu. The 320-kilometer-long Puna Tsang Chhu rises in northwestern Bhutan as the Mo Chhu and Pho Chhu, which are fed by the snows and glaciers from the Great Himalayan Range. They flow southerly to Punakha, where they join to form the Puna Tsang Chhu, which flows southerly into India's state of West Bengal. The Wang Chhu, which is 370 kilometers flows southeasterly through west-central Bhutan, drains the Ha, Paro, and Thimphu valleys, and continues through the foothills, before it finally drains into West Bengal. The smallest river system, the Torsa Chhu, known as the Amo Chhu in its northern reaches, flows swiftly through western Bhutan before broadening near Phuntsholing and then flowing into India. Glaciers in northern Bhutan, which cover about 10 percent of the total surface area, are an important renewable source of water for Bhutan's rivers.

#### v. Government

On 17 December 1907, the civil and monastic representatives unanimously crowned Ugyen Wangchuck as the first hereditary monarch of Bhutan. It was as a result of the influence of the strength and the farsightedness of Ugyen Wangchuck that for the first time Bhutan was united under a central authority, which provided the country with stability and opportunity for development. In 1926 his son Jigme Wangchuck, who ruled Bhutan until his death in 1952, succeeded Ugyen Wangchuck. The third Druk Gyalpo, Jigme Dorji Wangchuck began a campaign of modernization and expansion of Bhutan's government and society based on the accomplishments of his two predecessors in uniting the country under a strong central authority. Hence, the National Assembly consisting of representatives of the people, the Monastic order and civil administration was reestablished in 1953.

The fourth Druk Gyalpo, Jigme Singye Wangchuk became the King in 1972. There had been steady decentralization of decision-making and institute building since His Majesty the King was enthroned. His Majesty's philosophy of Gross National Happiness guided Bhutan into the 21<sup>st</sup> century. The most momentous change in the structure of the government came in 1998 after the devolution of the executive power by His Majesty the King to the Council of Ministers. The Fourth Druk Gyalpo initiated the drafting of Bhutan's first Constitution in 2001 and the Constitution was eventually enacted in 2008. The King abdicated the throne in favour of crown prince in 2006.

The fifth Druk Gyalpo, His Majesty King Jigme Khesar Namgyel Wangchuck acceded to the throne on December 14, 2006 and was crowned on November 6, 2008. His Majesty the king is the head of state. The head of government is the Prime Minister, who is elected from the ruling political party (Druk Phuensum Tshogpa).

## vi. Administrative System

The country is governed through three levels of administration – the

- (i) Central Government (consisting 10 ministries), Departments, Autonomous bodies, Institutions and Corporations.
- (ii) Dzongkhag (District) Administrations consists of 20 districts each headed by dzongkhag administrator (Dzongdag), and
- (iii) The Gewog (Block) Administrations consists of 205 Gewogs headed by Gewog headman called Gup. He is assisted by Gewog Administrative Officer (GAO), Mangmi, Geydrung and Tshogpas.

In order to plan and review the development activities most efficiently in the Dzongkhag, the Dzongkhag Yargay Tshogdu (DYT) was established in 1981. The DYT members are made up of the elected representative of the people and Dzongkhag officials, and the chairman of the DYT is one of the elected members of the people (Gup). Similarly, the Gewog Yargay Tshogchung (GYTs) was established in 1991 for further decentralization process undertaken in the country. The GYT members are mostly elected representative of the people comprising Gup, Mangmi, Tshogpas and GAO is the GYT secretary. The main role of the GYT is to plan, priorities and implement the development activities in their respective Gewogs. This has been done to realize a sense of participation and responsibilities in the course of development process in their Gewogs.

## vii. The National Assembly

The National Assembly (Gyelyong Tshogdu) consists of 47 members who are representatives from the 47 Constituencies elected by the people of their respective constituencies. The main functions of the National Assembly are to enact, amend or repeal laws and approve the national budget. The National Assembly also reviews and approves the Five Year Plans which are formulated by the government in consultation with the people of every Dzongkhags. It also deliberates on issues that affect the security and well-being of the country and promote the welfare and happiness of the people. The National Assembly meets twice a year. However, if an important and emergency matter demands, special sessions of the National Assembly may be convened by the speaker. The duration of the National Assembly is governed by the nature and scope of the points for discussion received from the people. A session normally lasts about three weeks. The speaker is the presiding officer of the House. He is assisted by the Deputy Speaker in the conduct and smooth functioning of the house. The day to day administrative functions of the National Assembly rest with the secretariat which is headed by a secretary.

## viii. The National Council

The National Council was established in 2008 under Article 11 of the constitution of Bhutan. There are 25 members; out of which 20 are elected by the people from 20 Dzongkhags and the other 5 are nominated by His Majesty, the Druk Gyalpo. Their tenure is five years which commences from the date of the first sitting of the National Council. The main functions of the National Council are to:

- i. Ensure that the government safeguards the interest of the nation and fulfills the aspirations of the people through public review of policies and issues, bills and other legislation, and scrutiny of state functions.
- ii. Act as the house of review on matters affecting the security and sovereignty of the country and the interests of the nation and people that need to be brought to the notice of His Majesty, the Druk Gyalpo, the Prime Minister and the National Assembly.

The National Council meets twice a year. However, special sessions may also be convened depending upon the needs. The chairperson, who is elected from 25 members of the National Council is the Presiding Officer of the House, and is assisted by a Deputy Chairperson in the smooth functioning and the conduct of the House. The Nation Council has seven working committees; namely the *House Committee*, the *Legislative Committee*, the *Good Governance Committee*, the *Social & Cultural Affairs Committee*, and the *International Relation & Security Committee*. Each committee has a minimum of seven members headed by a chairperson who is elected from the seven members. The National Council is assisted in the discharge of its parliamentary functions by a secretariat which is headed by a secretary general.

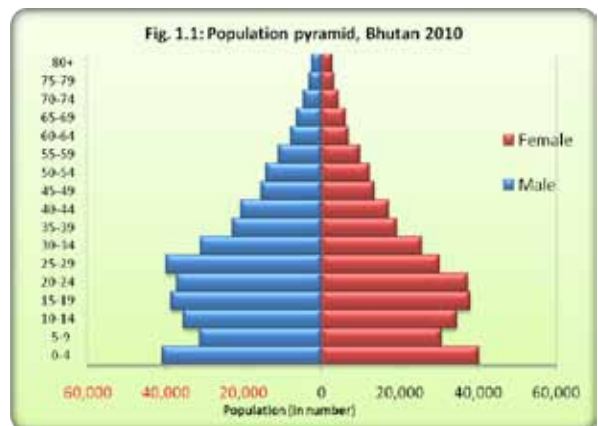
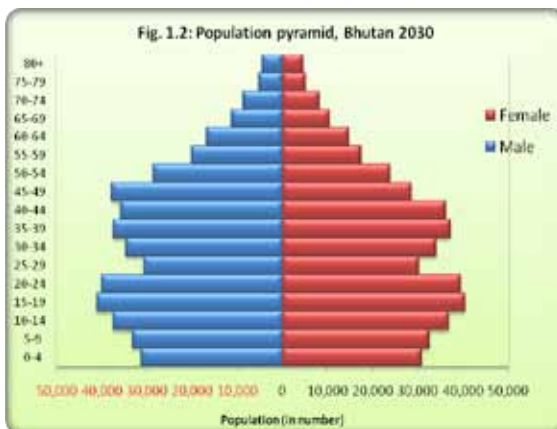
#### ix. The Monastic Body

The Monastic Body comprises the Central Monastic Body and the Rabdeys (Dzongkhag Monastic Body). As of 31<sup>st</sup> Dec 2010, the central monastic body has a total strength of over 5,000 Gelongs (monks) registered in different dzongs and shedras. The central monastic bodies receives annual subsidy from the Government to manage and run its day to day affairs. Punakha and Thimphu Dratshang have a total strength of about 1,600 monks and constitute the Central Monastic Body. The Monastic Body is the sole arbiter on religious matters. The Je Khenpo, who is chosen from among high-ranking gelongs, is the head of the Body. He is assisted by five high-ranking Lopens of the Central Monastic Body.

# CHAPTER 1

## POPULATION

Population presents statistics on the basic attributes of population such as the size and the growth of population, its geographical distribution, its structure by sex and age etc. The principle source of data on population is the population and housing census, which is basically conducted on a five or ten yearly basis. The Population and Housing Census in Bhutan was first conducted in May 2005. The census provides a full count of the population according to a range of characteristics such as demography, health, education and other social aspects. It is useful not only because they provide a range of current population data but are also used as a benchmark for making population estimates in non-census years and for population projections. Population censuses were undertaken in Bhutan in 1969 and 1980. The population figures for those early years were large because of the large influx of migrants from neighboring countries, particularly labor migrants at the instance of construction coinciding with the large-scale development work on infrastructure expansion. With the development emphasis changing to human resource development the large migrants moved out and in 1996 the total population was found to be around 600,000. The Census conducted in 2005 was based on the international standards and had been enumerated as the *de facto* population.



The second major element of population statistics relates to the demographic characteristics of the population. The most common source of information on demography is the vital registration system (which usually covers the registration of births and deaths and sometimes marriages and divorces). In Bhutan, the vital registration system does not currently provide the full coverage of births and deaths and it has been necessary to undertake special sample surveys, (the first one in 1984, and second one in 1994 and 2000) to obtain important demographic information. The Statistics presented in this chapter are purely of the Population and Housing Census of Bhutan 2005. The actual resident population enumerated as of 30<sup>th</sup> and 31<sup>st</sup> May 2005 is 634,982 persons out of which 333,595 persons are male and 301,387 are females. The urban population consists of 196,111 persons while 438,871 are in the rural areas. Based on the population growth rate of 1.3% derived from PHCB 2005, the population for 2006 was calculated at 646,852.

## The interpretations of Demographic indicators are as follows:

**Crude birth rate:** Number of live births in a year per thousand populations.

**General fertility rate:** Number of live births in a year per thousand women in the childbearing age (15 to 49).

**Total fertility rate:** Average number of children born by women during their reproductive span of life.

**Gross reproductive rate:** Measures the extent to which a cohort of newly born girls will replace their mothers under pre-determined schedules of fertility and mortality.

**Crude death rate:** Number of deaths in a year per thousand populations.

**Infant mortality rate:** Number of deaths during first year of life per thousand live births.

**Maternal mortality ratio:** The annual number of deaths of women from pregnancy-related causes per thousand live births.

**Rate of natural Increase:** the difference between the crude birth rate and the crude death rate.

**Dependency ratio:** Measures the number of dependents as a percentage of population aged 15 to 64. Child dependency refers to children aged 0 to 14 years, while old age dependency refers to persons aged 65 and over.

**Index of aging:** It is the number of person's aged 65 and over as a percentage of the number of persons aged 0 to 14.

TABLE 1.1: PROJECTED POPULATION BY SEX, BHUTAN, 2010 - 2030

(in numbers)

Year	Persons			Percent		
	Total	Male	Female	Total	Male	Female
2010	695,822	363,383	332,439	100.0	52.2	47.8
2011	708,265	369,476	338,789	100.0	52.2	47.8
2012	720,679	375,554	345,125	100.0	52.1	47.9
2013	733,004	381,582	351,422	100.0	52.1	47.9
2014	745,153	387,520	357,633	100.0	52.0	48.0
2015	757,042	393,324	363,718	100.0	52.0	48.0
2016	768,577	398,948	369,629	100.0	51.9	48.1
2017	779,666	404,347	375,319	100.0	51.9	48.1
2018	790,215	409,474	380,741	100.0	51.8	48.2
2019	800,154	414,293	385,861	100.0	51.8	48.2
2020	809,397	418,760	390,637	100.0	51.7	48.3
2021	818,370	423,085	395,285	100.0	51.7	48.3
2022	827,038	427,250	399,788	100.0	51.7	48.3
2023	835,379	431,247	404,132	100.0	51.6	48.4
2024	843,363	435,058	408,305	100.0	51.6	48.4
2025	850,976	438,679	412,297	100.0	51.6	48.4
2026	858,410	442,200	416,210	100.0	51.5	48.5
2027	865,662	445,626	420,036	100.0	51.5	48.5
2028	872,759	448,965	423,794	100.0	51.4	48.6
2029	879,707	452,224	427,483	100.0	51.4	48.6
2030	886,523	455,409	431,114	100.0	51.4	48.6

Source: Population Projections Bhutan, 2005-2030, NSB

TABLE 1.2: PROJECTED POPULATION BY AGE GROUP AND SEX, BHUTAN 2010 - 2012

(in numbers)

Age group	2010			2011			2012		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
0-4	81,063	40,853	40,210	81,918	41,285	40,633	82,559	41,610	40,949
5-9	61,901	31,204	30,697	64,406	32,399	32,007	67,467	33,872	33,595
10-14	70,108	35,404	34,704	68,504	34,672	33,832	66,946	33,974	32,972
15-19	76,636	38,536	38,100	75,834	38,234	37,600	74,607	37,645	36,962
20-24	74,730	37,240	37,490	75,316	37,149	38,167	75,899	37,422	38,477
25-29	69,980	39,907	30,073	71,427	39,991	31,436	72,426	39,398	33,028
30-34	56,767	31,061	25,706	59,707	33,091	26,616	62,533	35,205	27,328
35-39	42,226	22,888	19,338	44,255	23,957	20,298	46,873	25,337	21,536
40-44	38,000	20,708	17,292	38,818	21,152	17,666	39,237	21,354	17,883
45-49	29,087	15,553	13,534	30,353	16,280	14,073	32,072	17,280	14,792
50-54	26,535	14,229	12,306	26,848	14,375	12,473	26,931	14,384	12,547
55-59	20,697	10,980	9,717	21,696	11,516	10,180	22,705	12,068	10,637
60-64	14,873	7,867	7,006	15,424	8,158	7,266	16,167	8,535	7,632
65-69	12,566	6,425	6,141	12,600	6,451	6,149	12,560	6,460	6,100
70-74	9,113	4,729	4,384	9,314	4,804	4,510	9,570	4,894	4,676
75-79	6,253	3,163	3,090	6,350	3,221	3,129	6,397	3,259	3,138
80+	5,287	2,636	2,651	5,495	2,741	2,754	5,730	2,857	2,873
<b>Total</b>	<b>695,822</b>	<b>363,383</b>	<b>332,439</b>	<b>708,265</b>	<b>369,476</b>	<b>338,789</b>	<b>720,679</b>	<b>375,554</b>	<b>345,125</b>

Source: Population Projections Bhutan, 2005-2030, NSB



TABLE 1.3: PROJECTED POPULATION BY AGE GROUP AND SEX, BHUTAN 2013 - 2015

(in numbers)

Age group	2013			2014			2015		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
0-4	82,936	41,801	41,135	83,001	41,835	41,166	82,716	41,693	41,023
5-9	71,111	35,670	35,441	75,377	37,859	37,518	80,336	40,533	39,803
10-14	65,365	33,224	32,141	63,657	32,309	31,348	61,685	31,097	30,588
15-19	73,090	36,868	36,222	71,452	36,039	35,413	69,822	35,253	34,569
20-24	76,354	37,879	38,475	76,495	38,239	38,256	76,199	38,303	37,896
25-29	73,105	38,429	34,676	73,652	37,516	36,136	74,196	36,963	37,233
30-34	65,147	37,169	27,978	67,446	38,683	28,763	69,358	39,547	29,811
35-39	49,896	26,978	22,918	53,044	28,790	24,254	56,100	30,689	25,411
40-44	39,561	21,490	18,071	40,225	21,811	18,414	41,526	22,491	19,035
45-49	33,987	18,396	15,591	35,732	19,405	16,327	37,069	20,163	16,906
50-54	26,987	14,379	12,608	27,287	14,522	12,765	28,007	14,919	13,088
55-59	23,651	12,590	11,061	24,440	13,021	11,419	25,023	13,329	11,694
60-64	17,044	8,974	8,070	17,978	9,447	8,531	18,908	9,927	8,981
65-69	12,534	6,485	6,049	12,636	6,572	6,064	12,936	6,747	6,189
70-74	9,836	4,986	4,850	10,054	5,065	4,989	10,192	5,122	5,070
75-79	6,430	3,289	3,141	6,488	3,323	3,165	6,594	3,368	3,226
80+	5,970	2,975	2,995	6,189	3,084	3,105	6,375	3,180	3,195
<b>Total</b>	<b>733,004</b>	<b>381,582</b>	<b>351,422</b>	<b>745,153</b>	<b>387,520</b>	<b>357,633</b>	<b>757,042</b>	<b>393,324</b>	<b>363,718</b>

Source: Population Projections Bhutan, 2005-2030, NSB

TABLE 1.4: PROJECTED POPULATION BY AGE GROUP AND SEX, BHUTAN 2016 - 2018  
(in numbers)

Age group	2016			2017			2018		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
0-4	82,041	41,354	40,687	80,944	40,804	40,140	79,405	40,032	39,373
5-9	81,213	40,975	40,238	81,877	41,310	40,567	82,279	41,513	40,766
10-14	64,190	32,292	31,898	67,250	33,765	33,485	70,890	35,561	35,329
15-19	68,236	34,530	33,706	66,693	33,839	32,854	65,126	33,096	32,030
20-24	75,416	38,010	37,406	74,212	37,432	36,780	72,716	36,666	36,050
25-29	74,797	36,881	37,916	75,395	37,162	38,233	75,864	37,625	38,239
30-34	70,813	39,641	31,172	71,824	39,063	32,761	72,518	38,113	34,405
35-39	59,026	32,706	26,320	61,841	34,808	27,033	64,448	36,763	27,685
40-44	43,542	23,553	19,989	46,139	24,922	21,217	49,135	26,548	22,587
45-49	37,885	20,606	17,279	38,313	20,814	17,499	38,653	20,960	17,693
50-54	29,253	15,633	13,620	30,933	16,607	14,326	32,802	17,693	15,109
55-59	25,338	13,477	11,861	25,441	13,499	11,942	25,520	13,509	12,011
60-64	19,844	10,425	9,419	20,794	10,940	9,854	21,686	11,428	10,258
65-69	13,443	7,012	6,431	14,118	7,351	6,767	14,911	7,743	7,168
70-74	10,238	5,153	5,085	10,226	5,171	5,055	10,229	5,205	5,024
75-79	6,759	3,430	3,329	6,966	3,504	3,462	7,178	3,579	3,599
80+	6,543	3,270	3,273	6,700	3,356	3,344	6,855	3,440	3,415
<b>Total</b>	<b>768,577</b>	<b>398,948</b>	<b>369,629</b>	<b>779,666</b>	<b>404,347</b>	<b>375,319</b>	<b>790,215</b>	<b>409,474</b>	<b>380,741</b>

Source: Population Projections Bhutan, 2005-2030, NSB

TABLE 1.5: PROJECTED POPULATION BY AGE GROUP AND SEX, BHUTAN 2019 - 2021

(in numbers)

Age group	2019			2020			2021		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
0-4	77,429	39,040	38,389	75,031	37,835	37,196	72,746	36,686	36,060
5-9	82,373	41,561	40,812	82,115	41,432	40,683	81,469	41,108	40,361
10-14	75,152	37,749	37,403	80,105	40,419	39,686	80,987	40,864	40,123
15-19	63,434	32,190	31,244	61,477	30,987	30,490	63,982	32,183	31,799
20-24	71,100	35,849	35,251	69,490	35,074	34,416	67,921	34,360	33,561
25-29	76,021	37,991	38,030	75,742	38,063	37,679	74,979	37,780	37,199
30-34	73,081	37,219	35,862	73,640	36,681	36,959	74,253	36,609	37,644
35-39	66,743	38,272	28,471	68,657	39,140	29,517	70,118	39,244	30,874
40-44	52,257	28,344	23,913	55,288	30,227	25,061	58,193	32,228	25,965
45-49	39,326	21,288	18,038	40,622	21,967	18,655	42,617	23,018	19,599
50-54	34,508	18,677	15,831	35,820	19,419	16,401	36,628	19,857	16,771
55-59	25,832	13,660	12,172	26,546	14,053	12,493	27,754	14,742	13,012
60-64	22,435	11,834	10,601	22,994	12,127	10,867	23,309	12,275	11,034
65-69	15,754	8,165	7,589	16,596	8,595	8,001	17,446	9,042	8,404
70-74	10,339	5,289	5,050	10,615	5,445	5,170	11,060	5,673	5,387
75-79	7,352	3,643	3,709	7,466	3,691	3,775	7,512	3,721	3,791
80+	7,018	3,522	3,496	7,193	3,605	3,588	7,396	3,695	3,701
<b>Total</b>	<b>800,154</b>	<b>414,293</b>	<b>385,861</b>	<b>809,397</b>	<b>418,760</b>	<b>390,637</b>	<b>818,370</b>	<b>423,085</b>	<b>395,285</b>

Source: Population Projections Bhutan, 2005-2030, NSB

TABLE 1.6: PROJECTED POPULATION BY AGE GROUP AND SEX, BHUTAN 2022 - 2024

(in numbers)

Age group	2022			2023			2024		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
0-4	70,635	35,623	35,012	68,763	34,679	34,084	67,192	33,887	33,305
5-9	80,400	40,571	39,829	78,894	39,814	39,080	76,946	38,834	38,112
10-14	81,657	41,202	40,455	82,065	41,408	40,657	82,163	41,458	40,705
15-19	67,039	33,654	33,385	70,676	35,449	35,227	74,929	37,632	37,297
20-24	66,394	33,677	32,717	64,843	32,943	31,900	63,165	32,044	31,121
25-29	73,794	37,212	36,582	72,317	36,457	35,860	70,720	35,649	35,071
30-34	74,862	36,896	37,966	75,343	37,363	37,980	75,511	37,733	37,778
35-39	71,137	38,682	32,455	71,841	37,750	34,091	72,414	36,872	35,542
40-44	60,988	34,311	26,677	63,577	36,249	27,328	65,858	37,747	28,111
45-49	45,181	24,369	20,812	48,135	25,971	22,164	51,211	27,739	23,472
50-54	37,063	20,070	16,993	37,414	20,224	17,190	38,087	20,553	17,534
55-59	29,376	15,678	13,698	31,172	16,716	14,456	32,810	17,655	15,155
60-64	23,427	12,308	11,119	23,525	12,331	11,194	23,841	12,485	11,356
65-69	18,308	9,504	8,804	19,117	9,941	9,176	19,799	10,306	9,493
70-74	11,642	5,961	5,681	12,320	6,292	6,028	13,038	6,646	6,392
75-79	7,517	3,742	3,775	7,538	3,776	3,762	7,642	3,848	3,794
80+	7,618	3,790	3,828	7,839	3,884	3,955	8,037	3,970	4,067
<b>Total</b>	<b>827,038</b>	<b>427,250</b>	<b>399,788</b>	<b>835,379</b>	<b>431,247</b>	<b>404,132</b>	<b>843,363</b>	<b>435,058</b>	<b>408,305</b>

Source: Population Projections Bhutan, 2005-2030, NSB

TABLE 1.7: PROJECTED POPULATION BY AGE GROUP AND SEX, BHUTAN 2025 - 2027

(in numbers)

Age group	2025			2026			2027		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
0-4	65,982	33,276	32,706	64,877	32,718	32,159	63,920	32,235	31,685
5-9	74,575	37,641	36,934	72,314	36,501	35,813	70,225	35,448	34,777
10-14	81,911	41,331	40,580	81,271	41,010	40,261	80,209	40,476	39,733
15-19	79,870	40,295	39,575	80,757	40,742	40,015	81,430	41,081	40,349
20-24	61,222	30,849	30,373	63,725	32,044	31,681	66,778	33,513	33,265
25-29	69,126	34,882	34,244	67,574	34,176	33,398	66,063	33,501	32,562
30-34	75,244	37,809	37,435	74,496	37,533	36,963	73,329	36,974	36,355
35-39	72,983	36,347	36,636	73,604	36,283	37,321	74,222	36,575	37,647
40-44	67,761	38,610	29,151	69,219	38,720	30,499	70,241	38,173	32,068
45-49	54,197	29,592	24,605	57,062	31,562	25,500	59,819	33,614	26,205
50-54	39,366	21,222	18,144	41,323	22,252	19,071	43,831	23,571	20,260
55-59	34,072	18,365	15,707	34,858	18,789	16,069	35,291	19,001	16,290
60-64	24,529	12,862	11,667	25,676	13,511	12,165	27,201	14,384	12,817
65-69	20,311	10,572	9,739	20,607	10,710	9,897	20,734	10,751	9,983
70-74	13,756	7,008	6,748	14,482	7,384	7,098	15,221	7,775	7,446
75-79	7,869	3,973	3,896	8,224	4,151	4,073	8,678	4,372	4,306
80+	8,202	4,045	4,157	8,341	4,114	4,227	8,470	4,182	4,288
<b>Total</b>	<b>850,976</b>	<b>438,679</b>	<b>412,297</b>	<b>858,410</b>	<b>442,200</b>	<b>416,210</b>	<b>865,662</b>	<b>445,626</b>	<b>420,036</b>

Source: Population Projections Bhutan, 2005-2030, NSB

TABLE 1.8: PROJECTED POPULATION BY AGE GROUP AND SEX, BHUTAN 2028 - 2030

(in numbers)

Age group	2028			2029			2030		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
0-4	63,154	31,848	31,306	62,612	31,574	31,038	62,326	31,429	30,897
5-9	68,372	34,512	33,860	66,819	33,727	33,092	65,627	33,124	32,503
10-14	78,710	39,722	38,988	76,772	38,747	38,025	74,410	37,558	36,852
15-19	81,842	41,289	40,553	81,945	41,341	40,604	81,700	41,218	40,482
20-24	70,408	35,304	35,104	74,651	37,481	37,170	79,580	40,136	39,444
25-29	64,527	32,774	31,753	62,864	31,883	30,981	60,938	30,698	30,240
30-34	71,872	36,228	35,644	70,295	35,431	34,864	68,722	34,674	34,048
35-39	74,711	37,044	37,667	74,890	37,417	37,473	74,640	37,499	37,141
40-44	70,955	37,263	33,692	71,540	36,406	35,134	72,121	35,898	36,223
45-49	62,376	35,523	26,853	64,633	37,001	27,632	66,521	37,857	28,664
50-54	46,717	25,132	21,585	49,722	26,856	22,866	52,644	28,665	23,979
55-59	35,649	19,161	16,488	36,320	19,490	16,830	37,570	20,143	17,427
60-64	28,887	15,350	13,537	30,426	16,225	14,201	31,614	16,887	14,727
65-69	20,849	10,787	10,062	21,161	10,940	10,221	21,807	11,290	10,517
70-74	15,918	8,146	7,772	16,506	8,456	8,050	16,954	8,685	8,269
75-79	9,201	4,624	4,577	9,754	4,893	4,861	10,306	5,168	5,138
80+	8,611	4,258	4,353	8,797	4,356	4,441	9,043	4,480	4,563
<b>Total</b>	<b>872,759</b>	<b>448,965</b>	<b>423,794</b>	<b>879,707</b>	<b>452,224</b>	<b>427,483</b>	<b>886,523</b>	<b>455,409</b>	<b>431,114</b>

Source: Population Projections Bhutan, 2005-2030, NSB

TABLE 1.9: PROJECTED POPULATION BY SEX AND SINGLE YEAR OF AGE, BHUTAN 2010

(in numbers)

Age group	Male	Female	Both sex	Age	Male	Female	Both sex	Age	Male	Female	Both sex
0	9,781	9,623	19,404	27	8,212	5,915	14,127	54	2,639	2,294	4,933
1	8,846	8,704	17,550	28	7,973	5,718	13,691	55	2,480	2,174	4,654
2	8,037	7,911	15,948	29	7,541	5,600	13,141	56	2,336	2,064	4,400
3	7,363	7,249	14,612	30	7,055	5,513	12,568	57	2,192	1,948	4,140
4	6,826	6,723	13,549	31	6,606	5,391	11,997	58	2,053	1,827	3,880
5	6,433	6,337	12,770	32	6,173	5,214	11,387	59	1,919	1,704	3,623
6	6,190	6,097	12,287	33	5,785	4,953	10,738	60	1,782	1,575	3,357
7	6,098	6,001	12,099	34	5,442	4,635	10,077	61	1,649	1,452	3,101
8	6,152	6,047	12,199	35	5,078	4,296	9,374	62	1,543	1,363	2,906
9	6,331	6,215	12,546	36	4,717	3,995	8,712	63	1,470	1,316	2,786
10	6,595	6,465	13,060	37	4,458	3,772	8,230	64	1,423	1,300	2,723
11	6,889	6,747	13,636	38	4,333	3,656	7,989	65	1,387	1,298	2,685
12	7,147	6,999	14,146	39	4,302	3,619	7,921	66	1,347	1,286	2,633
13	7,328	7,183	14,511	40	4,325	3,618	7,943	67	1,299	1,256	2,555
14	7,445	7,310	14,755	41	4,323	3,594	7,917	68	1,234	1,193	2,427
15	7,582	7,429	15,011	42	4,244	3,524	7,768	69	1,158	1,108	2,266
16	7,731	7,557	15,288	43	4,047	3,377	7,424	70	1,079	1,016	2,095
17	7,802	7,655	15,457	44	3,769	3,179	6,948	71	1,005	931	1,936
18	7,765	7,718	15,483	45	3,464	2,966	6,430	72	938	862	1,800
19	7,656	7,741	15,397	46	3,204	2,781	5,985	73	880	808	1,688
20	7,481	7,758	15,239	47	3,018	2,646	5,664	74	827	767	1,594
21	7,329	7,740	15,069	48	2,936	2,579	5,515	75	774	730	1,504
22	7,297	7,616	14,913	49	2,931	2,562	5,493	76	715	690	1,405
23	7,440	7,361	14,801	50	2,952	2,561	5,513	77	648	638	1,286
24	7,693	7,015	14,708	51	2,945	2,542	5,487	78	565	566	1,131
25	7,988	6,612	14,600	52	2,901	2,498	5,399	79	461	466	927
26	8,193	6,228	14,421	53	2,792	2,411	5,203	80 +	2,636	2,651	5,287
<b>Total</b>									<b>363,383</b>	<b>332,439</b>	<b>695,822</b>

Source: Population Projections Bhutan, 2005-2030, NSB

TABLE 1.10: PROJECTED POPULATION BY SEX AND SINGLE YEAR OF AGE, BHUTAN 2015

(in numbers)

Age group	Male	Female	Both sex	Age	Male	Female	Both sex	Age	Male	Female	Both sex
0	8,334	8,198	16,532	27	7,243	7,564	14,807	54	2,786	2,461	5,247
1	8,242	8,114	16,356	28	7,383	7,309	14,692	55	2,793	2,452	5,245
2	8,273	8,143	16,416	29	7,631	6,962	14,593	56	2,774	2,426	5,200
3	8,369	8,235	16,604	30	7,922	6,560	14,482	57	2,717	2,375	5,092
4	8,475	8,333	16,808	31	8,122	6,176	14,298	58	2,602	2,281	4,883
5	8,530	8,381	16,911	32	8,139	5,864	14,003	59	2,443	2,160	4,603
6	8,480	8,325	16,805	33	7,897	5,665	13,562	60	2,278	2,035	4,313
7	8,275	8,123	16,398	34	7,467	5,546	13,013	61	2,128	1,920	4,048
8	7,891	7,747	15,638	35	6,981	5,456	12,437	62	1,980	1,799	3,779
9	7,357	7,227	14,584	36	6,532	5,333	11,865	63	1,838	1,675	3,513
10	6,756	6,643	13,399	37	6,098	5,154	11,252	64	1,703	1,552	3,255
11	6,226	6,129	12,355	38	5,711	4,892	10,603	65	1,565	1,422	2,987
12	5,928	5,837	11,765	39	5,367	4,576	9,943	66	1,432	1,298	2,730
13	5,957	5,860	11,817	40	5,003	4,238	9,241	67	1,322	1,204	2,526
14	6,230	6,119	12,349	41	4,643	3,937	8,580	68	1,242	1,147	2,389
15	6,573	6,445	13,018	42	4,382	3,712	8,094	69	1,186	1,118	2,304
16	6,861	6,723	13,584	43	4,250	3,595	7,845	70	1,139	1,098	2,237
17	7,117	6,971	14,088	44	4,213	3,553	7,766	71	1,090	1,073	2,163
18	7,294	7,153	14,447	45	4,227	3,547	7,774	72	1,034	1,032	2,066
19	7,408	7,277	14,685	46	4,218	3,520	7,738	73	967	971	1,938
20	7,541	7,394	14,935	47	4,132	3,445	7,577	74	892	896	1,788
21	7,687	7,519	15,206	48	3,933	3,296	7,229	75	813	810	1,623
22	7,754	7,614	15,368	49	3,653	3,098	6,751	76	735	722	1,457
23	7,716	7,674	15,390	50	3,349	2,883	6,232	77	663	635	1,298
24	7,605	7,695	15,300	51	3,086	2,698	5,784	78	601	559	1,160
25	7,430	7,710	15,140	52	2,894	2,559	5,453	79	556	500	1,056
26	7,276	7,688	14,964	53	2,804	2,487	5,291	80+	3,180	3,195	6,375
<b>Total</b>									<b>393,324</b>	<b>363,718</b>	<b>757,042</b>

Source: Population Projections Bhutan, 2005-2030, NSB



TABLE 1.11: PROJECTED POPULATION BY SEX AND SINGLE YEAR OF AGE, BHUTAN 2020

(in numbers)

Age group	Male	Female	Both sex	Age	Male	Female	Both sex	Age	Male	Female	Both sex
0	6,457	6,361	12,818	27	7,705	7,570	15,275	54	3,495	2,990	6,485
1	7,264	7,145	14,409	28	7,665	7,628	15,293	55	3,189	2,775	5,964
2	7,790	7,656	15,446	29	7,555	7,647	15,202	56	2,925	2,587	5,512
3	8,093	7,950	16,043	30	7,379	7,659	15,038	57	2,727	2,443	5,170
4	8,231	8,084	16,315	31	7,224	7,634	14,858	58	2,623	2,362	4,985
5	8,266	8,118	16,384	32	7,189	7,508	14,697	59	2,589	2,326	4,915
6	8,257	8,107	16,364	33	7,323	7,253	14,576	60	2,577	2,305	4,882
7	8,251	8,103	16,354	34	7,566	6,905	14,471	61	2,543	2,269	4,812
8	8,289	8,139	16,428	35	7,850	6,503	14,353	62	2,473	2,208	4,681
9	8,369	8,216	16,585	36	8,044	6,120	14,164	63	2,349	2,107	4,456
10	8,449	8,293	16,742	37	8,055	5,806	13,861	64	2,185	1,978	4,163
11	8,450	8,295	16,745	38	7,812	5,605	13,417	65	2,015	1,847	3,862
12	8,280	8,128	16,408	39	7,379	5,483	12,862	66	1,862	1,725	3,587
13	7,888	7,746	15,634	40	6,892	5,390	12,282	67	1,711	1,601	3,312
14	7,352	7,224	14,576	41	6,441	5,264	11,705	68	1,569	1,475	3,044
15	6,737	6,626	13,363	42	6,005	5,083	11,088	69	1,438	1,353	2,791
16	6,206	6,111	12,317	43	5,617	4,820	10,437	70	1,312	1,235	2,547
17	5,906	5,817	11,723	44	5,272	4,504	9,776	71	1,194	1,123	2,317
18	5,934	5,840	11,774	45	4,908	4,166	9,074	72	1,080	1,022	2,102
19	6,204	6,096	12,300	46	4,545	3,865	8,410	73	976	933	1,909
20	6,543	6,420	12,963	47	4,280	3,639	7,919	74	883	857	1,740
21	6,829	6,695	13,524	48	4,141	3,516	7,657	75	805	797	1,602
22	7,080	6,940	14,020	49	4,093	3,469	7,562	76	746	756	1,502
23	7,255	7,119	14,374	50	4,095	3,456	7,551	77	711	733	1,444
24	7,367	7,242	14,609	51	4,074	3,422	7,496	78	702	733	1,435
25	7,497	7,356	14,853	52	3,980	3,342	7,322	79	727	756	1,483
26	7,641	7,478	15,119	53	3,775	3,191	6,966	80 +	3,605	3,588	7,193
<b>Total</b>									<b>418,760</b>	<b>390,637</b>	<b>809,397</b>

Source: Population Projections Bhutan, 2005-2030, NSB

TABLE 1.12: PROJECTED POPULATION BY SEX AND SINGLE YEAR OF AGE, BHUTAN 2025

(in numbers)

Age	Male	Female	Both sex	Age	Male	Female	Both sex	Age	Male	Female	Both sex
0	6,399	6,297	12,696	27	7,042	6,906	13,948	54	3,922	3,355	7,277
1	6,501	6,393	12,894	28	7,214	7,082	14,296	55	3,907	3,332	7,239
2	6,631	6,518	13,149	29	7,324	7,202	14,526	56	3,869	3,288	7,157
3	6,786	6,666	13,452	30	7,452	7,313	14,765	57	3,764	3,201	6,965
4	6,959	6,832	13,791	31	7,592	7,433	15,025	58	3,554	3,045	6,599
5	7,145	7,012	14,157	32	7,654	7,522	15,176	59	3,271	2,841	6,112
6	7,338	7,200	14,538	33	7,612	7,576	15,188	60	2,966	2,624	5,590
7	7,532	7,390	14,922	34	7,499	7,591	15,090	61	2,700	2,433	5,133
8	7,723	7,577	15,300	35	7,322	7,600	14,922	62	2,495	2,282	4,777
9	7,903	7,755	15,658	36	7,164	7,571	14,735	63	2,378	2,189	4,567
10	8,065	7,916	15,981	37	7,124	7,443	14,567	64	2,323	2,139	4,462
11	8,202	8,052	16,254	38	7,252	7,185	14,437	65	2,291	2,102	4,393
12	8,306	8,156	16,462	39	7,485	6,837	14,322	66	2,238	2,051	4,289
13	8,369	8,219	16,588	40	7,759	6,434	14,193	67	2,156	1,979	4,135
14	8,389	8,237	16,626	41	7,943	6,050	13,993	68	2,026	1,870	3,896
15	8,427	8,274	16,701	42	7,947	5,734	13,681	69	1,861	1,737	3,598
16	8,426	8,272	16,698	43	7,699	5,530	13,229	70	1,686	1,595	3,281
17	8,254	8,105	16,359	44	7,262	5,403	12,665	71	1,522	1,459	2,981
18	7,862	7,722	15,584	45	6,772	5,305	12,077	72	1,380	1,336	2,716
19	7,326	7,202	14,528	46	6,316	5,175	11,491	73	1,261	1,229	2,490
20	6,711	6,604	13,315	47	5,878	4,990	10,868	74	1,159	1,129	2,288
21	6,180	6,089	12,269	48	5,487	4,726	10,213	75	1,061	1,032	2,093
22	5,880	5,795	11,675	49	5,139	4,409	9,548	76	956	927	1,883
23	5,905	5,816	11,721	50	4,772	4,071	8,843	77	828	806	1,634
24	6,173	6,069	12,242	51	4,408	3,769	8,177	78	668	657	1,325
25	6,510	6,391	12,901	52	4,135	3,539	7,674	79	460	474	934
26	6,792	6,663	13,455	53	3,985	3,410	7,395	80+	4,045	4,157	8,202
<b>Total</b>									<b>438,679</b>	<b>412,297</b>	<b>850,976</b>

Source: Population Projections Bhutan, 2005-2030, NSB

TABLE 1.13: PROJECTED POPULATION BY SEX AND SINGLE YEAR OF AGE, BHUTAN 2030

(in numbers)

Age	Male	Female	Both sex	Age	Male	Female	Both sex	Age	Male	Female	Both sex	
0	6,413	6,313	12,726	27	5,851	5,769	11620	54	4,944	4277	9,221	
1	6,292	6,189	12,481	28	5,875	5,788	11663	55	4,575	3939	8,514	
2	6,232	6,125	12,357	29	6,140	6,040	12180	56	4,207	3634	7,841	
3	6,225	6,116	12,341	30	6,474	6,358	12832	57	3,925	3399	7,324	
4	6,267	6,154	12,421	31	6,755	6,628	13383	58	3,760	3262	7,022	
5	6,348	6,231	12,579	32	7,000	6,867	13867	59	3,676	3193	6,869	
6	6,462	6,342	12,804	33	7,170	7,039	14209	60	3,638	3156	6,794	
7	6,605	6,480	13,085	34	7,275	7,156	14431	61	3,581	3100	6,681	
8	6,766	6,639	13,405	35	7,399	7,263	14662	62	3,461	3002	6,463	
9	6,943	6,811	13,754	36	7,534	7,379	14913	63	3,244	2838	6,082	
10	7,130	6,994	14,124	37	7,592	7,463	15055	64	2,963	2631	5,594	
11	7,322	7,183	14,505	38	7,545	7,513	15058	65	2,662	2410	5,072	
12	7,515	7,374	14,889	39	7,429	7,523	14952	66	2,397	2215	4,612	
13	7,706	7,562	15,268	40	7,247	7,525	14772	67	2,188	2056	4,244	
14	7,885	7,739	15,624	41	7,086	7,493	14579	68	2,058	1951	4,009	
15	8,046	7,900	15,946	42	7,038	7,358	14396	69	1,985	1885	3,870	
16	8,182	8,034	16,216	43	7,154	7,099	14253	70	1,932	1830	3,762	
17	8,283	8,136	16,419	44	7,373	6,748	14121	71	1,867	1767	3,634	
18	8,345	8,198	16,543	45	7,631	6,344	13975	72	1,770	1678	3,448	
19	8,362	8,214	16,576	46	7,802	5,957	13759	73	1,638	1564	3,202	
20	8,398	8,249	16,647	47	7,794	5,638	13432	74	1,478	1430	2,908	
21	8,394	8,247	16,641	48	7,536	5,429	12965	75	1,307	1284	2,591	
22	8,221	8,077	16,298	49	7,094	5,296	12390	76	1,139	1138	2,277	
23	7,828	7,696	15,524	50	6,598	5,190	11788	77	995	1004	1,999	
24	7,295	7,175	14,470	51	6,135	5,053	11188	78	888	894	1,782	
25	6,681	6,579	13,260	52	5,692	4,863	10555	79	839	818	1,657	
26	6,151	6,064	12,215	53	5,296	4,596	9,892	80 +	4,480	4563	9,043	
									<b>Total</b>	<b>455,409</b>	<b>431,114</b>	<b>886,523</b>

Source: Population Projections Bhutan, 2005-2030, NSB

## CHAPTER 2

### HEALTH

Since the time when the health care facilities in Bhutan were first established in 1962, there has been continuous efforts in improving the modern medical facilities. The Ministry of Health has now a wide spread network of Health Facilities, covering around 95 percent of the total population. Institutional health facilities were earlier concentrated in the urban centres, but today the emphasis has shifted to the rural areas where the majority of the population live.

Health Care is delivered in a totally integrated system through an organized structure placed at the National, Regional and Dzongkhag Hospitals serving as Referral Centers followed by the Basic Health Units (BHUs) at the Community Level. BHUs serve remote areas staffed by well-trained paramedical personnel who are equipped to treat minor ailments and advice on preventive measures to avoid the spread of communicable diseases. Extended Health Centers Out Reach Clinics (ORCs) and Mobile Health Units support these BHUs.

There are also numbers of special health programs in Bhutan administered by the Ministry of Health. These cover Child Health and Immunization Program, Reproductive Health Program, Acute Respiratory Infection (ARI) Program, National Control of Diarrhoeal Disease Program (NCDDP), National STD/AIDS Control Program, Rural Water Supply & Sanitation Program (RWSS), Village Health Workers Program (VHW), National Leprosy Program, National Malaria Control Program (NMCP) and Mental Health Program.

As of 2010, there were 31 hospitals, 181 BHUs and over 518 ORCs spread over 205 Gewogs providing primary health care services. Besides the allopathic system, there exists a well established network of Indigenous Medical Facilities under the Institute of Traditional Medical Services that has basically three functions; medical services for out-patients; collection and manufacturing of indigenous medicines; and research and training of the Physicians (Drungtso) and Compounders (Menpas).

The main indicators of the health status of the population are morbidity and mortality. Morbidity refers to the type of illness people suffer from, while mortality relates to death rates and causes of death. The Population and Housing Census of Bhutan (PHCB) 2005 is the source for mortality statistics. Over all the Infant mortality rate per 1000 live birth is 40.1 estimated from the PHCB 2005, but causes of death data have not yet become available. Efforts are under way to improve the vital registration system. Morbidity data are obtained from the patients' records in hospitals and BHUs whose data are presented in the annual publication "Annual Health Bulletin 2011", published by Ministry of Health. The available morbidity statistics are based on patients treated by hospitals, BHUs and ORCs.

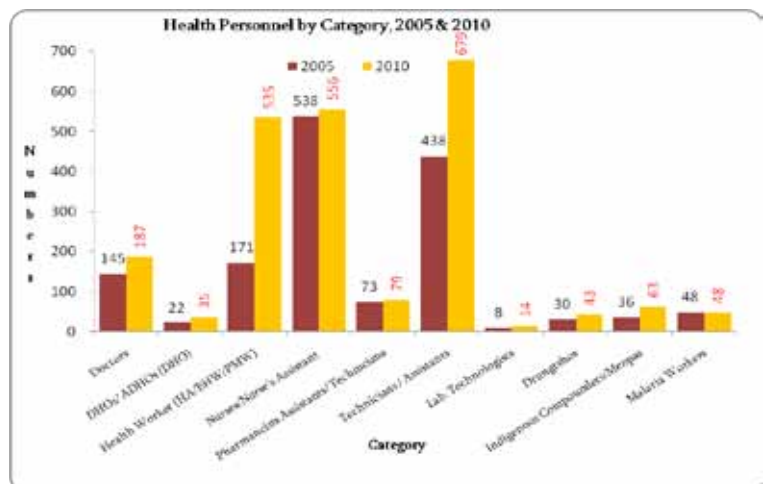


TABLE 2.1: SUMMARY OF THE HEALTH FACILITIES AND PERSONNEL, BHUTAN, 2005 TO 2010

(Number)

Facilities	2005	2006	2007	2008	2009	2010
Number of hospitals	29	29	29	31	31	31
Number of basic health units	176	176	178	178	181	181
Number of dispensaries/outreach clinic	485	514	519	519	518	518
Number of indigenous hospitals	1	1	1	1	1	1
Number of indigenous dispensaries	21	21	26	35	37	38
Persons per doctor*	4,379	4,312	4,197	3,924	3,883	3,721
Number of hospital beds	1,078	1,133	1,159	1,166	1,186	1,186
Persons per hospital bed	589	571	568	576	576	587
Doctors per 10,000 persons	2	2	2	3	3	3
Hospital bed per 10,000 persons	17	18	18	17	17	17
Population covered by health care (%)	90	90	90	90	90	90
Population access to safe drinking water (%)	84	81	82	83	83	88
Women attended by trained personnel during child birth (%)	52	57	54	66	66	70

Note: Indigenous hospital included under hospital,\*\* Satellite clinic included under BHU

Source: Annual Health Bulletin 2011, MoH, Thimphu.

TABLE 2.2: TYPE OF HEALTH FACILITIES IN DZONGKHAG, BHUTAN, 2010

(Number)

Dzongkhag	Hospitals	Basic Health Unit**	Indigenous Unit	Outreach Clinic
Bumthang	1	4	2	14
Chhukha	3	9	3	47
Dagana	1	8	3	16
Gasa	0	4	1	13
Haa	1	4	1	15
Lhuentse	1	11	1	33
Monggar	1	24	4	57
Paro	1	3	1	27
Pema Gatshel	1	12	2	33
Punakha	1	6	1	9
Samdrup Jongkhar	2	8	3	36
Samtse	3	9	2	18
Sarpang	2	10	1	11
Thimphu*	5	9	0	16
Trashigang	3	19	4	57
Trashi Yangtse	1	7	1	23
Trongsa	1	6	2	19
Tsirang	1	4	1	13
Wangdue Phodrang	1	10	2	23
Zhemgang	1	14	3	38
<b>Bhutan</b>	<b>31</b>	<b>181</b>	<b>38</b>	<b>518</b>

Note: \*Indigenous hospital included under hospital,\*\*Satellite Clinic included under BHU

Source: Annual Health Bulletin 2011, MoH, Thimphu.

TABLE 2.3: HEALTH PERSONNEL BY CATEGORY, BHUTAN, 2005 TO 2010

(Number)

Health personnel	2005	2006	2007	2008	2009	2010
Doctors*	145	150	154	171	176	187
DHOs/ ADHOs (DHO)	22	22	37	38	35	35
Health Worker (HA/BHW)**	171	229	232	425	505	535
Nurses/ Nurse's Assistant	538	587	559	567	556	556
Assistant Clinical Officers (ACO)	32	31	n.a	43	45	44
Pharmacists	10	10	n.a	14	12	11
Pharmacists Assistants/ Technicians	73	77	n.a	75	79	79
Technicians / Assistants	438	420	510	453	549	679
Lab. Technologists	8	8	n.a	10	13	14
Drungtshos	30	30	n.a	36	41	43
Indigenous Compounders/Menpas	36	42	43	54	52	63
Malaria Workers	48	48	48	48	48	48
Village Health Workers (VHW)	1,200	1,087	1,200	1,200	1,200	1,200

Note: \*Includes doctors in administrative services, Non-Bhutanese and attachments.

\*\*Health workers for 2008 has been combined of HA/BHW/PMW

Source: Annual Health Bulletin 2011, MoH, Thimphu.

TABLE 2.4: TOP TEN MORBIDITY, BHUTAN, 2009 AND 2010

(Number)

Priority health problem/ Disease	2009	2010
Common cold	302,035	323,709
Skin Infections	90,375	92,023
Acute Pharyngitis/Tonsilitis	70,999	74,432
Peptic Ulcer Syndrome	68,036	72,333
Musculo-Skeletal Disorders	65,842	78,500
Other Disorders of Skin & Subcutaneous-tissues	60,923	69,518
Other Diseases of the Digestive System	60,101	68,216
Conjunctivitis	372,046	65,974
Diarrhoea	65,495	65,870
Other Respiratory and Nose Diseases	54,156	51,861

Source: Annual Health Bulletin 2011, MoH, Thimphu.

TABLE 2.5: TOP TEN INPATIENT HOSPITAL MORTALITY, BHUTAN, 2009 AND 2010

(Number)

Priority health problem/Disease	2009	2010
Alcohol Liver Diseases	128	122
Neonatal Death	74	63
Other Circulatory Diseases	68	59
Other Cancers	53	42
Pneumonia	52	90
Other Respiratory & Nose Diseases	52	72
Other Diseases of the Digestive System	46	47
Cerebro-vascular Diseases	29	52
Other Kidney, UT / Genital Disorders	36	28
Tuberculosis	31	32

Source: Annual Health Bulletin 2011, MoH, Thimphu.



TABLE 2.6: MORBIDITY CASES SEEN BY BASIC HEALTH UNITS, BHUTAN, 2010

(Number)

Name of Diseases	Under 1 Yr		1 - 4 Yrs		5 - 14 Yrs		15 - 49 Yrs		50 - 64 Years		65 + Yrs		Total
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
<b>Infections</b>													
Diarrhoea	1,225	1,123	3,218	2,787	5,205	4,731	5,729	4,915	1,061	1,047	644	686	32,371
Dysentery	359	364	1,098	997	1,117	1,032	2,965	2,476	737	647	452	408	12,652
Genital Ulcer/Bubo	0	0	0	0	2	4	25	17	3	3	2	0	56
Urethral/Vaginal Discharges	0	0	1	1	1	1	230	221	17	15	5	1	493
Other Sexually Transmitted Disease, excluding HIV/AIDS	0	0	2	2	0	0	143	100	14	9	2	2	274
<b>Viral, Protozoal &amp; Helminthic disease</b>													
Chicken Pox	9	9	50	47	289	313	125	119	0	0	1	0	962
Viral Hepatitis	1	1	3	5	13	11	18	12	0	2	1	3	70
Plasmodium falciparum malaria	0	0	1	0	14	7	15	11	9	1	3	0	61
Other Malaria	0	0	2	2	11	7	33	22	5	4	2	2	90
Visceral Leishmaniasis	0	0	0	3	4	3	3	3	2	2	0	0	20
Intestinal Worms	16	27	476	533	845	793	1,270	1,596	353	319	127	126	6,481
Scabies	24	27	161	163	859	555	911	768	202	155	161	98	4,084
Other Infections (excluding ear, brain, STI)	60	67	239	208	810	844	759	930	183	169	79	61	4,409
<b>Blood diseases</b>													
Nutritional Anaemia	11	15	82	82	186	199	780	2,365	283	547	177	242	4,969
Blood & Immune Disorders	3	4	21	26	24	31	200	306	53	67	43	32	810
<b>Endocrine, Metabolic &amp; Nutritional</b>													
Malnutrition (exclude child clinic attendance)	7	6	15	27	20	21	83	101	10	17	8	7	322
<b>Mental disorders</b>													
Mental and behavioral disorder due to alcohol	0	0	0	0	1	0	23	6	3	4	2	1	40

Table 2..6 contd...

Mental and behavioral disorder due to multiple drug use & other use of psychoactive substances	0	0	0	0	0	0	0	0	1	3	0	2	0	0	6
<b>Other Mental Disorders</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>18</b>	<b>17</b>	<b>116</b>	<b>72</b>	<b>14</b>	<b>7</b>	<b>4</b>	<b>6</b>	<b>255</b>		
Disease of Nervous system															
Meningitis/Encephalitis	0	1	0	0	3	3	4	9	1	0	1	0	0	0	22
Other Nervous including Peripheral Disorders	21	32	135	162	2,176	2,584	7,223	13,847	1,891	2,289	892	958	32,210		
<b>Eye &amp; Ear Diseases</b>															
Conjunctivitis	410	453	980	990	4,978	4,871	6,836	8,588	1,863	2,189	1,103	1,407	34,668		
Other Eye Disorders	127	140	261	307	1,100	1,133	2,986	4,574	1,038	1,302	799	1,052	14,819		
Otitis Media	274	269	690	594	1,380	1,154	1,111	1,189	157	159	77	78	7,132		
Other Ear Disorders	61	64	157	178	657	667	1,052	1,274	294	290	142	182	5,018		
<b>Diseases of Circulatory System</b>															
Hypertension	0	0	0	0	13	16	1,094	1,827	677	904	525	635	5,691		
Other Circulatory Diseases	6	6	39	38	208	230	655	992	158	216	102	128	2,778		
Common Cold	3,780	3,911	9,059	9,218	21,207	23,622	32,280	41,291	5,948	6,678	3,047	3,067	163,108		
Acute Pharyngitis/Tonsillitis	189	200	748	777	3,847	4,794	7,738	10,520	1,209	1,319	506	465	32,312		
Pneumonia	897	781	1,202	1,057	238	199	134	172	34	44	24	20	4,802		
Other Respiratory & Nose Diseases	416	374	905	971	2,257	2,444	5,006	6,435	1,255	1,378	821	736	22,998		
<b>Diseases of the Digestive system</b>															
Diseases of Teeth & Gums	8	10	119	142	855	814	1,759	2,120	550	454	205	167	7,203		
Dental Caries	4	6	122	179	1,038	1,021	2,205	3,068	724	712	325	241	9,645		
Peptic Ulcer Syndrome	2	2	43	86	1,143	1,465	9,071	11,859	2,122	2,533	1,024	1,297	30,647		
Alcohol Liver Diseases	0	0	0	0	0	0	48	72	30	37	18	21	226		
Other Diseases of the Digestive System	213	238	916	1,051	2,979	3,469	6,894	8,767	1,576	1,523	881	852	29,359		
<b>Skin Diseases</b>															
Skin Infections	760	826	2,563	2,471	6,942	5,780	9,518	8,697	1,802	1,459	900	639	42,357		

Table 2..6 contd...

Other Disorders of Skin & Subcutaneous-tissues	612	654	1,500	1,585	4,281	3,747	7,304	7,512	1,509	1,409	788	570	31,471
<b>Diseases of Musculo-skeletal system &amp; Congenital Deformities</b>													
Arthritis & Arthrosis	4	3	10	8	102	114	1,467	1,648	876	785	482	401	5,900
Other Musculo-skeletal disorders	16	10	76	91	925	861	9,080	11,249	3,694	3,619	1,830	1,709	33,160
<b>Genito-Urinary diseases</b>													
Infection of Breasts, including Puerperium	0	0	0	0	0	3	0	193	0	8	0	2	206
Other Disease of the Breast	0	0	0	0	3	7	5	643	3	14	0	4	679
Menstrual Disturbances	0	0	0	0	0	53	0	1,934	0	86	0	10	2,083
Other Kidney, UT/ Genital Disorders	19	12	179	161	403	458	2,022	6,848	540	976	297	350	12,265
<b>Pregnancy, Childbirth and Puerperium</b>													
Abortions	0	0	0	0	0	0	0	102	0	0	0	0	102
Pregnancy Induced Hypertension	0	0	0	0	0	0	0	26	0	0	0	0	26
Ante-Partum Haemorrhage & Placenta Previa	0	0	0	0	0	0	0	8	0	0	0	0	8
Malpresentation	0	0	0	0	0	0	0	12	0	0	0	0	12
Prolonged Labour	0	0	0	0	0	0	0	47	0	0	0	0	47
Obstructed Labour	0	0	0	0	0	0	0	5	0	0	0	0	5
Post Partum Haemorrhage	0	0	0	0	0	0	0	48	0	0	0	0	48
Retained Placenta	0	0	0	0	0	1	0	56	0	0	0	0	57
Puerperal Sepsis	0	0	0	0	0	0	0	15	0	0	0	0	15
Other complications of pregnancy	0	0	0	0	0	1	0	245	0	0	0	0	246
Low Birth Weight	4	8	0	0	0	0	0	0	0	0	0	0	12
Foetal Death & Stillbirth	7	6	0	0	0	0	0	0	0	0	0	0	13
Neonatal Death	5	6	0	0	0	0	0	0	0	0	0	0	11

Table 2.6 contd...

Conditions Originating in the Perinatal Period	4	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
<b>Malformations</b>																				
Malformations	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	2
<b>Injuries &amp; Trauma</b>																				
Mushroom Poisoning (Toxic effect of other unspecified substances)	0	0	8	6	7	4	34	23	5	0	1	23	5	0	1	2	2	90		
Transport Accidents	0	1	12	10	48	21	226	62	31	13	13	7	444							
Accidental Falls	10	7	175	129	794	328	1,096	496	256	150	121	68	3,630							
Other Bites & Stings	4	7	97	57	250	141	379	331	86	41	36	19	1,448							
Dog Bite	3	0	83	45	364	254	501	359	133	106	57	31	1,936							
Drowning & Submersion	0	0	0	1	4	1	8	5	0	0	2	0	21							
Exposure to Electric Current	0	0	2	1	4	2	8	3	2	0	0	1	23							
Contact with Heat & Hot substances & exposure to smoke, fire, flames	26	30	207	195	230	160	281	257	71	32	22	26	1,537							
Snake Bite	1	0	0	0	3	5	30	22	11	4	2	0	78							
Contact with Venomous animals (excluding Snake bite)	0	0	6	5	5	6	13	12	5	5	0	2	59							
Intentional Self Harm	0	0	8	6	42	20	207	98	27	11	9	6	434							
Work Related Injuries	6	9	162	128	2,020	872	7,021	2,802	1,334	546	424	209	15,533							
Others (injuries other than above & unknown cause of injury)	11	19	253	188	1,503	740	2,578	1,345	417	248	157	85	7,544							
<b>Other Conditions</b>																				
Complications of Health Care	7	4	13	11	107	83	133	166	28	20	29	18	619							
ANC, Immunisation & Other counseling	805	738	750	720	536	631	2,272	8,077	669	462	203	161	16,024							
Total	10,427	10,475	26,850	26,451	72,071	71,348	143,708	183,994	33,975	35,035	17,581	17,302	649,217							
<b>Total Old Cases all causes</b>													<b>135,837</b>							

Source: Annual Health Bulletin 2011, MoH, Thimphu.

TABLE 2.7: TOTAL MORBIDITY BY SEX, BHUTAN, 2010

Name of Diseases	Under 1 Yr		1 - 4 Yrs		5 - 14 Yrs		15 - 49 Yrs		50 - 64 Years		65 + Yrs		Total
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
	(Number)												
<b>Infections</b>													
Diarrhoea	3,270	2,886	7,198	6,328	9,422	8,285	12,189	10,272	1,999	1,845	1,075	1,101	65,870
Dysentery	792	781	2,141	2,013	1,951	1,754	5,413	4,245	1,061	961	594	583	22,289
Tuberculosis	7	4	14	14	44	39	359	333	99	57	64	31	1,065
Genital Ulcer/Bubo	0	0	1	0	14	6	103	67	8	9	5	1	214
Urethral/Vaginal Discharges	2	0	1	4	14	17	779	805	57	50	13	3	1,745
Other Sexually Transmitted Disease, excluding HIV/AIDS	2	1	3	5	7	6	373	255	38	20	4	2	716
Rickettsial Disease	0	1	7	6	8	7	27	23	4	4	3	1	91
<b>Viral, Protozoal &amp; Helminthic disease</b>													
Chicken Pox	24	34	145	127	590	611	288	244	0	6	1	1	2,071
Viral Hepatitis	100	74	36	29	88	83	198	164	18	22	7	4	823
Plasmodium falciparum malaria	1	2	8	2	36	21	84	39	19	5	5	1	223
Other Malaria	1	2	9	9	33	20	115	63	11	11	6	4	284
Visceral Leishmaniasis	1	0	6	12	6	6	14	11	3	3	0	0	62
Intestinal Worms	33	40	827	872	1,321	1,247	1,962	2,265	476	427	176	164	9,810
Scabies	53	49	353	329	1,458	860	1,858	1,419	307	226	207	132	7,251
Streptococcus Group A	3	0	5	6	21	22	29	32	7	2	0	1	128
Other Infections (excluding ear, brain, STI)	211	191	665	608	1,969	1,791	2,525	2,753	451	384	173	138	11,859
<b>Neoplasm</b>													
Cervical Cancer	0	0	0	0	0	0	0	62	0	45	0	0	107
Other Cancers	7	0	2	2	12	10	62	124	131	90	119	73	632

Table 2..7 contd...

<b>Blood diseases</b>													
Neoplasm (benign + CIS)	1	0	1	3	7	5	27	145	34	21	55	3	302
Nutritional Anaemia	23	37	147	138	330	409	1,426	4,903	513	847	305	393	9,471
Blood & Immune Disorders	8	6	29	40	38	47	259	405	64	87	63	46	1,092
<b>Endocrine, Metabolic &amp; Nutritional</b>													
Diabetes	0	0	0	2	4	3	503	668	772	679	367	277	3,275
Malnutrition (exclude child clinic attendance)	20	29	49	53	38	35	97	130	21	24	10	9	515
Other Nutritional & Metabolic Disorders	54	57	99	104	165	176	466	588	100	92	85	52	2,038
<b>Mental disorders</b>													
Mental and behavioral disorder due to alcohol	0	0	0	0	1	0	197	34	20	12	9	3	276
Mental and behavioral disorder due to multiple drug use & other use of psychoactive substances	0	0	0	0	0	0	60	12	0	2	0	0	74
Psychosis	0	0	1	0	1	1	55	41	11	5	1	4	120
Depression	0	0	0	7	7	9	194	383	48	64	30	9	751
Anxiety	0	0	5	0	15	26	163	292	16	17	5	14	553
Other Mental Disorders	3	1	18	2	72	78	358	414	55	53	24	26	1,104
<b>Disease of Nervous system</b>													
Meningitis/Encephalitis	31	18	16	7	33	24	79	38	4	8	3	6	267
Epilepsy	10	7	27	30	106	84	532	488	42	49	14	7	1,396
Other Nervous including Peripheral Disorders	43	60	194	237	2,657	3,257	10,270	18,675	2,432	2,831	1,123	1,189	42,968
<b>Eye &amp; Ear Diseases</b>													
Conjunctivitis	966	909	1,934	1,926	8,878	8,618	15,832	17,198	3,036	3,215	1,639	1,823	65,974
Cataract	0	3	7	5	27	17	56	74	77	109	154	141	670
Other Eye Disorders	283	326	630	693	2,273	2,434	7,549	9,953	1,984	2,271	1,473	1,767	31,636
Otitis Media	519	516	1,265	1,147	2,498	2,182	2,849	2,825	403	306	156	148	14,814

Table 2.7 contd...

Other Ear Disorders	163	159	490	474	1,603	1,563	3,289	3,535	594	553	315	279	13,017
<b>Diseases of Circulatory System</b>													
Rheumatic Heart Disease	30	11	18	19	45	22	174	274	97	88	61	60	899
Hypertension	0	0	0	0	39	47	4,877	7,249	3,232	3,746	2,552	2,311	23,853
Ischaemic Heart Diseases	0	0	0	0	5	3	62	60	30	38	32	38	268
Cerebro-vascular Diseases	2	1	1	1	5	4	47	52	55	48	89	49	354
Other Circulatory Diseases	43	32	92	72	324	350	1,280	1,771	493	499	427	420	5,803
<b>Respiratory diseases</b>													
Common Cold	10,375	10,244	21,875	21,663	45,470	42,564	67,119	75,024	9,885	10,220	4,775	4,495	323,709
Acute Pharyngitis/Tonsillitis	751	714	2,323	2,603	8,895	10,232	19,535	22,907	2,381	2,363	931	797	74,432
Pneumonia	2,262	1,925	2,650	2,367	715	668	656	643	172	163	182	170	12,573
Other Respiratory & Nose Diseases	1,559	1,453	2,626	2,645	4,761	4,652	11,630	13,547	2,678	2,704	1,837	1,769	51,861
<b>Diseases of the Digestive system</b>													
Diseases of Teeth & Gums	28	23	358	341	1,920	1,874	4,365	4,940	1,026	853	423	310	16,461
Dental Caries	29	39	599	735	4,202	4,145	9,101	11,797	2,140	2,024	955	690	36,456
Peptic Ulcer Syndrome	9	15	156	215	2,092	2,743	22,994	29,260	4,758	5,389	2,223	2,479	72,333
Acute Appendicitis	1	0	6	1	51	29	246	226	49	24	47	5	685
Alcohol Liver Diseases	0	0	0	0	0	0	601	516	337	244	154	91	1,943
Gall Bladder Diseases	0	1	2	5	1	6	148	434	79	118	32	53	879
Other Diseases of the Digestive System	675	776	2,403	2,530	6,150	6,793	17,235	21,443	3,532	3,230	1,773	1,676	68,216
<b>Skin Diseases</b>													
Skin Infections	2,240	2,251	6,303	5,725	13,438	11,098	23,297	18,880	3,489	2,584	1,634	1,084	92,023
Other Disorders of Skin & Subcutaneous-tissues	1,686	1,635	3,663	3,622	8,364	7,281	17,805	17,004	3,123	2,675	1,558	1,102	69,518
<b>Diseases of Musculo-skeletal system &amp; Congenital Deformities</b>													
Arthritis & Arthrosis	18	22	53	70	303	271	3,713	3,572	1,589	1,479	898	681	12,669
Other Musculo-skeletal disorders	49	65	360	371	2,693	2,434	25,699	26,633	7,246	6,616	3,417	2,917	78,500

Table 2..7 contd...

<b>Genito-Urinary diseases</b>													
Cystitis	5	12	23	45	66	91	372	1,226	83	124	33	59	2,139
Infection of Breasts, including Puerperium	0	0	0	0	0	8	0	690	0	27	0	8	733
Other Disease of the Breast	1	1	1	0	4	15	30	1,414	10	30	1	10	1,517
Pelvic Inflammatory Disease	0	0	0	0	0	17	0	988	0	69	0	21	1,095
Menstrual Disturbances	0	0	0	0	0	107	0	4,609	0	212	0	22	4,950
Other Kidney, UT/ Genital Disorders	104	83	457	412	1,012	1,141	5,757	17,870	1,092	1,952	626	664	31,170
<b>Pregnancy, Childbirth and Puerperium</b>													
Abortions	0	0	0	0	0	0	0	1,190	0	0	0	0	1,190
Pregnancy Induced Hypertension	0	0	0	0	0	2	0	563	0	0	0	0	565
Ante-Partum Haemorrhage & Placenta Previa	0	0	0	0	0	0	0	143	0	0	0	0	143
Malpresentation	0	0	0	0	0	0	0	155	0	0	0	0	155
Prolonged Labour	0	0	0	0	0	3	0	818	0	0	0	0	821
Obstructed Labour	0	0	0	0	0	0	0	378	0	0	0	0	378
Post Partum Haemorrhage	0	0	0	0	0	0	0	152	0	0	0	0	152
Retained Placenta	0	0	0	0	0	1	0	198	0	0	0	0	199
Puerperal Sepsis	0	0	0	0	0	0	0	75	0	0	0	0	75
Other complications of pregnancy	0	0	0	0	0	24	0	6,226	0	0	0	0	6,250
<b>Perinatal Conditions</b>													
Low Birth Weight	137	134	0	0	0	0	0	0	0	0	0	0	271
Foetal Death & Stillbirth	31	17	0	0	0	0	0	0	0	0	0	0	48
Neonatal Death	45	42	0	0	0	0	0	0	0	0	0	0	87
Conditions Originating in the Perinatal Period	632	520	0	0	0	0	0	0	0	0	0	0	1,152
<b>Malformations</b>													
Malformations	58	52	22	9	28	23	20	25	2	1	0	2	242



Table 2.7 contd...

<b>Injuries &amp; Trauma</b>													
Mushroom Poisoning (Toxic effect of other unspecified substances)	2	0	13	11	16	10	97	78	13	2	4	5	251
Transport Accidents	1	4	39	32	137	90	1,029	326	132	54	24	20	1,888
Accidental Falls	35	33	420	279	1,557	701	2,849	1,367	559	343	236	169	8,548
Other Bites & Stings	16	22	217	142	527	308	884	740	185	102	65	37	3,245
Dog Bite	7	7	218	137	832	561	1,180	852	280	197	177	60	4,508
Drowning & Submersion	0	0	0	1	8	3	12	11	2	4	2	2	45
Exposure to Electric Current	1	1	7	6	12	7	34	13	2	1	0	1	85
Contact with Heat & Hot substances & exposure to smoke, fire, flames	55	51	317	309	326	268	511	463	104	50	37	37	2,528
Snake Bite	1	1	3	0	12	10	79	45	21	10	6	3	191
Contact with Venomous animals (excluding Snake bite)	1	0	12	6	30	14	52	38	13	7	3	2	178
Intentional Self Harm	0	0	9	7	50	23	259	162	35	17	11	7	580
Work Related Injuries	16	19	321	238	2,883	1,363	11,722	4,572	1,954	802	562	293	24,745
Others (injuries other than above & unknown cause of injury)	66	54	742	551	3,325	1,616	7,440	4,013	1,083	643	426	260	20,219
Other Conditions													
Complications of Health Care	13	5	36	22	147	118	272	316	61	36	33	22	1,081
ANC, Immunisation & Other counseling	1,217	1,196	1,248	1,193	695	952	13,489	16,378	921	636	269	211	38,405
<b>Total</b>	<b>28,832</b>	<b>27,654</b>	<b>63,926</b>	<b>61,619</b>	<b>146,887</b>	<b>136,445</b>	<b>347,311</b>	<b>406,303</b>	<b>67,858</b>	<b>65,836</b>	<b>34,598</b>	<b>31,548</b>	<b>1,418,817</b>
<b>Total Old Cases all causes</b>													<b>472,061</b>

Source: Annual Health Bulletin 2011, MoH, Thimphu.

TABLE 2.8: HOSPITAL INPATIENT MORBIDITY CASES, BHUTAN, 2010

(Number)

Name of Diseases	Under 1 Yr		1 - 4 Yrs		5 - 14 Yrs		15 - 49 Yrs		50 - 64 Years		65 + Yrs		Total	Death
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female		
<b>Infections</b>														
Diarrhoea	158	94	230	165	116	100	256	273	44	66	37	63	1,602	4
Dysentery	37	23	59	67	35	45	115	104	20	28	13	36	582	0
Tuberculosis	5	2	3	6	20	23	294	273	75	47	53	28	829	32
Genital Ulcer/Bubo	0	0	0	0	0	1	12	9	2	1	2	0	27	1
Urethral/Vaginal Discharges	0	0	0	2	0	0	16	18	0	1	0	0	37	0
Other Sexually Transmitted Disease, excluding HIV/AIDS	1	0	0	1	0	0	14	13	2	2	1	0	34	0
Rickettsial Disease	0	1	6	6	7	6	16	18	4	3	2	1	70	0
<b>Viral, Protozoal &amp; Helminthic disease</b>														
Chicken Pox	1	3	0	1	6	5	13	12	0	2	0	0	43	0
Viral Hepatitis	28	30	8	4	23	23	49	45	5	6	4	0	225	2
Plasmodium falciparum malaria	1	1	6	1	14	9	51	20	6	3	1	0	113	3
Other Malaria	0	0	4	3	7	4	39	18	3	5	2	1	86	1
Visceral Leishmaniasis	0	0	1	0	0	0	1	1	0	0	0	0	3	0
Intestinal Worms	0	0	6	3	6	5	9	12	1	5	2	3	52	0
Scabies	0	3	1	3	10	6	11	6	0	0	0	1	41	0
Streptococcus Group A	1	0	0	0	0	0	0	0	1	0	0	0	2	0
Other Infections (excluding ear, brain, STI)	61	53	59	45	106	82	216	203	32	56	22	22	957	24
<b>Neoplasm</b>														
Cervical Cancer	0	0	0	0	0	0	0	37	0	16	0	0	53	1
Other Cancers	0	0	2	2	6	6	31	69	73	54	62	44	349	42

Table 2..8 contd....

<b>Blood diseases</b>														
Neoplasm (benign + CIS)	0	0	0	1	4	1	8	29	17	7	25	1	93	3
Nutritional Anaemia	2	5	11	5	17	18	66	264	41	34	39	47	549	2
Blood & Immune Disorders	2	2	4	7	10	9	25	42	9	10	16	8	144	28
<b>Endocrine, Metabolic &amp; Nutritional</b>														
Diabetes	0	0	0	0	1	1	72	70	95	68	65	47	419	16
Malnutrition (exclude child clinic attendance)	7	11	10	8	4	4	3	3	0	0	1	0	51	11
Other Nutritional & Metabolic Disorders	6	14	3	3	7	3	27	48	11	10	13	4	149	0
<b>Mental disorders</b>														
Mental and behavioral disorder due to alcohol	0	0	0	0	0	0	91	13	12	3	5	2	126	0
Mental and behavioral disorder due to multiple drug use & other use of psychoactive substances	0	0	0	0	0	0	38	6	0	0	0	0	44	0
Psychosis	0	0	0	0	0	0	20	15	5	1	0	2	43	0
Depression	0	0	0	0	0	2	49	66	9	8	5	1	140	1
Anxiety	0	0	0	0	0	4	35	73	1	1	0	2	116	0
Other Mental Disorders	1	0	1	0	3	5	54	56	4	6	4	1	135	0
<b>Disease of Nervous system</b>														
Meningitis/Encephalitis	25	14	15	6	12	12	15	13	1	8	1	5	127	13
Epilepsy	5	4	8	9	15	5	82	61	4	5	4	3	205	2
Other Nervous including Peripheral Disorders	13	12	7	9	15	18	180	166	31	21	16	14	502	11
<b>Eye &amp; Ear Diseases</b>														
Conjunctivitis	15	11	32	26	173	188	216	233	17	23	9	5	948	0
Cataract	0	0	2	0	5	4	13	13	16	27	101	90	271	0
Other Eye Disorders	7	10	9	18	35	33	119	131	46	59	40	54	561	0
Otitis Media	7	9	6	15	20	32	44	56	6	2	1	5	203	1

Table 2..8 contid...

Other Ear Disorders	9	8	13	18	48	34	71	61	9	12	5	5	293	0
<b>Diseases of Circulatory System</b>														
Rheumatic Heart Disease	13	4	0	2	12	6	53	64	16	15	13	19	217	16
Hypertension	0	0	0	0	1	1	272	251	168	185	235	158	1,271	14
Ischaemic Heart Diseases	0	0	0	0	1	2	28	11	12	12	20	15	101	8
Cerebro-vascular Diseases	2	1	0	0	1	1	31	26	44	29	61	37	233	52
Other Circulatory Diseases	22	10	11	10	20	17	123	111	83	63	122	114	706	59
<b>Respiratory diseases</b>														
Common Cold	192	195	286	278	388	369	737	671	81	71	26	38	3,332	0
Acute Pharyngitis/Tonsillitis	22	19	39	34	85	110	289	295	18	22	14	6	953	2
Pneumonia	725	582	578	505	151	110	118	102	43	35	63	58	3,070	90
Other Respiratory & Nose Diseases	343	306	272	186	183	155	522	558	235	280	297	345	3,682	72
<b>Diseases of the Digestive system</b>														
Diseases of Teeth & Gums	0	0	4	4	10	8	28	37	1	2	4	1	99	0
Dental Caries	0	0	8	10	38	41	116	161	21	22	11	7	435	0
Peptic Ulcer Syndrome	1	0	1	2	25	29	519	643	85	146	76	75	1,602	2
Acute Appendicitis	1	0	4	1	35	24	143	135	20	8	7	2	380	3
Alcohol Liver Diseases	0	0	0	0	0	0	313	261	186	115	84	39	998	122
Gall Bladder Diseases	0	0	0	2	0	1	89	220	39	71	24	38	484	8
Other Diseases of the Digestive System	72	73	119	91	195	200	889	879	234	188	180	140	3,260	47
<b>Skin Diseases</b>														
Skin Infections	83	97	86	58	99	86	239	182	56	41	37	18	1,082	1
Other Disorders of Skin & Subcutaneous-tissues	85	82	109	96	209	143	476	397	98	77	68	42	1,882	4
<b>Diseases of Musculo-skeletal system &amp; Cogenital Deformities</b>														
Arthritis & Arthrosis	0	0	1	1	17	8	83	67	18	25	49	18	287	1
Other Musculo-skeletal disorders	5	3	16	12	102	65	531	432	109	94	61	50	1,480	4

Table 2..8 contd...

<b>Genito-Urinary diseases</b>															
Cystitis	0	6	6	6	6	10	6	69	177	15	33	14	22	364	0
Infection of Breasts, including Puerperium	0	0	0	0	0	0	0	0	99	0	2	0	0	101	0
Other Disease of the Breast	1	1	0	0	0	0	0	5	72	0	2	0	6	87	1
Pelvic Inflammatory Disease	0	0	0	0	0	0	1	0	86	0	12	0	2	101	1
Menstrual Disturbances	0	0	0	0	0	0	1	0	182	0	27	0	2	212	0
Other Kidney, UT/ Genital Disorders	29	19	54	28	122	76	524	1,269	126	193	140	92	2,672	28	
<b>Pregnancy, Childbirth and Puerperium</b>															
Abortions	0	0	0	0	0	0	0	0	876	0	0	0	0	876	0
Pregnancy Induced Hypertension	0	0	0	0	0	2	0	0	363	0	0	0	0	365	2
Ante-Partum Haemorrhage & Placenta Previa	0	0	0	0	0	0	0	0	95	0	0	0	0	95	0
Malpresentation	0	0	0	0	0	0	0	0	122	0	0	0	0	122	0
Prolonged Labour	0	0	0	0	0	3	0	0	729	0	0	0	0	732	0
Obstructed Labour	0	0	0	0	0	0	0	0	294	0	0	0	0	294	0
Post Partum Haemorrhage	0	0	0	0	0	0	0	0	99	0	0	0	0	99	0
Retained Placenta	0	0	0	0	0	0	0	0	130	0	0	0	0	130	3
Puerperal Sepsis	0	0	0	0	0	0	0	0	45	0	0	0	0	45	0
Other complications of pregnancy	0	0	0	0	0	3	0	0	4,150	0	0	0	0	4,153	3
<b>Perinatal Conditions</b>															
Low Birth Weight	111	97	0	0	0	0	0	0	0	0	0	0	0	208	14
Foetal Death & Stillbirth	22	11	0	0	0	0	0	0	0	0	0	0	0	33	24
Neonatal Death	37	26	0	0	0	0	0	0	0	0	0	0	0	63	63
Conditions Originating in the Perinatal Period	466	385	0	0	0	0	0	0	0	0	0	0	0	851	20

Table 2..8 contd...

<b>Malformations</b>		33	38	17	7	18	17	17	15	0	1	0	1	164	3
<b>Injuries &amp; Trauma</b>															
Mushroom Poisoning (Toxic effect of other un- specified substances)	1	0	4		5	6	4	39	34	7	2	2	3	107	3
Transport Accidents	0	2	8	23	10	28	23	367	101	42	18	8	8	615	15
Accidental Falls	7	7	40	49	27	117	49	236	111	69	51	48	40	802	16
Other Bites & Stings	0	0	7	4	5	7	4	24	30	10	5	1	3	96	0
Dog Bite	0	0	1	2	3	12	2	12	2	1	5	2	0	40	0
Drowning & Submersion	0	0	0	0	0	0	0	0	1	0	1	0	1	3	0
Exposure to Electric Current	0	0	2	0	2	0	0	10	3	0	0	0	0	17	0
Contact with Heat & Hot substances & exposure to smoke, fire, flames	14	4	20	16	25	14	16	35	35	3	5	2	4	177	0
Snake Bite	0	1	2	4	0	6	4	44	15	8	5	3	2	90	0
Contact with Venomous animals (excluding Snake bite)	0	0	1	0	1	2	0	2	5	3	0	2	0	16	1
Intentional Self Harm	0	0	0	2	0	1	2	20	40	3	1	1	1	69	3
Work Related Injuries	1	0	3	10	4	26	10	309	93	56	25	23	7	557	4
Others (injuries other than above & unknown cause of injury)	4	9	55	78	27	151	78	527	255	122	68	61	52	1,409	9
<b>Other Conditions</b>															
Complications of Health Care	2	0	0	4	0	10	4	8	33	1	5	0	0	63	1
ANC, Immunisation & Other counseling	3	0	0	3	0	1	3	27	464	5	5	3	1	512	1
<b>Total</b>	<b>2,689</b>	<b>2,288</b>	<b>2,260</b>	<b>2,372</b>	<b>1,876</b>	<b>2,828</b>	<b>2,372</b>	<b>10,245</b>	<b>18,078</b>	<b>2,640</b>	<b>2,567</b>	<b>2,313</b>	<b>1,962</b>	<b>52,118</b>	<b>918</b>
<b>Total Old Causes all causes</b>															<b>11,990</b>

Source: Annual Health Bulletin 2011, MoH, Thimphu.

TABLE 2.9: NUMBER OF PATIENTS ADMISSION & AVERAGE LENGTH OF STAY IN DIFFERENT DZONGKHAG HOSPITALS, BHUTAN, 2008 TO 2010

(Number)

Dzongkhag	2008		2009		2010	
	Total patient	Patient days	Total patient	Patient days	Total patient	Patient days
Bumthang	167	501	767	2,178	697	2,789
Chhukha	6,040	14,276	5,763	10,350	5,223	9,266
Dagana	389	245	169	449	593	982
Gasa	0	0	0	0	0	0
Haa	598	1,362	540	1,290	407	1,337
Lhuentse	1,063	3,409	813	4,011	1,137	4,423
Monggar	2,834	18,417	3,392	23,253	3,758	23,518
Paro	3,916	9,030	2,932	8,098	3,195	8,144
Pema Gatshel	1,298	3,458	999	3,389	970	3,186
Punakha	1,969	7,686	2,036	8,034	1,878	8,670
Samdrup Jongkhar	1,912	9,785	1,915	11,159	1,479	9,081
Samtse	3,359	15,834	3,213	16,076	3,304	13,434
Sarpang	3,662	14,131	4,208	17,853	4,135	18,165
Thimphu	11,772	67,506	12,522	88,269	14,532	113,358
Trashigang	2,989	13,508	3,524	15,232	3,508	15,257
Trashhi Yangtse	806	4,735	664	3,572	699	3,319
Trongsa	408	762	526	1,728	541	1,768
Tsirang	885	2,781	873	2,434	1,021	2,016
Wangdue Phodrang	1,428	4,095	1,344	4,640	1,485	4,258
Zhemgang	1,190	4,885	1,350	5,273	1,269	4,443
<b>Bhutan</b>	<b>46,685</b>	<b>196,406</b>	<b>47,550</b>	<b>227,288</b>	<b>49,831</b>	<b>247,414</b>

Source: Annual Health Bulletin 2011, MoH, Thimphu.

TABLE 2.10: IMMUNIZATION STATUS BY DZONGKHAG, BHUTAN, 2010

(Numbers)

Dzongkhag	Antigen				
	BCG	Measles	OPV3	DPT-HEP B3	OPV 0
Bumthang	264	356	331	331	201
Chhukha	1,310	1,281	1,309	1,319	1,164
Dagana	284	443	414	411	247
Gasa	25	54	48	48	22
Haa	125	187	167	167	115
Lhuentse	194	322	286	280	174
Monggar	977	806	796	781	898
Paro	737	736	731	703	709
Pema Gatshel	389	438	421	417	318
Punakha	373	469	449	471	343
Samdrup Jongkhar	729	653	668	663	565
Samtse	889	1,158	1,110	1,087	732
Sarpang	811	707	704	704	771
Thimphu	3,569	2,592	2,422	2,410	3,535
Trashigang	924	847	863	863	733
Trashhi Yangtse	367	374	398	368	328
Trongsa	213	251	266	266	173
Tsirang	291	330	333	329	280
Wangdue Phodrang	527	689	669	623	441
Zhemgang	260	397	381	384	209
<b>Bhutan</b>	<b>13,258</b>	<b>13,090</b>	<b>12,766</b>	<b>12,625</b>	<b>11,958</b>

Source: Annual Health Bulletin 2011, MoH, Thimphu.



TABLE 2.11: DETAILS OF CHILD GROWTH MONITORING IN IMMUNIZATION CLINICS, BHUTAN, 2006 TO 2010

(Number)

Details	2006	2007	2008	2009	2010
Child attendances weighed (nos)	174,149	172,955	187,342	205,752	223,124
Under weight	39,926	38,032	17,342	16,156	12,951
Normal weight	n.a	n.a	n.a	171,461	196,455
Over weight	39,926	38,032	28,905	15,149	12,443

Source: Annual Health Bulletin 2011, MoH, Thimphu.

TABLE 2.12: DETAILS OF MATERNAL HEALTH CARE ACTIVITIES BY DZONGKHAG, BHUTAN, 2006 TO 2010

(Number)

Type of care	2006	2007	2008	2009	2010
Maternal health care attendance(a)	48,859	49,004	53,352	55,586	61,282
Antenatal	48,859	49,004	53,352	55,586	61,282
Deliveries attended	7,675	7,422	8,621	9,011	9,230
Home	1,317	1,064	927	878	710
Facility	6,358	6,358	7,694	8,133	8,520
Child health care attendance	171,135	172,955	187,342	205,752	223,124
First visit	14,589	13,285	14,575	15,555	14,866
Re-visit	156,546	159,670	172,767	190,197	208,258
Malnourished children (b)	16,788	55,529	46,247	31,305	25,394
All malnourished*	16,788	55,050	46,247	31,305	25,394
Third degree	428	479	n.a	n.a	n.a

Notes: \*All malnourished included over weight and under weight after 2008

Source: Annual Health Bulletin 2011, MoH, Thimphu.

TABLE 2.13: DETAILS OF MATERNAL HEALTH CARE ACTIVITIES BY DZONGKHAG, BHUTAN, 2005 TO 2010

(Number)

Dzongkhag	Details	2005	2006	2007	2008	2009	2010
Bumthang	Antenatal	1,289	1,141	345	1,352	1,274	1,420
	Reported deliveries	281	233	345	298	298	324
	Trained deliveries	169	154	131	147	172	165
Chhukha*	Antenatal	6,651	5,508	1,076	7,669	7,048	7,770
	Reported deliveries	1,701	1,330	1,076	825	898	707
	Trained deliveries	477	539	542	1,048	1,089	1,208
Dagana	Antenatal	971	1,003	1,209	1,452	1,386	1,509
	Reported deliveries	411	396	555	537	450	425
	Trained deliveries	82	58	111	132	254	131
Gasa	Antenatal	134	188	200	175	192	152
	Reported deliveries	50	47	51	43	67	62
	Trained deliveries	21	28	30	35	16	15
Haa	Antenatal	502	579	562	759	896	860
	Reported deliveries	178	189	196	182	215	160
	Trained deliveries	52	46	47	66	136	73
Lhuentse	Antenatal	1,154	1,098	1,079	1,189	968	1,148
	Reported deliveries	347	403	366	320	380	282
	Trained deliveries	138	178	202	171	194	78
Monggar	Antenatal	2,395	3,021	3,269	3,401	3,307	3,362
	Reported deliveries	935	886	897	797	880	879
	Trained deliveries	452	553	574	763	768	799
Paro	Antenatal	3,184	2,653	2,517	2,701	3,384	3,961
	Reported deliveries	592	567	678	531	588	772
	Trained deliveries	418	376	501	543	521	491

Table 2..13 contd...

Pema Gatshel	Antenatal	767	791	1,484	1,364	1,597	1,816
	Reported deliveries	274	255	392	402	365	419
	Trained deliveries	43	51	255	144	164	167
Punakha	Antenatal	1,687	1,528	1,165	1,393	2,442	2,610
	Reported deliveries	356	354	347	339	343	370
	Trained deliveries	182	299	300	299	358	358
Samdrup Jongkhar	Antenatal	3,529	3,344	2,618	2,532	2,514	2,741
	Reported deliveries	909	990	679	710	465	785
	Trained deliveries	453	489	381	330	428	456
Samtse	Antenatal	5,078	4,760	4,827	4,950	5,218	5,382
	Reported deliveries	898	1,238	1,267	1,208	1,154	986
	Trained deliveries	763	758	565	495	438	475
Sarpang	Antenatal	3,793	3,411	2,700	3,359	3,399	3,621
	Reported deliveries	915	1,099	808	833	658	1,187
	Trained deliveries	747	696	489	632	714	686
Thimphu*	Antenatal	12,689	10,068	10,112	10,708	11,738	13,168
	Reported deliveries	1,989	2,594	3,122	3,324	3,791	307
	Trained deliveries	1,584	2,202	2,131	2,549	2,659	3,082
Trashigang	Antenatal	3,275	3,082	4,103	3,725	3,145	3,428
	Reported deliveries	1,181	1,008	987	776	869	861
	Trained deliveries	490	481	462	591	498	430
Trashy Yangtse	Antenatal	949	1,093	1,102	1,240	1,437	1,441
	Reported deliveries	399	431	438	404	399	386
	Trained deliveries	107	111	108	118	107	125
Trongsa	Antenatal	824	937	720	771	886	989
	Reported deliveries	299	243	255	226	244	309
	Trained deliveries	140	106	34	68	87	106

Table 2..13 contd...

Tsirang	Antenatal	1,441	1,192	1,230	1,213	1,107	1,338
	Reported deliveries	449	352	448	323	268	269
	Trained deliveries	295	227	191	104	229	94
Wangdue Phodrang	Antenatal	2,559	2,296	1,913	2,148	2,263	3,323
	Reported deliveries	737	429	551	509	653	506
	Trained deliveries	161	161	182	230	309	395
Zhemgang	Antenatal	1,251	1,166	1,253	1,251	1,284	1,243
	Reported deliveries	401	405	393	409	377	378
	Trained deliveries	183	162	216	156	145	130

Note: Trained delivery refers to deliveries attended by trained health personnels in hospitals/BHUs and at home, Reported deliveries refers to total reported deliveries during household survey 2010, \*Thimphu and Phuentsholing urban areas are not covered by the Annual Household Survey.

Source: Annual Health Bulletin 2011, MoH, Thimphu.

TABLE 2.14: DETAILS OF COMPLICATIONS DURING PREGNANCY AND DURING DELIVERIES, BHUTAN, 2006 TO 2010

Complications	2006		2007		2008		2009		2010	
	Numbers	Percent	Numbers	Percent	Numbers	Percent	Numbers	Percent	Numbers	Percent
<b>Pregnancy, Childbirth and Puerperium</b>										
Abortions	913	13	913	13	928	12	1,057	12	1,190	12
Pregnancy Induced Hypertension	392	6	392	6	451	6	458	5	565	6
Ante-Partum Haemorrhage & Placenta Previa	97	1	97	1	163	2	147	2	143	1
Malpresentation	105	2	105	2	133	2	165	2	155	2
Prolonged Labour	289	4	289	4	381	5	635	8	821	8
Obstructed Labour	149	2	149	2	156	2	275	3	378	4
Post Partum Haemorrhage	142	2	142	2	154	2	133	2	152	2
Retained Placenta	218	3	218	3	439	6	168	2	199	2
Puerperal Sepsis	116	2	116	2	96	1	125	1	75	1
Other complications of pregnancy	4,483	65	4,483	65	4,607	61	5,296	63	6,250	63
<b>All complications</b>	<b>6,904</b>	<b>100</b>	<b>6,904</b>	<b>100</b>	<b>7,508</b>	<b>100</b>	<b>8,459</b>	<b>100</b>	<b>9,928</b>	<b>100</b>

Source: Annual Health Bulletin 2011, MoH, Thimphu.

TABLE 2.15: FAMILY PLANNING ACCEPTORS BY TYPE OF METHOD, BHUTAN, 2006 TO 2010

Method	2006		2007		2008		2009		2010	
	Numbers	Percent	Numbers	Percent	Numbers	Percent	Numbers	Percent	Numbers	Percent
Female Sterilisation			1,844	2,808	2,733	3,219	3,642			
Male Sterilisation			7,202	8,927	9,433	9,730	9,436			
Intra uterine device (IUD) inserted			1,598	2,610	1,970	2,343	2,631			
Pills (OCP)			32,074	34,688	40,274	44,643	52,234			
Condoms			1,517,705	1,607,790	1,462,467	1,426,426	1,050,891			
Injection DMPA			57,985	67,965	71,738	75,999	89,797			
<b>All methods</b>			<b>1,618,408</b>	<b>1,724,788</b>	<b>1,588,615</b>	<b>1,562,360</b>	<b>1,208,631</b>			

(Number)

Note: IUD = No. inserted, Pills = No. of cycles, DMPA = No. of injections and Condoms = No. of pieces distributed

Source: Annual Health Bulletin 2011, MoH, Thimphu.

TABLE 2.16: NUMBER OF USERS OF FAMILY PLANNING METHODS BY TYPE, BY DZONGKHAG, BHUTAN, 2010

Dzongkhag	Family planning methods					
	New IUD Inserted	Oral pills (No. of Cycles issued)	DMPA (No. Injected)	Vasectomy*	Tubectomy*	No. of Condom issued ( In pieces)
Bumthang	5	2,085	2,426	87	57	47,480
Chhukha	177	5,825	8,728	910	460	74,316
Dagana	10	3,470	4,596	587	110	26,586
Gasa	21	102	1,003	32	17	6,835
Haa	6	1,072	1,670	188	146	20,351
Lhuentse	40	1,049	2,172	303	72	41,156
Monggar	164	2,319	9,204	620	361	163,027
Paro	43	1,982	3,990	614	558	50,170
Pema Gatshel	48	1,504	2,859	414	54	33,930
Punakha	90	2,221	2,965	251	234	35,080
Samdrup Jongkhar	49	3,356	4,528	480	34	31,940
Samtse	133	6,575	7,428	1,919	478	71,194
Sarpang	106	4,019	6,649	484	231	63,895
Thimphu	1,395	4,382	9,566	283	153	156,645
Trashigang	208	3,927	6,688	785	175	68,617
Trashi Yangtse	23	616	1,661	285	75	48,737
Trongsa	18	1,043	2,469	117	33	23,252
Tsirang	11	2,999	4,237	381	97	18,155
Wangdue Phodrang	39	1,316	3,926	501	175	33,007
Zhemgang	45	2,372	3,032	195	122	36,518
<b>Bhutan</b>	<b>2,631</b>	<b>52,234</b>	<b>89,797</b>	<b>9,436</b>	<b>3,642</b>	<b>1,050,891</b>

Note: \*DMPA = 1 user is equal to 4 injections

\*\*Oral pills = 1 user is equal to 13 cycles or 12 cycles

Source: Annual Health Bulletin 2011, MoH, Thimphu.

TABLE 2.17: NUMBER OF BLOOD SLIDE EXAMINATIONS FOR MALARIA AND MALARIOMETRIC INDICES, BHUTAN, 2006 TO 2010

Details	2006	2007	2008	2009	2010
Total blood films examined (numbers)	66,079	51,446	n.a	n.a	n.a
Blood film detected negative	64,210	50,653	n.a	n.a	n.a
Blood films detected positive	1,869	793	n.a	n.a	n.a
Plasmodium vivax	963	414	n.a	394	255
Plasmodium falciparum	761	379	n.a	473	139
Mixed infections	144	n.a	n.a	84	32
Deaths due to malaria (numbers)	6	2	n.a	4	1

Source: Annual Health Bulletin 2011, MoH, Thimphu.

TABLE 2.18: NUMBER OF TUBERCULOSIS CASES BY TYPE, BHUTAN, 2004 TO 2010

(Person)

Year	Cases diagnosed and treated		Total cases	Total deaths
	Pulmonary	Extra Pulmonary		
2004	648	354	1,002	22
2005	631	387	1,018	29
2006	608	326	934	19
2007	635	373	1,008	23
2008	567	418	982	20
2009	797	357	1,154	31
2010	814	518	1,332	38

Source: Annual Health Bulletin 2011, MoH, Thimphu.

TABLE 2.19: TYPES OF WATER AND SANITATION FACILITY BY DZONGKHAG, BHUTAN, 2010

Dzongkhag	Percentage Coverage						
	Latrine	Water Supply	Household with Functional Piped water	Drainage & Foot-path	Household with Animal Shed	Household with Vegetable Garden	Household with Garbage Pit
Bumthang	98.8	98.2	98.2	75.1	47.2	78.9	90.3
Chhukha	93.5	85.3	81.6	51.6	39.4	65.1	66.4
Dagana	89.6	81.0	74.6	66.5	55.8	74.5	62.3
Gasa	71.8	55.4	51.9	35.0	28.3	83.0	63.3
Haa	95.6	89.1	88.4	78.4	30.9	68.9	77.4
Lhuentse	87.5	93.5	91.6	61.2	55.0	86.4	75.4
Monggar	88.0	92.8	91.9	70.1	60.9	70.9	71.3
Paro	92.1	91.8	88.0	65.5	26.1	59.0	57.6
Pema Gatshel	82.9	83.5	81.9	37.3	50.9	76.8	55.6
Punakha	95.8	93.8	83.5	73.9	52.0	70.0	71.2
Samdrup Jongkhar	90.8	68.1	66.9	46.8	46.4	68.5	76.0
Samtse	94.1	85.8	80.8	44.1	63.1	74.4	73.7
Sarpang	96.2	88.1	81.6	35.4	39.9	52.9	75.3
Thimphu	96.7	96.7	93.4	65.3	28.5	73.0	51.3
Trashigang	93.9	91.8	89.6	54.7	48.3	78.6	70.1
Trashhi Yangtse	97.3	98.1	87.0	66.1	60.5	83.9	82.9
Trongsa	85.2	79.8	76.4	44.2	22.5	71.9	53.8
Tsirang	95.2	93.5	91.2	26.7	68.8	86.9	69.8
Wangdue Phodrang	94.0	83.6	79.4	75.5	55.4	71.3	83.6
Zhemgang	97.2	94.5	91.6	60.9	31.0	86.1	65.9
<b>Bhutan</b>	<b>92.5</b>	<b>87.8</b>	<b>83.9</b>	<b>55.1</b>	<b>48.1</b>	<b>72.1</b>	<b>69.9</b>

Source: Annual Health Bulletin 2011, MoH, Thimphu.



## CHAPTER 3

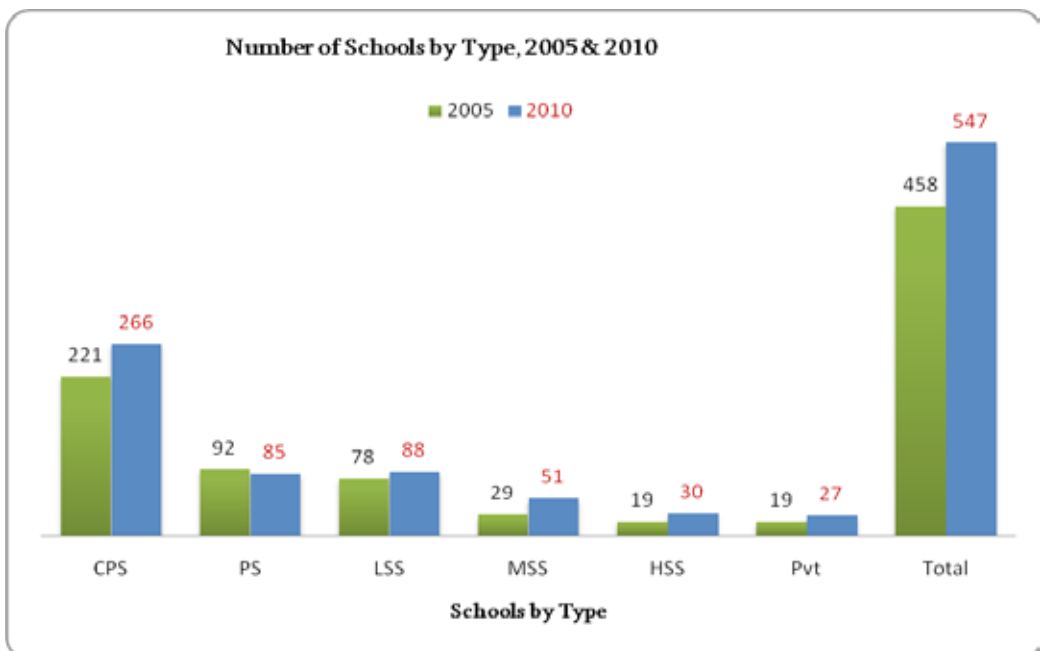
### EDUCATION

The introduction of comprehensive education system in Bhutan came along with the economic development initiated in 1961. Prior to that time there were virtually no modern education facilities in Bhutan. However, the monastic form of education existed and continued to exist even today. Now there is an extensive network of Schools and other educational institutions spread throughout the country.

The present formal educational refers to the hierarchically structured and chronologically graded learning's, which requires certification for the learner to progress through the grades to go to higher levels. The formal education consists of 1 year pre-primary (PP), 6 years primary, 2 years Lower Secondary School (LSS), 2 years Middle Secondary School (MSS), 2 years Higher Secondary School (HSS) and 3 years of tertiary (college) education.

Entry into the formal education system starts at the age of 6 when the children are admitted into pre-primary classes. The medium of instruction in the schools is both Dzongkha-‘the national language’ and English. School curricula also include training in traditional arts, crafts, and agriculture. Besides the modern education system, there is large number of traditional institutions offering education to children in monasteries, Drupdas and Shedras, for which the Ministry of Education has recently started collecting the information for some shedras.

Non-Formal Education (NFE), which is meant for those individuals who are unable to avail the facilities of the formal education, was first established formally in 1992. Basic literacy skills, reading, writing and numeric skills are likewise strengthened through this system. The Ministry of Education maintains an extensive range of statistics on students, schools and teaching personnel.



The summaries of the data are presented through this chapter. For the academic session 2010, there were 181,686 students enrolled in 547 schools, 62 extended classrooms and 27 Institutes. Of 547 schools 27 are privately run while the government runs the rest.

In 2010, there were 267 Community Primary Schools (CPS) catering to small and far-flung remote areas. CPS is the basic level for the primary school system, which caters to the specific community, a village or a cluster of defined villages.

Number of NFE centers expanded from 6 in 1992 with 300 learners to 714 centers with 12,901 learners in 2010. The NFE centers provide only basic literacy courses of reading and writing.

The size of enrolment till Higher Secondary Schools was highest in Thimphu Dzongkhag with 25,682 students followed by Chhukha with 16,562 & Samtse with 14,739 and least was Gasa with 670.

Many schools provide boarding facilities for students living in areas far from the school. Children from communities who do not have their own schools enroll in the more distant school either as day scholar or as boarders. This is made possible largely through the provision of meals through the World Food Programme (WFP).

TABLE 3.1: NUMBER OF SCHOOLS, INSTITUTES &amp; CENTRES, BHUTAN, 2010

(Number)

Details	Government	Private	Total
<b>Early childhood development</b>			
Day Care Centres	0	25	25
School education			
Community Primary Schools	266	1	267
Primary Schools	85	10	95
Lower Secondary Schools	88	2	90
Middle Secondary Schools	51	1	52
Higher Secondary Schools	30	13	43
Sub-Total	520	27	547
Extended Classroom	62		62
Special Institutes*	8		8
Tertiary Institutes under RUB	10	1	11
Vocational Institutes	8		8
Total (Schools and Institutes)	608	53	661
Monastic Education (Lobdra, Shredra,etc)	207	n.a	207
Non-Formal Centres	714	N.A	714
<b>Total</b>	<b>1,529</b>	<b>52</b>	<b>1,582</b>

Note: \* National institute for the disabled, the sanskrit patshala and drugyel LSS and Changangkha LSS are included under special institutes.

Source: Annual Education Statistics 2010

TABLE 3.2: NUMBER OF STUDENTS, LEARNERS, TRAINEES AND NOVITIATES, BHUTAN, 2010

(Number)

Details	Government			Private			Total		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
<b>Early childhood development</b>									
Day Care Centres	0	0	0	313	346	659	346	313	659
<b>School Education</b>									
Community Primary Schools	15,163	14,968	30,131	62	39	101	15,225	15,007	30,232
Primary Schools	11,512	11,360	22,872	873	841	1,714	12,385	12,201	24,586
Lower Secondary Schools	24,001	24,595	48,596	395	384	779	24,396	24,979	49,375
Middle Secondary Schools	18,750	18,705	37,455	221	195	416	18,971	18,900	37,871
Higher Secondary Schools	11,060	10,376	21,436	3,406	3,499	6,905	14,466	13,875	28,341
Sub-Total	80,486	80,004	160,490	4,957	4,958	9,915	85,443	84,962	170,405
Bhutanese students in India & abroad**	0	0	0	57	38	95	57	38	95
Sub-Total	80,486	80,004	160,490	5,014	4,996	10,010	85,500	85,000	170,500
Special Institutes*	115	168	283	0	0	0	115	168	283
<b>Tertiary education</b>									
Tertiary Institutes under RUB	3,123	1,803	4,926	0	0	0	3,123	1,803	4,926
Tertiary Students in India***	192	149	341	1,466	2,090	3,556	1,658	2,239	3,897
Tertiary students in private colleges in Bhutan	0	0	0	179	138	317	179	138	317
Tertiary Students abroad***	95	90	185	65	50	115	160	140	300
Sub-Total	3,410	2,042	5,452	1,710	2,278	3,988	5,120	4,320	9,440
Vocational institutes	543	261	804	0	0	0	261	543	804
Total (Schools and Institutes)	84,554	82,475	167,029	7,037	7,620	14,657	91,342	90,344	181,686
Monastic Education (Lob-dra, Shredra, etc)****	7,240	123	7,363	0	0	5,149	123	12,389	12,512
Non-Formal Centres	3,966	8,935	12,901	0	0	0	3,966	8,935	12,901
<b>Grand total</b>	<b>95,760</b>	<b>91,533</b>	<b>187,293</b>	<b>12,186</b>	<b>7,620</b>	<b>19,806</b>	<b>95,431</b>	<b>111,668</b>	<b>207,099</b>

Note: \* National institute for the disabled, the sanskrit patshala and drugyel LSS and Changangkha LSS are included under special institutes. \*\*Bhutanese students in PP-XII studying in Darjeeling and Kalimpong, \*\*\*Students who are on RGOB scholarship abroad have been listed under public students and other students studying abroad under private, \*\*\*\*The monastic enrolment reflected under public is from 2009 and enrolment reflected under private is from 2004.

Source: Annual Education Statistics 2010

TABLE 3.3: SUMMARY OF TEACHERS, LECTURERS, INSTRUCTORS AND TRAINERS, BHUTAN, 2010

(Number)

Details	Government			Private			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>Early childhood development</b>									
Day Care Centres	0	0	0	1	78	79	1	78	79
<b>School Education</b>									
Community Primary Schools	991	386	1,377	4	3	7	995	389	1,384
Primary Schools	435	461	896	43	82	125	478	543	1,021
Lower Secondary Schools	919	938	1,857	19	23	42	938	961	1,899
Middle Secondary Schools	797	636	1,433	0	0	0	797	636	1,433
Higher Secondary Schools	659	387	1,046	173	111	284	832	498	1,330
Sub-Total	3,801	2,808	6,609	239	219	458	4,040	3,027	7,067
Special Institutes	69	54	123	0	0	0	69	54	123
Tertiary Institutes under RUB	708	84	792	0	0	0	708	84	792
Tertiary Private Institutes in Bhutan	0	0	0	5	18	23	5	18	23
Vocational institutes	83	26	109	0	0	0	83	26	109
Total (Schools and Institutes)	4,661	2,972	7,633	240	297	537	4,901	3,269	8,193
Non-Formal Centres	315	441		0	0	0	293	461	754
<b>Grand total</b>	<b>4,976</b>	<b>3,413</b>	<b>7,633</b>	<b>240</b>	<b>297</b>	<b>537</b>	<b>5,194</b>	<b>3,730</b>	<b>8,947</b>

Source: Annual Education Statistics 2010

TABLE 3.4: NUMBER OF EDUCATIONAL FACILITIES BY TYPE AND DZONGKHAG, 2010

(Number)

Dzongkhag	CPS	CPS Pvt	PS	Pvt. PS	LSS	Pvt. LSS	MSS	Pvt MSS	HSS	Pvt. HSS	ECR	Total
Bumthang	12	0	1	0	2	0	2	0	1	1	0	19
Chhukha	18	0	5	0	7	1	4	0	3	1	3	42
Dagana	14	0	1	0	4	0	3	0	1	0	5	28
Gasa	2	0	1	0	0	0	1	0		0	1	5
Haa	2	0	3	0	3	0	0	0	1	0	1	10
Lhuentse	13	0	9	0	2	0	2	0	1	0	0	27
Monggar	31	0	6	0	8	0	2	0	2	1	0	50
Paro	3	0	3	1	7	0	3	0	2	3	1	23
Pema Gatshel	18	0	4	0	6	0	1	0	2	0	6	37
Punakha	9	0	3	0	4	0	4	0	1	1	0	22
Samdrup Jongkhar	11	0	5	1	4	0	5	0	1	0	2	29
Samtse	9	0	1	0	4	0	4	0	2	0	18	38
Sarpang	12	0	0	1	5	0	2	0	2	1	3	26
Trashigang	35	0	12	0	8	0	5	0	3	0	6	69
Trashigang	20	0	3	0	5	0	1	0	1	0	0	30
Trongsa	15	0	4	0	3	0	1	0	1	0	1	25
Tsirang	7	0	3	0	2	0	1	0	1	0	3	17
Wangdue Phodrang	15	0	6	0	3	0	1	0	2	0	3	30
Zhemgang	15	0	9	0	3	0	3	0	1	1	1	33
<b>Total</b>	<b>261</b>	<b>1</b>	<b>79</b>	<b>9</b>	<b>80</b>	<b>2</b>	<b>45</b>	<b>1</b>	<b>28</b>	<b>9</b>	<b>54</b>	<b>560</b>

Source: Annual Education Statistics 2010

TABLE 3.5: NUMBER OF TEACHERS IN EDUCATIONAL INSTITUTIONS BY SEX, BHUTAN, 2006 TO 2010

(Number)

Details	2006			2007			2008			2009			2010		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Community Primary Schools	665	187	852	703	193	896	775	225	1,000	991	290	1,281	991	386	1,377
Pvt Community Primary School	0	0	0	0	0	0	0	0	0	5	2	7	4	3	7
Primary Schools	427	363	790	416	335	751	425	374	799	500	431	931	435	461	896
Pvt Primary Schools	52	112	164	46	107	153	39	84	123	36	86	122	43	82	125
Lower Secondary Schools	857	786	1,643	860	744	1,604	836	791	1,627	904	881	1,785	919	938	1,857
Pvt Lower Secondary Schools	0	0	0	12	11	23	27	37	64	18	32	50	19	23	42
Middle Secondary Schools	440	308	748	622	471	1,093	697	480	1,177	734	540	1,274	797	636	1,433
Pvt Middle Secondary School	0	0	0	0	0	0	0	0	0	12	15	27	0	0	0
Higher Secondary Schools	413	183	596	467	216	683	523	231	754	598	314	912	659	387	1,046
Pvt Higher Secondary schools	136	34	170	131	38	169	154	47	201	202	77	279	173	111	284
<b>Total</b>	<b>2,990</b>	<b>1,973</b>	<b>4,963</b>	<b>3,257</b>	<b>2,115</b>	<b>5,372</b>	<b>3,476</b>	<b>2,269</b>	<b>5,745</b>	<b>4,000</b>	<b>2,668</b>	<b>6,668</b>	<b>4,040</b>	<b>3,027</b>	<b>7,067</b>

Source: Annual Education Statistics 2010

TABLE 3.6: NUMBER OF EDUCATIONAL FACILITIES AND STUDENTS BY DZONGKHAG, 2010

(Number)

Dzongkhag	Educational facilities	Student		Total
		Boys	Girls	
Bumthang	19	2,079	2,174	4,253
Chhukha	42	8,247	8,315	16,562
Dagana	28	3,596	3,363	6,959
Gasa	5	333	337	670
Haa	10	1,531	1,549	3,080
Lhuentse	27	2,026	1,968	3,994
Monggar	50	5,087	4,877	9,964
Paro	23	5,244	5,434	10,678
Pema Gatshel	37	3,313	3,000	6,313
Punakha	22	3,646	3,902	7,548
Samdrup Jongkhar	29	4,555	4,384	8,939
Samtse	38	7,618	7,121	14,739
Sarpang	26	5,487	5,425	10,912
Thimphu	43	12,494	13,188	25,682
Trashigang	69	6,544	6,227	12,771
Trashi Yangtse	30	2,587	2,526	5,113
Trongsa	25	1,742	1,744	3,486
Tsirang	17	2,834	2,678	5,512
Wangdue Phodrang	30	3,663	3,997	7,660
Zhemgang	33	2,817	2,753	5,570
<b>Total</b>	<b>603</b>	<b>85,443</b>	<b>84,962</b>	<b>170,405</b>

Note: In the above table, Institutes and NFE and Day Care Centres are excluded

Source: Annual Education Statistics 2010



TABLE 3.7: NUMBER OF ENROLMENT IN EDUCATIONAL INSTITUTIONS, 2006 TO 2010

(Number)

Institutions	2006	2007	2008	2009	2010
Schools	146,524	152,194	157,112	164,262	170,405
Community Primary Schools	29,132	28,953	29,702	31,090	30,232
Primary Schools	25,745	23,585	22,813	23,565	24,586
Lower Secondary Schools	50,576	48,716	48,706	48,153	49,375
Middle Secondary Schools	21,236	29,829	32,292	33,891	37,871
Higher Secondary Schools	14,414	14,963	16,155	18,880	28,341
Tertiary Education Institutes (Royal University of Bhutan)	3,326	3,550	3,914	4,715	5,243
Sherubtse College, Kanglung	1,014	1,045	1,092	772	938
Paro College of Education, Paro	744	703	839	1,062	907
Samtse College of Education, Samtse	483	546	659	966	664
Institute of Language and Culultural Studies	272	320	338	339	345
College of Science and Technology, Rinchending	446	314	247	292	384
Jigme Namgyal Polytechnic, Dewathang	0	250	307	345	320
Royal Institute of Health Sciences, Thimphu	197	211	257	257	314
National Institute of Traditional Medicines, Thimphu	28	23	35	40	42
College of Natural Resources, Lobesa	142	138	140	147	151
Gedu College of Business Studies	0	0	0	495	861
Royal Thimphu College (pvt)	.N.A	.N.A	n.a	n.a	317
Vocational Institutes	728	804	1,220	1,222	804
National Institue of Zorig Chusum, Thimphu	59	53	380	341	50
Institute of Automobile Engineering, Thimphu	0	0	0	25	45
Trashiyangtse Institue of Zorigchusum	41	49		57	23
Vocational Training Institue of Shershong, Sarpang	81	121	97	133	90
Vocational Training Institue, Samthang	254	272	227	105	138
Vocational Training Institute, Chumey	133	147	168	238	79
Vocational Training Institute, Khuruthang	80	81	174	166	184
Vocational Training Institrute, Rangjung	80	81	174	157	195
Special Institutes	68	76	68	66	283
National Institute for the Disabled (NID)	41	49	50	48	n.a
Jigmecholing (Surey) Sanskrit patshala	27	27	18	18	n.a
Others	18,819	14,909	14,124	13,523	13,560
Day Care Centres	269	215	294	363	659
Non-formal Education Centres	18,550	14,694	13,830	13,160	12,901
<b>Total</b>	<b>169,465</b>	<b>171,533</b>	<b>176,438</b>	<b>183,788</b>	<b>176,735</b>

Source: Annual Education Statistics 2010

TABLE 3.8: NUMBER AND PERCENT SHARE OF STUDENTS PER DZONGKHAG BY TYPE OF SCHOOL, 2010

Dzongkhag	CPS		PS		Pvt. PS		LSS		Pvt. LSS		MSS		Pvt. MSS		HSS		Pvt. HSS		Total			
	Total	Per cent	Total	Per cent	Total	Per cent	Total	Per cent	Total	Per cent	Total	Per cent	Total	Per cent	Total	Per cent	Total	Per cent	Total	Per cent		
Bumthang	1,134	3.8	0	0.0	326	1.4	0	0.0	1,160	2.4	0	0.0	943	2.5	0	0.0	494	2.3	196	2.8	4,253	2.5
Chhukha	2,257	7.5	0	0.0	1,244	5.4	0	0.0	5,580	11.5	219	18.6	3,617	9.7	0	0.0	3,130	14.6	515	7.5	16,562	9.7
Dagana	2,670	8.9	0	0.0	121	0.5	0	0.0	1,542	3.2	0	0.0	2,127	5.7	0	0.0	499	2.3	0	0.0	6,959	4.1
Gasa	205	0.7	0	0.0	98	0.4	0	0.0	0	0.0	0	0.0	367	1.0	0	0.0	0	0.0	0	0.0	670	0.4
Haa	164	0.5	0	0.0	665	2.9	0	0.0	1,582	3.3	0	0.0	0	0.0	0	0.0	669	3.1	0	0.0	3,080	1.8
Lhuentse	677	2.2	0	0.0	1,490	6.5	0	0.0	575	1.2	0	0.0	736	2.0	0	0.0	516	2.4	0	0.0	3,994	2.3
Monggar	2,845	9.4	0	0.0	908	4.0	0	0.0	3,132	6.4	0	0.0	1,189	3.2	0	0.0	1,588	7.4	302	4.4	9,964	5.8
Paro	242	0.8	0	0.0	1,404	6.1	38	2.2	3,852	7.9	0	0.0	2,104	5.6	0	0.0	1,400	6.5	1,638	23.7	10,678	6.3
Pema Gatsel	1,637	5.4	0	0.0	417	1.8	0	0.0	2,490	5.1	0	0.0	757	2.0	0	0.0	1,012	4.7	0	0.0	6,313	3.7
Punakha	980	3.3	0	0.0	926	4.0	0	0.0	1,935	4.0	0	0.0	2,134	5.7	0	0.0	675	3.1	898	13.0	7,548	4.4
Samdrup Jongkhar	1,505	5.0	0	0.0	2,073	9.1	159	9.3	1,742	3.6	0	0.0	2,930	7.8	0	0.0	530	2.5	0	0.0	8,939	5.2
Samtse	2,787	9.3	0	0.0	580	2.5	0	0.0	3,102	6.4	0	0.0	6,036	16.1	0	0.0	2,234	10.4	0	0.0	14,739	8.6
Sarpang	1,906	6.3	0	0.0	0	0.0	18	1.1	4,821	9.9	0	0.0	2,451	7.0	0	0.0	1,179	5.5	537	7.8	10,912	6.4
Thimphu	607	2.0	117	100.0	4,902	21.4	1,499	87.5	6,228	12.8	958	81.4	6,178	16.5	18	100.0	2,485	11.6	2,690	39.0	25,682	15.1
Trashigang	3,231	10.7	0	0.0	2,361	10.3	0	0.0	3,118	6.4	0	0.0	2,396	6.4	0	0.0	1,665	7.8	0	0.0	12,771	7.5
Trashiyangtse	1,705	5.7	0	0.0	324	1.4	0	0.0	1,826	3.8	0	0.0	723	1.9	0	0.0	535	2.5	0	0.0	5,113	3.0
Trongsa	1,163	3.9	0	0.0	805	3.5	0	0.0	688	1.4	0	0.0	354	0.9	0	0.0	476	2.2	0	0.0	3,486	2.0
Tsiring	1,355	4.5	0	0.0	929	4.1	0	0.0	1,940	4.0	0	0.0	644	1.7	0	0.0	644	3.0	0	0.0	5,512	3.2
Wangdue Phodrang	1,837	6.1	0	0.0	2,097	9.2	0	0.0	2,084	4.3	0	0.0	606	1.6	0	0.0	1,036	4.8	0	0.0	7,660	4.5
Zhengang	1,208	4.0	0	0.0	1,202	5.3	0	0.0	1,199	2.5	0	0.0	1,163	3.1	0	0.0	669	3.1	129	1.9	5,570	3.3
Total	30,115	100.0	117	100.0	22,872	100.0	1,714	100.0	48,596	100.0	1,177	100.0	37,455	100.0	18	100.0	21,436	100.0	6,905	100.0	170,405	100.0

Source: Annual Education Statistics 2010

TABLE 3.9: NUMBER OF STUDENTS BY GRADE AND TYPE OF SCHOOL, BHUTAN, 2010

(Number)

Grade	Private School	Community Primary	Primary	Lower Secondary	Middle Secondary	Higher Secondary	All Schools
Pre primary/ PP	1,056	5,094	3,372	4,996	2,257	390	17,165
I	545	5,098	3,323	5,123	2,350	293	16,732
II	421	4,831	3,324	5,090	2,269	311	16,246
III	340	4,524	3,387	4,884	2,342	331	15,808
IV	264	4,491	3,492	5,393	2,419	304	16,363
V	223	3,189	3,057	5,087	2,401	268	14,225
VI	164	2,904	2,917	5,004	2,525	316	13,830
Sub-Total	3,013	30,131	22,872	35,577	16,563	2,213	110,369
VII	90	0	0	7,236	5,098	664	13,088
VIII	108	0	0	5,783	4,765	1,160	11,816
Sub-Total	198	0	0	13,019	9,863	1,824	24,904
IX	47	0	0	0	6,306	5,172	11,525
X	78	0	0	0	4,723	5,492	10,293
Sub-Total	125	0	0	0	11,029	10,664	21,818
XI	3,021	0	0	0	0	3,425	6,446
XII	3,558	0	0	0	0	3,310	6,868
Sub-Total	6,579	0	0	0	0	6,735	13,314
<b>Total</b>	<b>9,915</b>	<b>30,131</b>	<b>22,872</b>	<b>48,596</b>	<b>37,455</b>	<b>21,436</b>	<b>170,405</b>

Source: Annual Education Statistics 2010

TABLE 3.10: NUMBER OF STUDENTS BY GRADE, 2006 TO 2010

(Number)

Grade	2006	2007	2008	2009	2010
Primary grade	102,225	104,467	106,100	107,700	110,369
Pre-primary/PP	16,869	16,392	16,432	17,108	17,165
I	15,546	16,865	16,084	16,316	16,732
II	16,109	15,537	16,529	15,921	16,246
III	14,772	15,386	14,983	15,900	15,808
IV	14,591	14,899	15,506	15,194	16,363
V	12,618	13,450	13,808	14,362	14,225
VI	11,720	11,938	12,758	12,899	13,830
Lower Secondary grade	20,482	22,104	23,247	24,297	24,904
VII	11,214	11,887	12,328	12,850	13,088
VIII	9,268	10,217	10,919	11,447	11,816
Middle Secondary grade	15,715	16,807	17,608	19,308	21,818
IX	8,859	9,116	9,699	10,551	11,525
X	6,856	7,691	7,909	8,757	10,293
Higher Secondary school	8,102	8,816	10,157	11,815	13,314
XI	4,234	4,581	5,426	5,990	6,446
XII	3,868	4,235	4,731	5,825	6,868
<b>Total</b>	<b>146,524</b>	<b>152,194</b>	<b>157,112</b>	<b>164,262</b>	<b>170,405</b>

Source: Annual Education Statistics 2010

TABLE 3.11: NUMBER OF STUDENTS ENROLED,PROMOTEEES,REPEATERS AND DROP-OUTS BY GRADE, BHUTAN, 2010

Class	Number				Percentage		
	Enrolment	Promo-tees	Repeaters	Dropouts	Promotees	Repeaters	Dropouts
PP	17,165	1,130	15,641	534	90.4	6.5	3.1
I	16,732	1,091	15,204	194	92.2	6.6	1.2
II	16,246	1,042	14,870	190	92.3	6.5	1.2
III	15,808	938	14,994	103	93.5	5.8	0.6
IV	16,363	1,369	13,377	576	87.3	8.9	3.8
V	14,225	848	13,259	432	91.2	5.8	3.0
VI	13,830	571	12,306	173	94.3	4.4	1.3
Sub-Total	110,369	6,989	99,651	2,202	91.6	6.4	2.0
VII	13,088	782	11,374	694	88.5	6.1	5.4
VIII	11,816	442	10,922	83	95.4	3.9	0.7
Sub-Total	24,904	1,224	22,296	777	91.8	5.0	3.2
IX	11,525	603	10,253	-305	97.2	5.7	-2.9
X*	10,293	40	4,478	0	51.1	0.5	0.0
Sub-Total	21,818	643	14,731	-305	76.3	3.3	-1.6
<b>Total</b>	<b>157,091</b>	<b>8,856</b>	<b>136,678</b>	<b>2,674</b>	<b>89.7</b>	<b>5.8</b>	<b>1.8</b>

Note:\* The students who leave school after Class X are school leavers and not drop-outs. Promotees and dropout figures are imputations

Source: Annual Education Statistics 2010

# CHAPTER 4

## LABOUR AND EMPLOYMENT

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The economy of Bhutan is characterized by the predominance of people engaged in self-employment, particularly those working on their own land. There is also a good deal of small cottage industry often undertaken in the home. The number of person working for wages is relatively small.



Statistics on human resources are designed to measure the involvement of people in economic activities. Economic activities refer to the production of economic goods and services and include people who are self-employed (e.g. farmers operating their own land) as well as persons who work for wages (i.e. employees). Broadly, a statistical system for human resources should cover topics such as size and characteristics of the labour force, employment, wage rate and conditions of work.

The National Statistical Bureau conducted the two consecutive Labour Force Surveys in 1998 and 2000. The Department of Employment (DoE) under Ministry of Labour and Human Resources (MoLHR) conducted the Labour Force Survey from 2001 onwards, since its creation in 2000. Labour statistics presented in this chapter are from Labour Force Survey (LFS) Report, 2011.

Although share of primary sector in GDP is gradually decreasing, agriculture sector still contributes the 16.80 percent of the over-all GDP in 2010, providing 60 percent of the labour force as per Labour Force Survey 2011. The private sector is emerging as the important sector generating employment opportunities for the rapidly increasing labour market.

The employed persons comprise of all those who had performed some paid or cash or in kind, during the reference period for at least one hour or the person has a job or business formally attached but temporally absent from the work and going to resume the work. A total of 323,700 were employed and 10,500 were found to be unemployed out of total projected population of 708,265 in 2011, making unemployment rate at the national level by 3.1 percent as per the Labour Force Survey 2011.

TABLE 4.1: EMPLOYMENT IN CIVIL SERVANTS BY AGENCY, BHUTAN, 2006 TO 2011

(Number)

Ministry/Division	2006	2007	2008	2009	2010	2011
His Majesty 4th King's Secretariat	33	35	29	30	26	26
His Majesty 5th King's Secretariat	..	7	11	14	27	37
<b>Judiciary</b>						
Royal Court of Justice	289	315	314	309	309	290
Legislative						
National Assembly	21	25	25	32	36	33
National Council	..	..	..	16	24	21
Constitutional						
Royal Audit Authority	161	170	178	189	199	198
Election Commission	..	94	93	93	94	69
Royal Civil Service Commission	49	54	56	57	69	54
Anti-Corruption Commission	..	18	23	29	29	36
<b>Executive</b>						
Ministries						
Ministry of Agriculture & Forests	3,150	3,243	3,036	3,084	3,176	3,296
Ministry of Economic Affairs	508	554	570	510	524	527
Ministry of Education	5,507	5,956	6,272	6,625	7,365	8,373
Ministry of Finance	1,216	1,293	1,308	1,424	1,547	1,631
Ministry of Foreign Affairs	113	121	116	136	141	149
Ministry of Health	2,216	2,328	2,374	2,492	2,660	2,828
Ministry of Home & Cultural Affairs	1,092	1,106	1,092	1,104	1,266	1,278
Ministry of Information & Communications	323	338	303	320	332	704
Ministry of Labour & Human Resources	212	247	253	281	310	339
Ministry of Works & Human Settlement	1,550	1,667	1,631	1,670	1,501	1,611
<b>Autonomous &amp; Other Agencies</b>						
Royal University of Bhutan	414	463	470	552	629	726
Bhutan Infocomm & Media Authority	..	..	16	17	22	24
Bhutan Narcotic Control Agency	..	2	4	7	11	14
Bhutan Olympic Committee	9	8	6	7	8	7
Cabinet Secretariat	10	12	12	24	27	27
Center for Bhutan Studies	15	19	21	23	22	26

Table 4.1 contd...

Dratshang Lhentshog	25	29	26	26	34	36
Dzongkha Development Commission	..	..	22	22	27	26
Gross National Happiness Commission	..	48	91	204	101	100
National Commission for Women & Children	4	5	6	6	6	11
National Environment Commission	38	42	55	58	63	61
National Land Commission	..	..	244	292	310	321
National Statistical Bureau	41	57	56	56	60	54
Drug Regulatory Authority	..	1	2	2	1	19
Office of Attorney General	21	21	21	22	26	96
Royal Privy Council	..	..	..	2	8	10
Royal Education Council	“	“	“	2	1	7
Royal Institute of Management	59	58	58	60	69	64
Tourism Council of Bhutan	..	..	..	51	53	48
All Civil Servants	17,090	18,350	18,807	19,848	21,113	23,177
<b>Total civil servants located outside the country</b>						<b>85</b>

Note: Information provided as of 30th June 2011

Source: Royal Civil Servics Commission



TABLE 4.2: PERCENTAGE DISTRIBUTION OF EMPLOYED PERSONS BY SEX AND ECONOMIC ACTIVITY, BHUTAN, 2011

(Percent)

Economic Activity	Male	Female	Both sexes
Agriculture and forestry	53.3	67.7	60.2
Mining and quarrying	0.5	0.3	0.4
Manufacturing	3.8	6.8	5.2
Electricity, gas & water supply	3.4	0.9	2.2
Construction	2.2	0.5	1.4
Wholesale & retail trade, repair of motor vehicle & household goods	6.4	11.1	8.6
Hotels & restaurants	1.7	2.1	1.9
Transport, storage & communication goods	4.6	0.7	2.8
Financial intermediation	0.8	0.6	0.7
Real estate, renting & business activities	3.8	1.2	2.6
Public administration & defense	12.5	3.8	8.4
Education	3.7	2.2	3.0
Health & social work	1.1	0.7	0.9
Other community, social & personal service activities	1.7	0.6	1.2
Private households with employed persons	0.5	0.7	0.7
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

Source: Labour Force Survey Report 2011, MoLHR

TABLE 4.3: PERCENTAGE DISTRIBUTION OF ECONOMICALLY INACTIVE POPULATION BY AGE-GROUP, BHUTAN, 2011

(Percent)

Age group	Economically Inactive population						Total
	House/ family duties	Study	Old or retired	Too young	Physically challenged	Other reasons	
15-19	7.4	70.8	0.0	50.0	11.5	15.1	36.4
20-24	14.8	23.9	0.0	25.0	11.5	27.4	16.8
25-29	15.8	3.2	0.7	0.0	7.7	17.8	6.8
30-34	14.2	0.7	0.0	0.0	7.7	11.0	4.8
35-39	14.6	0.4	0.7	0.0	7.7	6.8	4.6
40-44	8.4	0.3	1.0	0.0	0.0	4.1	2.8
45-49	7.2	0.1	2.0	0.0	15.4	5.5	2.9
50-54	6.7	0.3	7.5	0.0	3.8	8.2	3.8
55-59	5.3	0.1	7.8	0.0	7.7	2.7	3.3
60-64	2.6	0.0	15.3	0.0	15.4	1.4	4.0
65+	3.2	0.3	65.1	25.0	11.5	0.0	13.8
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Source: Labour Force Survey Report 2011, MoLHR

TABLE 4.4: NUMBER OF PERSONS EMPLOYED BY AGE GROUP AND TYPE OF ENTERPRISE, BHUTAN, 2011

(Number)

Age Group	Government		Public Corporation		Pvt. Corporation		Armed Forces		Pvt. Business		Agri. farming		NGO/INGO		Total	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
15-19	300	400	100	100	100	100	0	0	800	1,400	4,800	5,200	0	0	6,200	7,300
20-24	2,000	2,100	500	600	800	800	100	100	3,300	5,100	7,700	11,000	0	0	14,500	19,600
25-29	6,600	3,900	1,700	800	1,400	800	1500	100	5,700	7,400	8,700	12,200	100	100	25,700	25,300
30-34	7,200	2,600	1,600	700	1200	300	1400	100	4,800	6,100	8,900	11,900	100	100	25,200	21,800
35-39	5,500	1,500	1,100	300	900	200	1100	100	4,500	4,300	8,200	10,600	100	100	21,300	17,000
40-44	4,800	1,000	1000	100	600	200	1000	0	3,100	3,600	7,200	10,500	0	0	17,700	15,500
45-49	3,400	700	700	100	400	200	500	100	2,600	2,700	8,900	11,300	100	0	16,500	15,000
50-54	2,200	300	300	0	400	0	200	0	2,400	1,500	8,700	9,900	0	0	14,200	11,700
55-59	1,000	100	100	100	100	100	0	0	1,700	900	7,700	7,300	0	0	10,700	8,500
60-64	400	0	100	0	100	0	100	0	900	600	6,500	5,000	0	0	8,000	5,500
65+	400	100	0	0	0	0	0	0	1200	400	8,400	5,700	100	0	10,100	6,200
<b>Total</b>	<b>33,900</b>	<b>12,700</b>	<b>7,200</b>	<b>2,800</b>	<b>6,100</b>	<b>2,900</b>	<b>5,800</b>	<b>400</b>	<b>30,900</b>	<b>33,900</b>	<b>85,600</b>	<b>100,500</b>	<b>600</b>	<b>400</b>	<b>170,100</b>	<b>153,500</b>

Source: Labour Force Survey Report 2011, MoLHR

TABLE 4.5: NUMBER OF EMPLOYED PERSONS BY AGE GROUP AND COMPLETED LEVEL OF EDUCATION, BHUTAN, 2011

Age	Level of Education											Total
	Illiterate	Nursery	Primary	Junior	High	Higher Secondary	Under graduate	Graduate	Masters & above	NFE	Religious professionals	
15-19	6,600	0	3,100	900	1,000	500	0	0	0	1,300	200	13,600
20-24	15,100	0	4,500	2,300	4,800	4,100	100	900	0	2,100	300	34,100
25-29	22,200	100	6,000	3,800	7,000	6,500	200	3,300	200	1,500	400	51,000
30-34	25,600	0	4,800	2,900	5,900	3,300	100	2,200	300	1,300	500	47,000
35-39	23,700	0	4,800	2,400	3,100	1,600	100	1,100	600	800	200	38,300
40-44	22,500	0	4,100	1,600	2,200	700	0	800	300	700	300	33,200
45-49	24,600	0	2,000	1,000	1,200	600	100	600	400	700	300	31,500
50-54	22,100	0	1,100	600	600	300	0	300	200	300	500	26,000
55-59	16,400	0	1,300	300	200	200	0	200	100	300	300	19,200
60-64	11,800	0	700	100	100	100	0	100	0	100	300	13,500
65+	15,500	0	200	100	100	0	0	0	0	0	300	16,300
<b>Total</b>	<b>206,100</b>	<b>200</b>	<b>32,700</b>	<b>15,800</b>	<b>26,200</b>	<b>17,800</b>	<b>600</b>	<b>9,500</b>	<b>2,100</b>	<b>9,200</b>	<b>3,600</b>	<b>323,700</b>

Note: Totals may not add up due to rounding. '0' indicates a sample estimate less than 100 persons

Source: Labour Force Survey Report 2011, MoLHR

TABLE 4.6: EMPLOYED PERSONS BY SEX AND AREA OF RESIDENCE BY DZONGKHAG, BHUTAN, 2011

(Number)

Dzongkhag	Rural			Urban			Bhutan		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Bumthang	1,400	1,700	3,000	2,300	2,600	4,900	3,600	4,300	7,900
Chhukha	11,700	8,100	19,800	10,600	10,200	20,800	22,200	18,400	40,600
Dagana	500	400	900	5,600	5,500	11,100	6,100	5,900	12,000
Gasa	100	100	100	500	700	1,200	600	800	1,300
Haa	500	400	900	2,400	3,000	5,400	2,900	3,400	6,300
Lhuentse	500	400	800	3,500	4,200	7,700	3,900	4,600	8,500
Monggar	1,500	1,200	2,800	8,500	11,600	20,000	10,000	12,800	22,800
Paro	600	700	1,200	9,900	8,800	18,700	10,500	9,500	19,900
Pema Gatshel	500	200	700	4,800	4,100	8,900	5,200	4,400	9,600
Punakha	400	500	900	6,300	6,300	12,600	6,700	6,800	13,500
Samdrup Jongkhar	2,200	1,200	3,400	6,200	4,500	10,700	8,400	5,700	14,100
Samtse	2,600	2,100	4,800	14,300	12,500	26,800	17,000	14,600	31,600
Sarpang	3,000	1,700	4,700	7,700	6,900	14,500	10,600	8,600	19,200
Thimphu	20,700	13,900	34,700	3,200	1,600	4,800	24,000	15,500	39,500
Trashigang	800	700	1,500	9,800	10,300	20,100	10,600	11,000	21,600
Trashigang	400	300	700	2,900	3,200	6,100	3,400	3,500	6,800
Trongsa	700	400	1,100	3,900	3,500	7,400	4,600	3,900	8,500
Tsirang	500	300	800	6,400	6,600	12,900	6,800	6,900	13,700
Wangdue Phodrang	1,900	1,200	3,100	6,400	6,700	13,000	8,300	7,800	16,100
Zhemgang	600	500	1,000	4,100	4,900	9,000	4,700	5,300	10,000
<b>Total</b>	<b>51,000</b>	<b>36,000</b>	<b>86,900</b>	<b>119,200</b>	<b>117,600</b>	<b>236,700</b>	<b>170,100</b>	<b>153,500</b>	<b>323,700</b>

Source: Labour Force Survey Report 2011, MoLHR

TABLE 4.7: ALL EMPLOYED PERSONS WHO WORKED DURING THE PAST ONE WEEK PRIOR TO THE SURVEY PERIOD BY ECONOMIC ACTIVITY AND HOURS OF WORK, BHUTAN, 2011

(Number)

Economic Activity	Hours Worked							Total
	<30 hrs	30-39 hrs	40-49 hrs	50-59 hrs	60-69 hrs	70-79 hrs	80+ hrs	
Agricultural and forestry	20,900	15,000	34,200	62,000	23,800	30,200	8,600	194,700
Mining and quarrying	200	100	300	300	100	100	100	1,200
Manufacturing	2,900	4,400	3,600	3,400	1,100	900	800	16,900
Electricity, gas & water supply	200	200	3,700	1,900	600	200	400	7,200
Construction	200	100	1,100	1,200	900	800	200	4,500
Wholesale & retail trade, repair of Motor vehicle & household goods	1,500	800	4,700	5,500	2,700	6,400	6,300	27,800
Hotels & restaurants	300	200	1,100	1,400	600	1,100	1,400	6,100
Transport, storage & communication goods	400	400	2,800	1,800	900	1,400	1,200	8,900
Financial intermediation	0	100	1,200	700	0	0	100	2,300
Real estate, renting & business activities	400	400	2,900	2,300	800	900	700	8,400
Public administration & defense	1,400	1,900	12,900	5,800	1,900	1,300	1,900	27,200
Education	600	600	4,800	2,500	500	500	300	9,700
Health & social work	0	300	1,500	700	200	0	100	2,800
Other community, social & personal service activities	300	400	1,600	800	300	300	300	3,900
Private households with employed persons	400	100	400	300	100	300	300	2,100
<b>Total</b>	<b>29,700</b>	<b>25,100</b>	<b>76,700</b>	<b>90,500</b>	<b>34,600</b>	<b>44,400</b>	<b>22,600</b>	<b>323,700</b>

Source: Labour Force Survey Report 2011, MoLHR

TABLE 4.8: ALL EMPLOYED PERSONS BY LEVEL OF EDUCATION AND EMPLOYMENT NATURE, BHUTAN, 2011

(Number)

Nature of Employment	Level of Education											Total
	Illiterate	PP/ Nursery	Primary	Junior	High	Higher Secondary	Under- graduate	Graduate	Masters & above	NFE	Religious professionals	
Regular paid employee	20,600	100	9,200	7,000	16,600	13,100	200	7,900	2,000	600	600	77,800
Casual paid employee	7,600	0	2,100	700	1,200	700	100	400	0	400	300	13,600
Unpaid family worker (Non-agriculture)	7,900	0	800	700	500	400	0	100	0	400	100	10,900
Unpaid family worker (Agriculture)	66,700	0	6,900	2,100	1,800	700	100	200	0	4,300	600	83,400
Own-account worker (Non-agriculture)	23,000	0	4,500	3,000	4,100	2,000	0	700	100	700	400	38,400
Own-account worker (Agriculture)	78,900	100	8,800	2,100	1,900	700	100	0	0	2,600	1,600	96,800
Employer	300	0	0	100	0	100	0	0	0	100	0	700
Piece/Contract paid worker	1,100	0	300	100	200	100	0	0	0	100	0	2,100
<b>Total</b>	<b>206,100</b>	<b>200</b>	<b>32,700</b>	<b>15,800</b>	<b>26,200</b>	<b>17,800</b>	<b>600</b>	<b>9,500</b>	<b>2,100</b>	<b>9,200</b>	<b>3,600</b>	<b>323,700</b>

Source: Labour Force Survey Report 2011, MoLHR

TABLE 4.9: ALL EMPLOYED PERSONS BY NATURE OF EMPLOYMENT AND MAJOR OCCUPATION, BHUTAN, 2011

(Number)

Occupation	Nature of employment										Total
	Regular em- paid em- plovee	Casual em- paid em- plovee	Unpaid family worker (Non- agriculture)	Unpaid family worker (Agri- culture)	Own-account worker (Non- agriculture)	Own-account worker (Agri- culture)	Employer	Piece/Con- tract paid worker			
Legislators, sr. officials & managers	3,900	200	100	100	300	0	0	0	0	4,500	
Professionals	17,100	1,400	400	100	2,600	500	100	100	100	22,300	
Technicians & associated professionals	12,900	1,100	100	300	1,100	300	100	800	100	16,600	
Clerks	6,700	100	100	0	200	100	0	0	0	7,100	
Service workers & shop & market sales workers	8,800	3,500	1,300	400	16,400	1,000	200	100	100	31,700	
Skilled agricultural & fishery workers	1,500	3,200	7,200	80,400	6,100	92,700	100	100	100	191,300	
Craft & related workers	4,800	2,500	1,000	1,200	7,900	1,400	100	700	100	19,600	
Plant & machine operators & assemblers	6,700	800	200	300	3,000	200	100	100	100	11,500	
Elementary occupations	8,800	700	400	400	900	500	0	100	100	12,000	
Armed force personnel	6,800	100	0	100	0	0	0	0	0	7,100	
<b>Total</b>	<b>77,800</b>	<b>13,600</b>	<b>10,900</b>	<b>83,400</b>	<b>38,400</b>	<b>96,800</b>	<b>700</b>	<b>2,100</b>	<b>700</b>	<b>323,700</b>	

Source: Labour Force Survey Report 2011, MoLHR

TABLE 4.10: TOTAL UNEMPLOYED PERSONS BY LEVEL OF EDUCATION, SEX AND AREA OF RESIDENCE, BHUTAN, 2011

(Number)

Level of Education	Area of residence		Total
	Rural	Urban	
<b>Both sexes</b>			
Illiterate	1,400	1,900	3,200
PP/Nursery	0	0	0
Primary	500	600	1,100
Junior	400	200	700
High	1,400	1,400	2,700
Higher Secondary	1,100	700	1,800
Undergraduate	0	0	0
Graduate	500	200	700
Masters & above	0	0	0
NFE	100	200	200
Religious professionals	0	0	0
<b>Total</b>	<b>5,400</b>	<b>5,100</b>	<b>10,500</b>
<b>Male</b>			
Illiterate	200	800	1,000
PP/Nursery	0	0	0
Primary	100	200	300
Junior	100	0	200
High	400	300	700
Higher Secondary	400	300	600
Undergraduate	0	0	0
Graduate	300	0	300
Masters & above	0	0	0
NFE	0	0	100
Religious professionals	0	0	0
<b>Total</b>	<b>1,400</b>	<b>1,800</b>	<b>3,200</b>



Table 4.10 contd...

<b>Female</b>			
Illiterate	1,200	1,100	2,300
PP/Nursery	0	0	0
Primary	400	300	800
Junior	300	200	500
High	1,000	1,000	2,000
Higher Secondary	700	400	1,200
Undergraduate	0	0	0
Graduate	200	100	400
Masters & above	0	0	0
NFE	100	100	200
Religious professionals	0	0	0
<b>Total</b>	<b>4,000</b>	<b>3,300</b>	<b>7,300</b>

Source: Labour Force Survey Report 2011, MoLHR

TABLE 4.11: ECONOMICALLY INACTIVE POPULATION BY AGE AND REASONS, BHUTAN, 2011

(Number)

Age group	Economically Inactive population						Total
	House/family duties	Study	Old or retired	Too young	Physically challenged	Other reasons	
<b>Male</b>							
15-19	900	26,500	100	100	100	400	28,100
20-24	1,300	9,500	0	0	100	900	11,800
25-29	600	1,600	0	0	100	600	2,900
30-34	700	300	0	0	200	400	1,700
35-39	700	200	0	0	100	300	1,300
40-44	300	0	200	0	0	200	800
45-49	200	0	100	0	200	400	1,000
50-54	800	200	1,000	0	200	300	2,500
55-59	500	100	900	0	100	100	1,700
60-64	500	0	2,000	0	100	0	2,500
65+	400	0	9,700	0	200	100	10,400
<b>Total</b>	<b>7,000</b>	<b>38,500</b>	<b>14,100</b>	<b>200</b>	<b>1,200</b>	<b>3,700</b>	<b>64,700</b>
<b>Female</b>							
15-19	2,400	26,500	0	100	100	800	29,900
20-24	5,400	8,100	0	0	200	1,400	15,100
25-29	6,100	800	100	0	100	800	8,000
30-34	5,300	100	0	0	0	600	6,100
35-39	5,500	100	200	0	100	500	6,400
40-44	3,200	100	200	0	0	200	3,800
45-49	2,900	0	600	0	200	300	3,900
50-54	2,000	0	1,300	0	100	300	3,700
55-59	1,800	0	1,600	0	100	0	3,600
60-64	500	0	3,000	0	300	100	3,900
65+	900	200	10,400	0	200	0	11,700
<b>Total</b>	<b>35,900</b>	<b>36,100</b>	<b>17,400</b>	<b>200</b>	<b>1,600</b>	<b>5,100</b>	<b>96,200</b>

Table 4.11 contd...

<b>Both Sexes</b>							
15-19	3,300	53,000	100	200	300	1,100	58,000
20-24	6,700	17,600	100	100	300	2,300	26,900
25-29	6,600	2,400	200	0	200	1,400	10,900
30-34	6,000	500	0	0	200	1,100	7,800
35-39	6,100	300	300	0	200	800	7,700
40-44	3,500	200	400	0	100	400	4,500
45-49	3,100	0	700	0	400	700	4,900
50-54	2,800	200	2,300	0	200	600	6,200
55-59	2,300	100	2,500	0	200	200	5,300
60-64	1,000	0	4,900	0	400	100	6,400
65+	1,300	200	20,000	100	400	100	22,100
<b>Total</b>	<b>42,900</b>	<b>74,500</b>	<b>31,400</b>	<b>400</b>	<b>2,800</b>	<b>8,800</b>	<b>160,800</b>

Source: Labour Force Survey Report 2011, MoLHR

TABLE 4.12: RANGE OF MONTHLY ENARNINGS BY MAIN OCCUPATION OF REGULAR PAID EMPLOYEES, BHUTAN 2011

(Number)

Occupation	Monthly Earnings							Total
	<1000	1000-1999	2000-2999	3000-3999	4000-4999	5000-9999	10000+	
Legislators, sr. of- ficials & managers	100	200	2,100	1,100	300	100	400	4,400
Professionals	1,200	1,400	9,600	4,900	1,200	1,300	1,500	21,100
Technicians & associated profes- sionals	800	1,000	6,900	4,000	1,600	900	700	15,700
Clerks	200	300	3,000	1,600	500	300	200	6,000
Service workers & shop & market sales workers	1,800	900	4,300	4,700	2,400	5,200	5,800	25,000
Skilled agricultural & fishery workers	20,800	11,300	31,000	53,300	21,400	27,200	8,400	173,300
Craft & related workers	3,100	600	3,000	3,000	1,400	1,500	900	13,500
Plant & machine operators & as- semblers	500	300	3,400	2,600	1,100	1,400	1,600	10,800
Elementary oc- cupations	600	400	3,500	2,900	1,100	1,000	1,300	10,800
Armed force per- sonnel	400	500	3,100	1,100	400	500	800	6,900
<b>Total</b>	<b>29,700</b>	<b>16,800</b>	<b>69,700</b>	<b>79,000</b>	<b>31,200</b>	<b>39,300</b>	<b>21,600</b>	<b>287,400</b>

Source: Labour Force Survey Report 2011, MoLHR

TABLE 4.13: PERCENTAGE OF CHILDREN BY INVOLVEMENT IN ECONOMIC ACTIVITY AND HOUSEHOLD CHORES DURING THE PAST WEEK BY AGE GROUPS, AND PERCENTAGE OF CHILDREN AGE 5-14 INVOLVED IN CHILD LABOUR, BHUTAN, 2010

Dzongkhag	Percentage of children age 5-11 involved in										Number of children age 5-11
	Economic activity					Working for family business	Household chores less than 28 hours	Household chores for 28 hours or more	Child labour		
	Working outside household		Economic activity for at least one hour								
	Paid work	Unpaid work	Economic activity for at least one hour								
<b>Sex</b>											
Male	0.3	0.8	23.1	23.7	28.9	0.2	23.7	5189.4			
Female	0.3	0.6	25.8	26.3	39.6	0.3	26.5	5158.0			
<b>Dzongkhag</b>											
Bumthang	0.1	0.2	36.7	36.9	32.2	0.2	37.1	242.3			
Chhukha	0.3	0.7	15.6	16.1	29.9	0.3	16.5	974.7			
Dagana	0.0	0.6	34.8	35.2	41.8	0.2	35.2	382.6			
Gasa	0.0	1.1	19.7	20.8	14.6	0.0	20.8	71.9			
Haa	0.0	0.2	23.5	23.7	39.1	0.0	23.7	200.1			
Lhuentse	0.0	1.3	11.1	11.9	18.5	0.0	11.9	242.6			
Monggar	0.2	1.4	20.3	21.5	32.9	0.6	21.5	729.3			
Paro	0.1	1.2	17.0	17.8	19.7	0.2	17.8	529.2			
Pema Gatsel	0.1	0.9	42.6	43.4	37.5	0.0	43.4	381.6			
Punakha	0.5	0.2	21.9	22.2	27.0	0.0	22.2	403.8			
Samdrup Jongkhar	0.3	2.4	25.0	27.5	30.0	0.4	27.5	676.6			
Samtse	1.5	0.7	32.9	34.0	44.5	0.6	34.2	1206.5			
Sarpang	0.1	0.1	35.0	35.0	57.0	0.0	35.0	637.0			
Thimphu	0.0	0.0	7.4	7.4	36.1	0.0	7.4	1199.1			
Trashigang	0.0	0.3	27.1	27.1	24.8	0.8	27.3	916.3			
Trashi Yangtse	0.0	0.0	19.1	19.1	29.5	0.0	19.1	300.5			
Trongsa	0.3	0.4	41.8	41.8	34.1	0.2	42.0	242.2			
Tsirang	0.6	1.1	32.2	33.3	47.7	0.0	33.3	332.7			
Wangdue Phodrang	0.0	0.9	21.8	22.1	23.3	0.0	22.1	412.5			
Zhemgang	0.4	1.1	34.7	35.4	35.1	0.1	35.5	265.9			
<b>Bhutan</b>	<b>0.3</b>	<b>0.7</b>	<b>24.4</b>	<b>25.0</b>	<b>34.2</b>	<b>0.3</b>	<b>25.1</b>	<b>10347.4</b>			

TABLE 4.13 (contd...)

Dzongkhag	Percentage of children age 12-14 involved in										Number of children age 12-14	Total child labour	Number of children age 5-14 years
	Economic activity		Economic activity less than 14 hours	Economic activity for 14 hours or more	Household chores less than 28 hours	Household chores for 28 hours or more	Child labour	Working outside household					
	Paid work	Unpaid work						Working for family business	Working for family business	Working for family business			
			Working outside household	Working for family business	Working for family business								
<b>Sex</b>													
Male	1.2	1.4	34.0	31.6	3.1	55.6	0.4	3.3	2253	17.6	7,442		
Female	2.5	1.7	40.2	37.1	4.1	74.1	1.3	5.0	2673	19.1	7,831		
Dzongkhag													
Bumthang	0.6	2.9	43.3	42.0	1.3	61.0	0.0	1.3	101	26.6	343		
Chhukha	1.0	1.4	30.1	29.7	1.3	63.5	0.6	1.9	537	11.3	1,511		
Dagana	0.9	1.8	58.9	55.8	3.1	77.7	0.3	3.1	211	23.8	593		
Gasa	0.0	0.0	38.4	20.1	18.3	27.0	5.0	18.3	28	20.1	100		
Haa	0.0	1.0	29.4	29.5	0.4	60.5	0.8	0.8	98	16.2	298		
Lhuentse	4.4	4.6	32.6	26.6	7.1	50.8	0.0	7.1	125	10.3	367		
Monggar	4.4	4.0	35.8	31.4	6.8	57.8	2.0	7.5	335	17.1	1,065		
Paro	1.3	1.6	35.7	29.2	7.3	63.3	1.2	7.5	294	14.1	823		
Pema Gatsel	0.4	1.8	52.6	52.2	0.4	52.0	0.0	0.4	165	30.4	547		
Punakha	0.7	0.0	36.0	32.2	3.8	49.0	0.4	4.2	198	16.3	602		
Samdrup Jongkhar	0.7	1.3	37.8	36.8	1.6	61.2	0.9	2.6	303	19.8	980		
Samtse	3.5	2.0	45.3	36.6	10.0	75.5	3.6	12.8	447	28.4	1,654		
Sarpang	1.3	0.7	49.9	46.5	4.5	85.2	0.0	4.5	280	25.6	917		
Thimphu	0.7	0.0	9.4	9.8	0.3	80.6	0.0	0.3	671	4.9	1,870		
Trashigang	5.7	2.1	46.7	46.0	2.1	55.4	1.2	3.3	437	19.6	1,353		
Trashiyangtse	0.0	1.7	40.9	38.8	2.1	75.9	0.0	2.1	122	14.2	423		
Trongsa	2.4	0.0	56.2	49.7	6.5	61.7	0.0	6.5	116	30.4	359		
Tsirang	1.9	2.3	46.5	44.7	4.1	66.3	0.6	4.7	131	25.2	464		
Wangdue Phodrang	1.0	0.0	44.2	42.8	1.4	55.1	0.0	1.4	186	15.7	599		
Zhemgang	1.1	5.2	45.4	42.0	4.4	53.8	0.2	4.6	140	24.8	406		
<b>Bhutan</b>	<b>1.9</b>	<b>1.6</b>	<b>37.3</b>	<b>34.6</b>	<b>3.6</b>	<b>65.6</b>	<b>0.9</b>	<b>4.2</b>	<b>4926</b>	<b>18.4</b>	<b>15,273</b>		

Source: Bhutan Multiple Indicator Survey 2010, NSB

## CHAPTER 5

### LAND USE AND AGRICULTURE

The Ministry of Agriculture and Forests, over the past four decades, was concerned about “how to grow” by establishing various agriculture infrastructures to produce and distribute the inputs. Currently the Ministry of Agriculture and Forests established 4 main Renewable Natural Resources (RNR) research centers.

The Ministry of Agriculture and Forests with the accumulated experiences having accomplished one five year plan to the other, maintains the three basic objectives that are to i) conserve the environment, ii) enhance the rural income and iii) attain self reliance in cereals and essential oil crops. In 2010, Agriculture contributed 16.80 Percent to the total economy i.e. as measured by the Gross Domestic Product. It was also the single largest sector that provides livelihood about more than 60 percent of the population as per Labour Force Survey 2011.

Agricultural practices have changed tremendously over the years. Until a decade ago, agriculture was practiced on a subsistence basis. Whatever was produced on the farm was consumed having little or no marketable surplus. The farm production is supplemented by keeping different kinds of domestic animals such as cattle for draught and milking purpose, chicken for eggs and pigs for meat etc. At higher altitudes, herds of yaks and sheep are also kept for draught and milking.

Owing to the improved communication facilities in the country, there is an increasing tendency to go for cash crops like apples in the temperate north; oranges, areca nut and cardamom in the subtropical south. Other cash crops that are exported include ginger, chilies and vegetables.

Strategies to increase livestock and cereal production include the propagation and practice of double cropping of the paddy production and distribution of high yield varieties. In the livestock sector the artificial insemination covers not only for the Jersey breeds that are high yielding but also for the production of Jatsa and Jatsam that are local high yielding varieties. As a result, increasing number of farms are mechanized with sizable investment on the machinery and other inputs that are subsidized by the government.

The issue is not only to formulate well-balanced agricultural policies and the response shown by the farmers to the designed policies but also to monitor the progress. To do this, a good statistical database, giving the trends over the period of time or time series data is imperative.

Back in 1988/89, the National Agronomic Survey was carried out in collaboration with the then Department of Agriculture. The Ministry of Agriculture and Forests conducted nation-wide sample surveys called RNR Census in 2009, which represents most of the agricultural data available are from RNR census 2009.

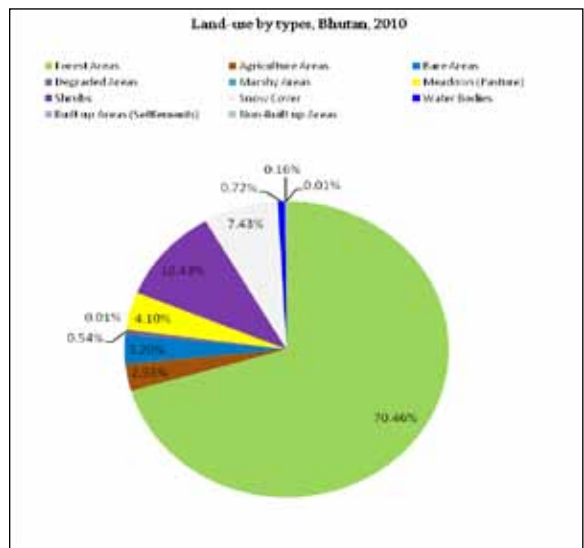


TABLE 5.1: NUMBER OF AGRICULTURE RESEARCH AND EXTENSION FACILITIES, BHUTAN, 2010 AND 2011

(Numbers)

Infrastructure	2010	2011
<b>RNR (Common services)</b>		
RNR Extension Centers	138	139
RNR Research Centers	4	4
RNR Research sub-stations	6	7
Soil and Plant Analytical Laboratory	1	1
<b>Agriculture</b>		
Agriculture Extension Centers	40	40
Agriculture Seed Production Farms	11	11
Farm Mechanization Centers	3	3
Farm Mechanization Training Centers	1	1
National Mashroom Center	1	1
National Post Harvest Center	1	1
National Plant Protection Center	1	1
National Soil Service Center		
<b>Livestock</b>		
Regional Hospitals	20	20
Livestock Extension Centers	42	51
Regional Livestock Development Centers	4	4
Regional Veterinary Laboratories	3	3
Livestock Farms	11	12
Fodder Seed Production Center	1	1
Vaccine Production Centre	1	1
National Artificial Insemination Center	1	1
National Cold Water Fishery Center	1	1
National Warm Water Fish Culture Center	1	1
National Center for Animal Health	1	1
<b>Forestry</b>		
Territorial Division HQs	12	12
National Parks	5	5
Range Offices	55	55
Beat Offices	80	80
Nature Conservation Study Center	1	1
Wildlife Sanctuaries	3	3
Forest Management Units	17	17
Nature Study Center	1	1
Percent of Forest cover	72	70.46
Percent of Protected Area	51.25	51.4

Source: Policy & Planning Division, MoAF, Thimphu.



TABLE 5.2: AREA OF LAND-USE AND VEGETATION BY TYPES , BHUTAN, 2010

Land Category/Types of Vegetation and Landuse	Land Type	Total Area	Area (Per-cent)
Forest Areas	Forest (Total)	27,052.9	70.5
	Blue Pine Forest	783.5	2.0
	Broadleaf Forest	16,850.2	
	Broadleaf with Conifer Forest	348.4	0.9
	Chir Pine Forest	1,137.2	3.0
	Fir Forest	1,804.4	4.7
	Mixed Conifer Forest	6,129.2	16.0
Agriculture Areas	Agricultural (Total)	1,125.5	2.9
	Wetland	319.1	0.8
	Dryland	682.5	1.8
	Citrus Orchard	54.9	0.1
	Apple Orchard	20.8	0.1
	Arecanut Plantation	12.0	0.0
	Cardamom Plantation	36.0	0.1
Other Horticulture	0.2	0.0	
Bare Areas	Bare Areas (Total)	1,229.5	3.2
	Bare Soils	0.3	0.0
	Rock Outcrops	996.6	2.6
	Scree	232.7	0.6
Degraded Areas	Degraded Areas (Total)	206.5	0.5
	Gullies	0.1	0.0
	Landslides	86.5	0.2
	Moraine Deposits	119.9	0.3
Marshy Areas	Marshy Areas	3.2	0.0
Meadows (Pasture)	Meadows	1,575.5	4.1
Shrubs	Shrubs	4,005.3	10.4
Snow Cover	Snow Cover	2,854.4	7.4
Water Bodies	Water Bodies (Total)	276.5	0.7
	Lakes	46.0	0.1
	Reservoirs	2.9	0.0
	Rivers	227.6	0.6
Built up Areas (Settlements)	Built up Areas	61.6	0.2
Non-Built up Areas (waste dump sites, mines, stone quarries and other extraction sites)	Non-Built up Areas	3.3	0.0
<b>Total</b>		<b>38,394</b>	<b>100</b>

Note: Updated in 2010 by Land Classification Mapping Project, DoA, MoAF

Source: Policy & Planning Division, MoAF, Thimphu.

TABLE 5.3: AREA PROPORTION AS PERCENTAGE OF TOTAL DZONGKHAG AREA BY TYPE OF LAND COVER, BHUTAN, 2010

(Percent)

Dzongkhag	Forest	Meadows (Pasture)	Agriculture	Built up Areas (Settlements)	Others	Total
Bumthang	52.1	0.0	1.1	0.1	36.1	89.4
Chhukha	85.8	1.9	4.9	0.5	7.0	100.0
Dagana	87.1	0.4	4.4	0.1	8.0	100.0
Gasa	26.3	8.0	0.2	0.0	65.6	100.0
Haa	65.3	8.3	0.0	0.1	24.7	98.5
Lhuentse	61.5	2.7	2.1	0.0	33.7	100.0
Monggar	91.6	0.3	3.0	0.1	5.0	100.0
Paro	60.9	5.6	5.1	0.3	28.1	100.0
Pema Gatshel	87.7	0.1	5.1	0.2	6.9	100.0
Punakha	75.9	1.5	4.8	0.1	17.7	100.0
Samdrup Jongkhar	86.9	0.2	4.3	0.2	8.3	100.0
Samtse	78.0	0.8	13.3	0.2	7.7	100.0
Sarpang	88.0	0.0	4.0	0.2	7.8	100.0
Thimphu	42.9	10.4	1.3	0.9	44.6	100.0
Trashigang	81.6	3.3	2.9	0.1	12.0	100.0
Trashi Yangtse	70.9	1.4	2.1	0.1	25.5	100.0
Trongsa	87.2	2.9	1.3	0.1	8.6	100.0
Tsirang	87.3	0.2	7.4	0.3	4.8	100.0
Wangdue Phodrang	65.3	7.2	1.5	0.0	26.0	100.0
Zhemgang	87.7	2.2	1.7	0.0	8.3	100.0
<b>Bhutan</b>	<b>70.5</b>	<b>4.1</b>	<b>2.9</b>	<b>0.2</b>	<b>22.3</b>	<b>100.0</b>

Source: Policy & Planning Division, MoAF, Thimphu.

TABLE 5.4: AREA PROPORTION AS PERCENTAGE OF TOTAL COUNTRY AREA BY TYPE OF LAND COVER, BHUTAN, 2010

Dzongkhag	Forest	Meadows (Pasture)	Agriculture	Built up Areas (Settlements)	Others	Total
Bumthang	3.6		0.1	0.0	2.5	6.9
Chhukha	4.2	0.1	0.2	0.0	0.3	4.9
Dagana	3.9	0.0	0.2	0.0	0.4	4.5
Gasa	2.1	0.6	0.0	0.0	5.3	8.0
Haa	3.2	0.4		0.0	1.2	4.9
Lhuentse	4.5	0.2	0.2	0.0	2.5	7.3
Monggar	4.6	0.0	0.1	0.0	0.3	5.1
Paro	2.0	0.2	0.2	0.0	0.9	3.3
Pema Gatshel	2.3	0.0	0.1	0.0	0.2	2.7
Punakha	2.2	0.0	0.1	0.0	0.5	2.9
Samdrup Jongkhar	4.3	0.0	0.2	0.0	0.4	4.9
Samtse	2.7	0.0	0.5	0.0	0.3	3.4
Sarpang	3.8	0.0	0.2	0.0	0.3	4.3
Thimphu	2.0	0.5	0.1	0.0	2.0	4.6
Trashigang	4.7	0.2	0.2	0.0	0.7	5.7
Trashi Yangtse	2.7	0.1	0.1	0.0	1.0	3.8
Trongsa	4.1	0.1	0.1	0.0	0.4	4.7
Tsirang	1.5	0.0	0.1	0.0	0.1	1.7
Wangdue Phodrang	6.7	0.7	0.2	0.0	2.7	10.2
Zhemgang	5.5	0.1	0.1	0.0	0.5	6.3
<b>Bhutan</b>	<b>70.5</b>	<b>4.1</b>	<b>2.9</b>	<b>0.2</b>	<b>22.3</b>	<b>100.0</b>

Source: Policy & Planning Division, MoAF, Thimphu.

TABLE 5.5: AREA PROPORTION BY ALTITUDE ZONES AS PERCENTAGE OF TOTAL DZONGKHAG AREA, BHUTAN, 2010

Dzongkhag	Altitude Zones (metres)											Total
	Area	< 600	1200-1800	1800-2400	2400-3000	3000-3600	3600-4200	4200-4800	4800-5400	> 5400		
Bumthang	0.0	0.0	0.0	0.3	7.2	25.0	26.6	19.5	19.3	2.0	100.0	
Chhukha	4.8	16.7	21.2	20.2	19.7	13.2	4.1	0.2	0.0	0.0	100.0	
Dagana	12.4	18.9	19.0	19.0	17.8	8.2	3.9	1.0	0.0	0.0	100.0	
Gasa	0.0	0.0		1.0	3.1	5.9	13.4	28.6	37.5	10.4	100.0	
Haa	0.0	1.7	6.2	10.3	16.7	21.5	23.9	16.5	3.1	0.0	100.0	
Lhuentse	0.0	0.6	5.6	13.8	19.2	17.9	15.3	16.2	10.5	0.9	100.0	
Monggar	1.7	15.3	26.4	25.1	16.9	12.3	2.3	0.0	0.0	0.0	100.0	
Paro	0.0	0.0	0.0	4.1	23.3	25.9	18.7	22.0	5.9	0.1	100.0	
Pema Gatshel	11.2	39.3	35.6	12.8	1.0	0.0	0.0	0.0	0.0	0.0	100.0	
Punakha	0.0	0.0	13.2	27.5	25.0	16.1	11.6	6.4	0.2	0.0	100.0	
Samdrup Jongkhar	18.2	24.1	25.4	18.6	9.5	3.6	0.6	0.0	0.0	0.0	100.0	
Samtse	15.0	28.7	24.3	17.5	10.9	2.8	0.8	0.1	0.0	0.0	100.0	
Sarpang	21.7	26.4	24.2	20.5	5.5	1.3	0.4	0.0	0.0	0.0	100.0	
Thimphu	0.0	0.0	0.0	1.6	15.1	22.9	19.8	25.0	13.9	1.7	100.0	
Trashigang	0.0	4.3	13.9	22.0	21.1	18.4	15.8	4.6	0.0	0.0	100.0	
Trashi Yangtse	0.0	1.8	5.9	15.1	22.9	19.6	15.6	14.4	4.6	0.3	100.0	
Trongsa	0.0	1.7	8.7	17.7	28.2	23.8	12.5	7.1	0.2	0.0	100.0	
Tsirang	4.4	28.2	33.8	20.4	8.8	3.5	0.9	0.0	0.0	0.0	100.0	
Wangdue Phodrang	0.0	2.6	7.9	13.3	17.2	20.2	13.1	11.6	12.9	1.1	100.0	
Zhemgang	8.3	27.5	28.8	17.8	9.4	5.4	2.0	0.7	0.0	0.0	100.0	
<b>Bhutan</b>	<b>4.1</b>	<b>9.7</b>	<b>12.9</b>	<b>13.9</b>	<b>14.8</b>	<b>14.3</b>	<b>11.2</b>	<b>10.2</b>	<b>7.6</b>	<b>1.3</b>	<b>100.0</b>	

Source: Policy & Planning Division, MoAF, Thimphu.

TABLE 5.6: AREA PROPORTION BY ALTITUDE ZONES AS PERCENTAGE OF TOTAL COUNTRY AREA, BHUTAN, 2010

Dzongkhag	Altitude Zones (metres)										Total
	Area	< 600	1200-1800	1800-2400	2400-3000	3000-3600	3600-4200	4200-4800	4800-5400	> 5400	
Bumthang	0.0	0.0	0.0	0.0	0.5	1.8	1.9	1.4	1.4	0.1	7.0
Chhukha	0.2	0.8	1.0	1.0	1.0	0.6	0.2	0.0	0.0	0.0	4.9
Dagana	0.6	0.8	0.9	0.8	0.8	0.4	0.2	0.0	0.0	0.0	4.5
Gasa	0.0	0.0		0.1	0.2	0.5	1.1	2.3	3.0	0.8	8.1
Haa	0.0	0.1	0.3	0.5	0.8	1.0	1.2	0.8	0.2	0.0	4.9
Lhuentse	0.0	0.0	0.4	1.0	1.4	1.3	1.1	1.2	0.8	0.1	7.3
Monggar	0.1	0.8	1.3	1.3	0.8	0.6	0.1	0.0	0.0	0.0	5.0
Paro	0.0	0.0	0.0	0.1	0.8	0.8	0.6	0.7	0.2	0.0	3.3
Pema Gatshel	0.3	1.0	0.9	0.3	0.0	0.0	0.0	0.0	0.0	0.0	2.6
Punakha	0.0	0.0	0.4	0.8	0.7	0.5	0.3	0.2	0.0	0.0	2.9
Samdrup Jongkhar	0.9	1.2	1.2	0.9	0.5	0.2	0.0	0.0	0.0	0.0	4.9
Samtse	0.5	1.0	0.8	0.6	0.4	0.1	0.0	0.0	0.0	0.0	3.4
Sarpang	0.9	1.1	1.0	0.9	0.2	0.1	0.0	0.0	0.0	0.0	4.3
Thimphu	0.0	0.0	0.0	0.1	0.7	1.0	0.9	1.1	0.6	0.1	4.6
Trashigang	0.0	0.2	0.8	1.3	1.2	1.1	0.9	0.3	0.0	0.0	5.7
Trashi Yangtse	0.0	0.1	0.2	0.6	0.9	0.7	0.6	0.5	0.2	0.0	3.8
Trongsa	0.0	0.1	0.4	0.8	1.3	1.1	0.6	0.3	0.0	0.0	4.8
Tsirang	0.1	0.5	0.6	0.3	0.1	0.1	0.0	0.0	0.0	0.0	1.7
Wangdue Phodrang	0.0	0.3	0.8	1.4	1.8	2.1	1.3	1.2	1.3	0.1	10.2
Zhemgang	0.5	1.7	1.8	1.1	0.6	0.3	0.1	0.0	0.0	0.0	6.3
<b>Bhutan</b>	<b>4.1</b>	<b>9.7</b>	<b>12.9</b>	<b>13.9</b>	<b>14.8</b>	<b>14.3</b>	<b>11.2</b>	<b>10.2</b>	<b>7.6</b>	<b>1.3</b>	<b>100.0</b>

Source: Policy & Planning Division, MoAF, Thimphu.

TABLE 5.7: MONTHLY MAXIMUM AND MINIMUM AVERAGE TEMPERATURE (DEGREE CELSIUS) BY DZONGKHAG, BHUTAN, 2010.

(Degree Celsius)

Dzongkhag	Temperature	Month												Average
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Bumthang	max	14	13	17	19	20	22	23	23	22	19	15	14	18
	min	-6	-2	3	7	10	13	14	14	12	10	4	-5	6
	Ave	4		10	13	15	17	19	18	17	15	10	5	12
Chhukha	max	14	19	21	24	24	26	26	26	26	26	22	18	23
	min	6	7	11	15	15	18	18	18	17	15	11	7	13
	Ave	10	13	16	19	20	22	22	22	22	21	17	13	18
Dagana	max	12	15	18	22	22	22	22	22	18	20	16	13	18
	min	10	11	14	16	17	19	21	20	18	16	11	8	15
	Ave	11	13	16	19	20	20	22	21	18	18	14	10	17
Gasa	max	10	10	13	18	19	18	19	19	19	16	14	11	15
	min	-2	0	2	8	8	9	9	12	10	8	1	2	6
	Ave	4	5	7	13	14	13	14	15	15	12	7	6	10
Haa Namjayingling	max	14	13	17	19	19	20	22	22	20	18	15	11	17
	min	-8	-5	1	5	8	12	13	13	11	5	1	-5	4
	Ave	3	4	9	12	14	16	18	17	15	11	8	3	11
Lhuentse	max	18	20	22	25	25	26	25	26	25	24	21	16	23
	min	8	10	15	17	19	21	21	21	20	17	13	8	16
	Ave	13	15	18	21	22	23	23	24	23	21	17	12	19
Monggar	max	18	18	21	24	22	25	24	25	24	22	20	18	22
	min	7	6	11	13	10	15	16	16	15	12	10	5	11
	Ave	12	12	16	18	16	20	20	21	19	17	15	11	16
Punakha	max	18	14	16	19	26	31	33	31	31	29	25	23	25
	min	5	1	6	9	14	21	22	22	21	18	14	6	14
		12	8	11	14	20	26	27	27	26	24	20	15	19
Paro	max	15	14	20	23	23	25	24	25	24	20	17	15	20
	min	0	-2	5	8	11	13	15	15	13	9	5	-3	7
	Ave	8	6	12	15	17	19	20	20	19	15	11	6	14
Pema Gatshel	max	17	17	20	22	23	23	24	25	24	23	20	17	21
	min	4	5	10	13	15	17	18	18	17	13	9	6	12
	Ave	10	11	15	17	19	20	21	21	21	18	14	11	17

Table 5.7 contd...

Samdrup Jongkhar	max	21	20	23	23	24	25	26	26	25	25	23	21	24
	min	12	13	17	18	20	21	22	22	21	19	16	12	18
	Ave	16	17	20	21	22	23	24	24	23	22	19	16	21
Samtse	max	21	24	27	28	29	28	28	28	27	28	25	21	26
	min	13	15	19	22	23	24	24	25	24	22	19	15	20
	Ave	17		23	25	26	26	26	26	25	25	22	18	22
Sarpang	max	22	23	26	26	27	28	28	29	28	28	25	23	26
	min	12	14	19	20	21	21	23	23	22	21	19	15	19
	Ave	17	19	22	23	24	25	25	26	25	25	22	19	23
Thimphu	max	18	18	22	24	23	26	25	26	25	23	19	19	22
	min	-2	1	5	9	12	16	17	17	15	10	6	-2	9
	Ave	8	9	13	16	17	21	21	21	20	16	13	8	15
Trashigang	max	19	19	22	24	25	26	26	27	26	24	21	18	23
	min	6	7	11	14	15	17	18	18	17	14	10	7	13
	Ave	12	13	16	19	20	21	22	23	21	19	15	12	18
Trashy Yangtse	max	16	17	21	21	22	25	25	25	25	23	20	17	21
	min	1	6	8	11	13	16	17	17	16	11	8	0	10
	Ave	8	11	15	16	18	20	21	21	20	17	14	9	16
Trongsa	max	17	16	19	21	21	22	23	24	22	21	17	17	20
	min	1	3	8	10	12	15	17	17	15	11	8	2	10
	Ave	9	10	13	15	17	19	20	20	19	16	12	9	15
Tsirang	max	16	16	20	22	23	23	23	24	23	22	19	17	21
	min	6	6	12	16	17	19	20	20	19	16	12	7	14
	Ave	11	11	16	19	20	21	22	22	21	19	15	12	17
Wangdue Phodrang	max	23	22	25	29	29	30	30	30	29	28	25	22	27
	min	4	8	13	16	18	21	21	21	20	17	12	5	15
	Ave	13	15	19	22	24	25	26	26	24	22	19	14	21
Zhemgang	max	15	14	18	21	21	23	23	23	23	21	18	15	20
	min	5	6	10	13	15	17	18	17	16	13	10	5	12
	Ave	10	10	14	17	18	20	20	20	20	17	14	10	16

Source : Metrology Section, Department of Energy, MoEA, Thimphu.

TABLE 5.8: TOTAL MONTHLY RAINFALL AT EXISTING STATIONS IN EACH DZONGKHAG, BHUTAN, 2010  
(Millimeter)

Dzongkhag	Station	Month												Annual total rainfall
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Bumthang	Chamkher	-	2	52	103	111	141	210	84	88	50	0	-	841
	Gyetsa	-	3	54	50	95	123	239	106	103	47	-	-	818
Chhukha	Chhukha	-	-	54	123	214	390	519	193	155	66	3	-	1,718
	Gedu	-	39	239	326	417	475	428	365	261	87	14	-	2,650
	Phuentsholing	-	25	211	423	394	894	926	611	630	68	1	-	4,182
	Tala	-	20	219	515	839	277	1,432	458	406	90	-	-	4,256
Dagana	Dagana Dzong	-	-	14	15	89	390	433	260	137	82	3	3	1,425
	Drujeygang	-	8	9	28	67	394	856	261	155	30	2	-	1,810
	Sunkosh	-	3	19	59	66	402	691	183	149	50	1	-	1,624
	Tashithang	-	-	-	56	21	437	306	209	153	26	-	-	1,208
Gasa	Gasa Katey	4	19	137	97	113	363	488	405	288	328	-	-	2,241
Haa	Haa Namjeyling	-	15	43	49	93	223	210	160	117	47	-	-	957
	Khomachu	-	4	56	43	122	116	147	124	64	106	81	-	863
Lhuentse	Autsho	-	2	59	44	100	204	275	104	100	51	4	0	944
	Dungkhar	-	-	71	131	200	182	212	-	124	107	5	-	1,032
	Tangmachu	-	-	57	86	143	214	175	129	104	48	15	-	969
Monggar	Monggar (A)	-	3	61	59	133	224	268	81	100	52	4	1	987
	Lingmethang	-	2	49	69	147	214	195	93	78	126	5	-	977
	Yadi	-	-	51	97	128	209	198	229	152	42	16	-	1,121



Table 5.8 contd...

Paro	-	0	19	24	69	138	132	99	55	49	1	7	593
Betikha	27	-	289	601	693	117	472	509	343	345	25	8	3,429
Drukgyel Dzong	-	-	24	13	59	131	223	167	127	51	6	-	801
Pemagatshel	-	-	107	210	146	392	462	194	148	34	2	-	1,695
Dungmain	-	-	216	67	183	128	899	344	333	30	-	-	2,200
Yurung	-	-	100	246	183	473	445	282	98	35	-	-	1,860
Punakha Dzong	-	2	10	30	62	143	251	98	120	37	8	4	764
Shelgana	-	3	13	41	76	125	372	213	256	103	19	-	1,221
Airong	0	13	190	-	-	-	-	-	-	-	-	-	203
Dechenling	-	-	171	114	216	672	-	531	388	-	5	-	2,097
Deothang	1	-	170	392	495	807	647	412	378	91	12	-	3,404
Tendu	-	8	39	86	341	718	1,268	754	400	105	15	1	3,735
Samtse (NIE)	-	4	119	276	541	1,002	2,228	1,287	1,034	107	5	-	6,600
Dorokha	-	-	-	273	325	676	697	120	117	38	-	-	2,246
Sipsu	-	32	118	347	462	1,050	1,914	1,525	946	206	6	2	6,608
Gidakom	-	1	14	37	59	123	215	97	68	27	3	-	644
Simtokha	-	1	15	7	56	129	184	91	66	34	-	-	584
MTI Complex	-	2	25	15	74	135	211	90	74	34	1	3	665
Dochula	-	-	-	-	-	-	-	-	-	-	-	-	-
Surey	-	2	68	138	238	279	702	695	554	49	5	-	2,729
Bhur	-	-	130	200	255	1,241	1,622	1,752	825	62	21	1	6,109
Sarpang	-	7	111	112	321	669	867	531	445	60	12	-	3,134

Table 5.8 conrtd...

Trashigang	Chazam	-	-	93	128	70	186	256	92	49	66	15	-	956
	Kanglung	1	6	78	97	110	279	257	134	102	72	13	-	1,149
	Khaling	-	-	67	147	80	114	168	131	131	42	23	-	903
	Radhi	-	5	127	72	165	-	-	-	-	-	-	1	370
	Thrimshing	1	2	90	287	207	284	393	229	78	45	1	-	1,617
Trashi Yangtse	Wamrong	18	4	76	281	175	322	394	471	61	23	22	1	1,848
	Tashi Yangtse	-	2	69	89	137	224	249	192	124	115	24	-	1,224
	Yalang	-	4	258	157	142	139	102	213	110	93	18	2	1,236
	Bjizam	-	26	36	140	131	232	267	114	123	126	10	-	1,205
	Kuengarabten	5	22	50	150	25	64	79	101	34	55	44	19	647
Trongsa	Langthel	-	3	31	54	69	265	277	216	165	82	2	-	1,161
	Chendebeji	-	7	42	64	77	222	388	271	188	16	-	1	1,276
	Trongsa	-	-	61	239	135	297	428	233	113	81	8	-	1,594
	Tsirang	-	3	18	54	81	522	697	249	155	58	2	-	1,838
	Wangdue (RNRRC)	-	0	20	35	93	207	214	131	98	95	3	2	898
Wangdue Phodrang	Nobding	-	-	15	-	-	-	-	-	-	-	-	-	15
	Phobjikha	-	4	40	54	79	193	323	193	171	43	-	-	1,099
	Samtengang	-	-	13	83	25	135	262	266	140	64	35	5	1,028
	Buli	2	3	72	42	-	-	594	398	156	38	-	-	1,304
	Yebilaptsa	3	-	125	83	158	618	716	675	77	40	6	-	2,499
Zhemgang	-	9	68	67	100	135	188	75	39	73	4	1	757	

Source : Metrology Section, Department of Energy, MoEA, Thimphu.

TABLE 5.9: QUALITY OF PESTICIDES SUPPLIED TO FARMERS, BHUTAN 2004/05 TO 2009/10

(Kgs/Ltrs)

Period	Insecticides	Fungicides	Herbicides	Acaricides	Rodenticides	Others (Non-toxic)
2004/05	2,600.0	2,460.0	850.0	50.0	10.0	10,505.0
2005/06	3,036.0	2,410.0	1,020.0	20.0	38.0	10,732.0
2006/07	4,126.0	4,101.0	1,853.0	10.0	48.0	10,053.0
2007/08	4,212.0	2,247.0	n.a	8.0	35.0	24,120.0
2008/09	3,867.0	n.a	2,689.8	8.0	51.4	8,009.0
2009/10	4,875.2	3,423.4	3,003.9	n.a	49.6	8,628.0

Source: Policy & Planning Division, MoAF, Thimphu.

TABLE 5.10: AGRICULTURE LAND HOLDINGS & LAND TYPES BY DZONGKHAG, BHUTAN 2010

(hectares)

Dzongkhag	Wet land	Dry land	Cash Crop Land	Total area
Bumthang	24.7	2,883.8	11.5	2,920.0
Chhukha	1,799.2	5,119.2	2,322.7	9,241.1
Dagana	1,492.8	4,588.4	1,455.5	7,536.7
Gasa	143.6	386.3	-	529.9
Haa	88.5	2,067.8	624.6	2,780.9
Lhuentse	1,575.6	4,328.7	0.9	5,905.2
Monggar	431.7	5,304.4	3.2	5,739.3
Paro	1,753.0	3,561.6	1,025.6	6,340.2
Pema Gatshel	302.3	4,333.4	620.4	5,256.1
Punakha	5,074.3	262.0	16.7	5,353.0
Samdrup Jongkhar	1,147.7	6,732.4	249.2	8,129.3
Samtse	5,682.4	8,150.5	3,533.4	17,366.3
Sarpang	2,087.6	3,472.7	1,092.5	6,652.8
Thimphu	458.3	913.6	902.1	2,274.0
Trashigang	1,448.5	4,974.4	-	6,422.9
Trashhi Yangtse	949.3	2,110.6	-	3,059.9
Trongsa	1,082.3	1,204.9	-	2,287.2
Tsirang	1,527.1	2,867.4	314.4	4,708.9
Wangdue Phodrang	4,202.3	1,742.0	0.1	5,944.4
Zhemgang	639.6	3,250.7	211.2	4,101.5
<b>Bhutan</b>	<b>31,910.8</b>	<b>68,254.8</b>	<b>12,384.0</b>	<b>112,549.6</b>

Note: Updated by Land Classification Mapping Project, DoA, MoAF, 2010

Source: Policy & Planning Division, MoAF, Thimphu.

TABLE 5.11: CULTIVATED AREA, PRODUCTION AND YIELD OF MAJOR CROPS BY DZONGKHAG, BHUTAN, 2010

Dzongkhag	Wheat			Barley			Paddy		
	Area (Hectares)	Production (MT)	Yield (MT/Hectare)	Area (Hectares)	Production (MT)	Yield (MT/Hectare)	Area (Hectares)	Production (MT)	Yield (MT/Hectare)
Bumthang	872.23	454.87	1.92	418.58	211.09	1.98	174.80	236.04	0.74
Chhukha	212.49	156.24		202.05	55.78	3.62	2,934.16	2,760.05	1.06
Dagana	29.27	24.92	1.17	44.69	19.66	2.27	4,465.02	4,084.96	1.09
Gasa	68.65	55.97	1.23	27.48	29.10	0.94	266.52	308.38	0.86
Haa	1,016.29	1,414.37	0.72	9.34	11.78	0.79	123.29	163.13	0.76
Lhuentse	16.00	19.69	0.81	8.06	7.32	1.10	1,917.24	2,861.35	0.67
Monggar	47.74	32.89	1.45	1,285.36	605.86	2.12	779.04	868.08	0.90
Paro	630.30	394.16	1.60	68.37	69.88	0.98	6,784.03	12,402.53	0.55
Pema Gatshel	19.94	10.95	1.82	26.15	19.93	1.31	50.17	67.92	0.74
Punakha	705.00	622.09	1.13	27.05	19.05	1.42	6,521.82	12,424.88	0.52
Samdrup Jongkhar	34.52	44.96	0.77	108.40	96.37	1.12	2,356.47	3,031.91	0.78
Samtse	153.18	108.43	1.41	31.05	19.60	1.58	8,454.37	7,126.42	1.19
Sarpang	7.95	3.26	2.44	6.85	2.12	3.23	5,185.41	4,512.19	1.15
Thimphu	235.38	121.05	1.94	5.63	4.59	1.23	878.62	1,498.74	0.59
Trashigang	159.61	210.02	0.76	131.72	110.64	1.19	1,435.33	2,409.91	0.60
Trashigang Yangtse	0.00	0.00	0.00	0.00	0.00	0.00	930.99	1,442.91	0.65
Trongsa	420.26	330.12	1.27	101.72	45.80	2.22	1,577.25	1,806.95	0.87
Tsirang	53.26	24.61	2.16	5.81	1.59	3.65	4,347.00	4,218.19	1.03
Wangdue Phodrang	763.56	756.46	1.01	124.47	94.77	1.31	5,236.78	7,645.33	0.68
Zhemgang	120.94	89.23	1.36	21.27	19.59	1.09	1,956.96	1,766.77	1.11
<b>Bhutan</b>	<b>5,566.57</b>	<b>4,874.29</b>	<b>24.98</b>	<b>2,654.05</b>	<b>1,444.52</b>	<b>33.18</b>	<b>56,375.27</b>	<b>71,636.64</b>	<b>1.27</b>

Table 5.11 contd...

Dzongkhag	Maize			Buckwheat			Millet		
	Area (Hectares)	Production (MT)	Yield (MT/Hectare)	Area (Hectares)	Production (MT)	Yield (MT/Hectare)	Area (Hectares)	Production (MT)	Yield (MT/Hectare)
Bumthang	2.09	1.14	1.83	1,097.87	522.06	2.10	0.00	0.00	0.00
Chhukha	4,916.61	3,247.13		1,309.95	584.43	2.24	2,093.47	793.25	2.64
Dagana	5,600.34	3,207.60	1.75	427.02	174.19	2.45	925.83	442.39	2.09
Gasa	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Haa	336.85	236.29	1.43	439.63	254.72	1.73	108.70	65.75	1.65
Lhuentse	2,195.12	2,852.02	0.77	0.00	0.00	0.00	101.90	79.19	1.29
Monggar	8,792.64	10,750.58	0.82	220.22	113.98	1.93	80.89	26.37	3.07
Paro	5.93	12.58	0.47	105.55	59.00	1.79	2.96	1.06	2.79
Pema Gatshel	4,377.49	4,023.87	1.09	506.19	136.52	3.71	333.35	129.92	2.57
Punakha	182.24	204.63	0.89	23.65	26.20	0.90	10.60	1.92	5.52
Samdrup Jongkhar	4,642.02	5,251.06	0.88	967.58	691.46	1.40	324.31	199.29	1.63
Samtse	7,114.89	5,587.96	1.27	270.90	135.38	2.00	2,375.27	1,161.10	2.05
Sarpang	4,238.87	2,612.29	1.62	50.58	26.59	1.90	897.57	595.12	1.51
Thimphu	12.97	7.55	1.72	0.00	0.00	0.00	0.00	0.00	0.00
Trashigang	5,721.08	8,299.29	0.69	653.82	337.32	1.94	108.09	48.09	2.25
Trashigang Yangtse	1,441.25	2,048.67	0.70	0.00	0.00	0.00	210.31	108.77	1.93
Trongsa	1,381.22	1,291.36	1.07	887.69	385.56	2.30	77.75	16.24	4.79
Tsirang	5,030.54	2,993.78	1.68	16.07	13.83	1.16	457.83	222.13	2.06
Wangdue Phodrang	211.52	294.00	0.72	302.01	310.72	0.97	80.83	22.37	3.61
Zhemgang	5,272.24	4,744.45	1.11	225.04	178.52	1.26	264.30	153.35	1.72
<b>Bhutan</b>	<b>61,475.91</b>	<b>57,666.25</b>	<b>20.51</b>	<b>7,503.77</b>	<b>3,950.48</b>	<b>29.79</b>	<b>8,453.96</b>	<b>4,066.31</b>	<b>0.48</b>

Source: RNR Census 2009, PPD, MoAF, Thimphu.

TABLE 5.12: NUMBER OF LIVESTOCK BY TYPE AND DZONGKHAG, BHUTAN, 2010

Dzongkhag	Mithun Cattle*	Nublang Cattle	Jersey Cattle**	Brown Swiss Cattle ***	Other Cattle	Yaks	Horses	Sheep	Goats	Pigs	Poultry
Bumthang	3,696	2,130	2,125	3,085	987	3,360	1,192	476	6	6	719
Chhukha	18,805	7,360	3,241	18	980	0	667	1,009	6,827	2,216	22,146
Dagana	1,620	3,939	3,563	31	14,610	0	336	432	5,415	2,027	30,109
Gasa	583	17,351		113	40	7,545	1,468	43	2	0	550
Haa	6,410	33,504	2,294	45	0	4,895	1,116	0	165	534	4,975
Lhuentse	8,834	7,612	1,392	254	1,692	223	1,529	60	39	282	8,250
Monggar	16,852	426	4,380	339	2,628	0	2,103	11	150	2,046	31,959
Paro	9,636	16,004	4,614	103	65	3,290	1,448	12	175	769	18,164
Pema Gatshel	4,441	8,487	3,812	107	477	0	1,458	0	42	670	8,118
Punakha	8,867	14,690	2,159	49	507	0	622	1	95	785	7,502
Samdrup Jongkhar	9,961	3,616	3,446	25	2,507	0	1,221	90	1,331	643	10,866
Samtse	33,766	6,180	4,360	10	550	0	440	3,846	15,351	2,133	40,102
Sarpang	9,635	2,945	4,632	32	8,030	0	407	780	5,022	1,613	63,283
Thimphu	2,134	18,664	2,153	1	8	10,223	1,131	13	31	665	3,924
Trashigang	17,726	6,099	4,994	211	6,827	7,094	3,597	2,000	163	1,058	20,456
Trashigang Yangtse	7,585	8,818	2,043	69	807	588	1,262	22	145	599	3,723
Trongsa	8,169	9,779	2,004	475	590	58	428	386	29	92	2,898
Tsirang	394	5,347	4,800	3	8,211	0	255	668	5,885	1,089	57,204
Wangdue Phodrang	17,662	2,975	2,151	832	610	3,098	1,001	2,841	2,194	1,362	5,779
Zhemgang	8,557	7,699	1,977	162	1,713	0	1,814	9	67	1,122	8,205
<b>Bhutan</b>	<b>68,885</b>	<b>184,014</b>	<b>50,443</b>	<b>5,253</b>	<b>1,476</b>	<b>4,082</b>	<b>22,355</b>	<b>12,116</b>	<b>34,176</b>	<b>18,963</b>	<b>197,766</b>

Note: Totals may not add up due to rounding. \*Includes Mithun pure+Mithun Cross like jatsa+jatsam+yangku+yangkum \*\* Includes Jersey pure+Jersey Cross, \*\*\* Includes Swiss Brown pure + Swiss Brown cross

Source: RNR Census 2009, PPD, MoAF, Thimphu.

TABLE 5.13: IMPORTS AND SALES OF FOOD ITEMS BY FOOD CORPORATION OF BHUTAN, 2005 TO 2009

(Metric tons)

Commodity	2005	2006	2007	2008	2009
<b>Imports</b>					
Rice	6,226.7	8,293.7	7,414.3	9,416.6	6,718.7
Wheat	35.6	0.0	0.0	49.0	80.3
Sugar	3,924.3	3,706.4	1,231.8	1,820.4	3,589.0
Salt	195.0	215.4	200.0	310.0	351.4
Oil	568.5	643.9	671.6	818.9	666.5
Pulses	202.7	289.6	309.7	331.7	295.6
Atta	169.7	327.8	160.2	183.8	280.2
Maida	283.4	327.8	249.9	294.5	167.0
<b>Sales</b>					
Rice	7,279.2	7,949.0	8,078.8	8,250.8	6,373.0
Wheat	202.9	0.0	0.0	20.5	82.5
Sugar		3,028.9	1,829.6	1,914.3	3,646.3
Salt	212.5	207.8	204.2	274.4	395.1
Oil	486.3	648.9	667.2	785.9	708.2
Pulses	229.1	261.7	304.6	359.4	278.1
Atta	430.6	299.0	199.3	177.8	283.0
Maida	337.4	332.7	263.1	266.1	141.9

Source: Food Corporation of Bhutan, Phuentsholing.

TABLE 5.14: QUANTITY OF AGRICULTURAL PRODUCE HANDLED BY FOOD CORPORATION OF BHUTAN, 2005 TO 2009

(Metric tonns)

Commodity	2005	2006	2007	2008	2009
Potatoes	23,766.1	20,645.2	21,611.9	21,109.1	30,998.6
Vegetables	1,706.5	1,488.0	1,432.6	1,592.7	1,310.4
Apples	226.7	452.5	202.3	121.6	107.8
Oranges	1,916.5	1,863.6	2,876.8	2,340.0	2,767.1
Cardamom	0.2	0.0	0.0	0.5	0.0
Ginger	208.7	459.9	0.0	463.0	724.5
Garlic	0.1	0.0	0.0	0.0	0.0
Arecanut	146.6	153.9	233.3	545.1	418.4
Supari(dried doma)	0.0	0.0	0.0	0.0	0.0
Dry chilli	3.9	6.4	0.0	0.9	0.6
Kidney bean(rajma)	49.6	69.5	0.0	51.3	48.3
Soya bean	37.2	47.9	0.0	17.1	56.3
Pulses	0.0	0.0	100.4	68.4	0.3
Mustard	0.0	0.0	0.0	0.0	0.0
Pipla (wild)	0.0	0.0	0.0	0.0	0.0
Leshi	0.0	0.0	0.0	0.0	0.0
Lemon	0.0	0.0	0.0	0.0	0.3
Apricot	0.0	0.0	0.0	0.0	0.0
Peach	1.1	0.2	0.0	1.1	0.7
Plum	0.1	0.0	0.0	0.3	0.8
Pear	0.0	0.1	0.0	0.4	1.1
Dry bean	0.0	0.0	0.0	0.0	0.0

Source: Food Corporation of Bhutan, Phuentsholing.



TABLE 5.15: QUANTITY AND VALUE OF FOREST PRODUCTS SUPPLIED BY TYPE AND USERS, BHUTAN, 2004/2005 TO 2007/2008

User and product type	2004/2005		2006/2007		2007/2008	
	Quantity	Value (Nu)	Quantity	Value (Nu)	Quantity	Value (Nu)
<b>Rural Supply</b>						
Trees (numbers)	15,745.0	629,800.0	11,504.0	471,458.0	24,510.0	997,936.0
Shinglap (numbers)	2,536.0	101,440.0	13.0	520.0	3,240.0	120,692.3
Cham (numbers)	42,625.0	1,705,000.0	19,451.0	594,064.0	56,772.0	1,840,121.8
Tsim (numbers)	25,074.0	300,888.0	10,897.0	43,588.0	32,572.0	489,147.0
Dangchung (numbers)	25,210.0	100,840.0	4,393.0	30,195.0	11,802.0	58,699.5
Poles (numbers)	36,906.0	147,624.0	22,984.0	103,372.0	49,721.0	215,081.3
Post (numbers)	24,489.0	97,956.0	16,015.0	225,105.0	45,753.0	262,411.3
Fire wood (cubic metre)	32,491.0	324,910.0	1,331,927.7	616,729.0	50,766.1	733,978.7
Log form (Cft)	416,742.0	333,393.6	308,461.0	246,097.2	-	-
Sawn timber (cft)	5,043.0	5,043.0	-	-	-	-
Other woods (numbers)			"	"	265.0	1,170.0
Sub total		3,746,894.6		2,331,128.2		4,719,237.7
<b>Non wood Forest Produce (Rural Supply)</b>						
Bamboo (numbers)	123,200.0	11,471.2	369,390.5	30,905.8	287,235.0	47,826.4
Stones (Truck Load)	3.0	120.0	1,100.0	24,040.0	1,011.0	40,440.0
Sand (Truck Load)	4.0	160.0	647.0	1,972.0	1,423.0	56,920.0
Mashrrom billet (numbers)	1,290.0	774.0	9.0	360.0	4,260.0	4,260.0
Cane (Headload)	96.0	384.0	484.0	1,972.0	375.0	1,330.0
Chirrata (kg)	..	..	-	..	"	"
Sub total		12,909.2		59,249.8		150,776.4

Table 5.15 contd...

Urban Supply (Auction)									
Trees (number)	12.0	28,800.0	961.0	291,587.0	595.0	202,561.3			
Shinglap (numbers)	..	..	..	..	36.0	2,080.0			
Cham (numbers)	..	..	413.0	23,946.0	723.0	41,812.0			
Tsims (numbers)	..	..	987.0	11,650.0	686.0	10,488.0			
Dangchung (numbers)	1,565.0	688,600.0	259.0	3,158.0	688.0	4,342.0			
Poles (numbers)	1,790.0	35,800.0	8,407.0	38,735.0	7,731.0	90,276.3			
post (numbers)	..	..	5,585.0	53,112.0	10,084.0	78,356.8			
Firewood (cubic metre)	2,896.0	28,960.0	130,686.3	1,297,404.0	77,804.3	1,646,624.7			
Log form (cft)	253,447.0	4,562,046.0	1,803,567.8	25,158,174.3	“	“			
Sawn form (cft)	126.4	2,275.9	6,962.0	123,178.0	1,968.1	30,660.4			
Sub total		22,126,095.8		27,000,944.3		2,107,201.4			
Non wood Forest Produce on Commercial rate									
Bamboo (numbers)	324,372.0	168,673.4	110,159.0	87,430.8	156,921.0	112,461.0			
Stones (Truck Load)	46,038.0	1,841,520.0	27,476.8	1,110,254.0	74,475.5	961,860.0			
Sand (TL)	47,137.0	1,885,480.0	43,439.0	9,329,236.5	32,691.0	1,307,640.0			
Stones Chips (Truck Load)	28,481.5	1,139,260.0	13,799.0	347,500.0	681.5	26,270.0			
Top Soil (TL)	350.0	14,000.0	..	..	1,128.5	38,610.0			
Wood Chips (Truck Load)	206.0	103,429,000.0	-	-	536.0	231,595.0			
Lemon grass (kg)	6,330.0	25,320.0	..	..	1,652.2	8,261.0			
Mashrrom Billet (numbers)	5,700.0	5,700.0	6,870.0	4,600.0	14,850.0	14,795.0			
Resin (Kg)	7,391.5	29,566.0	24,954.5	85,503.0	54,408.0	136,620.0			
Dalphe (Kg)	900.0	540.0	8,830.0	7,808.0	14,250.0	3,020.0			
Cordycep (Kg)	153.0	3,442,500.0	..	..	52.3	121,495.0			
Leaf mould (Truck Load)	141.0	8,460.0	206.0	11,324.0	305.0	10,363.0			

Table 5.15 contd...

Sand (Truck Load)	..	..	79.0	13,551,875.0	32,691.0	1,307,640.0
Sub total		111,990,019.4		24,535,531.3		4,280,630.0
Subsidy (Dzong and Lhakhang)						
Tree (numbers)	247.0	9,880.0	-	-	528.0	30,120.0
Chams (numbers)	30.0	900.0	-	-	227.0	6,810.0
Tsim (numbers)	18.0	216.0	-	-	310.0	3,720.0
Ploes (numbers)	1,152.0	4,608.0	-	-	25.0	100.0
Log (cft)	..	..	-	-	-	-
Sub total		15,604.0		-		40,750.0
Commercial (Dzong and Lhakhang)						
Tree (numbers)	947.0	1,090,944.0	-	-	57.0	56,000.0
Shinglap (numbers)	23.0	26,496.0	-	-	-	-
Chams (numbers)	1,814.0	435,360.0	-	-	1.0	30.0
Dangchung (numbers)	993.0		-	-	-	-
Tsims (numbers)	915.0	34,770.0	-	-	-	-
Ploes (numbers)	535.0	2,140.0	-	-	200.0	4,000.0
Firewood (cubic metre)	320.0	3,200.0	-	-	1,063.9	24,020.0
Log (cft)	..	..	-	-	199.8	181.6
Swan timber (cft)	..	..	-	-	-	-
Sub total		1,636,422.0		-		84,231.6
Government Institution						
Tree (numbers)	1,238.0	1,426,176.0	-	-	1,115.0	212,753.0
Chams (numbers)	544.0	130,560.0	-	-	103.0	3,090.0
Tsims (numbers)	394.0	14,972.0	-	-	167.0	2,039.0
Dangchung (numbers)	9,459.0	227,016.0	-	-	237.0	3,968.0

Table 5.15 contd...

Poles (numbers)	1,425.0	22,800.0	-	-	2,501.0	26,326.0
Post (numbers)	6,266.0	75,192.0	-	-	5,318.0	36,842.0
Firewood (cubic metre)	18,549.0	185,490.0	-	-	24,602.6	587,539.1
Log forms (cft)	485,025.0	6,305,325.0	-	-	4,475.7	44,526.4
Sawn timber (cft)	126.4	2,275.9	-	-	3,569.2	16,395.7
Sub total		8,389,806.9				933,479.1
Free of Royalty						
Tree (numbers)	127.0	-	270.0	-	352.0	-
Shinglap (numbers)	6.0	-	40.0	-	41.0	-
Chams (numbers)	880.0	-	167.0	-	885.0	-
Tsims (numbers)	1,025.0	-	175.0	-	968.0	-
Dangchung (numbers)	1,594.0	-	280.0	-	1,298.0	-
Poles (numbers)	..	-	1,253.0	-	2,094.1	-
Fencing post (numbers)	..	-	80.0	-	-	-
Poles (numbers)	..	-	-	-	-	-
Log (cft)	995.0	-	-	-	-	-
Firewood (cubic metre)	2,327.0	-	767.7	-	-	-
Sub total		8,389,806.9	3,032.7	-	5,638.1	-
Bhutan						
Tree (numbers)	18,316.0	3,185,600.0	12,465.0	763,045.0	27,157.0	1,499,370.3
Shinglap (numbers)	2,565.0	127,936.0	13.0	520.0	4,438.0	124,712.3
Cham (numbers)	45,893.0	2,271,820.0	19,864.0	618,010.0	58,711.0	1,891,863.8
Tsims (numbers))	26,401.0	350,846.0	11,884.0	55,238.0	34,703.0	505,394.0
Dangchung (numbers)	37,256.0	1,040,288.0	4,393.0	30,195.0	14,075.0	67,209.5
Poles (numbers)	39,483.0	194,712.0	28,569.0	156,484.0	60,178.0	335,783.5

Table 5.15 contd...

Post (numbers)	33,080.0	137,621.0	24,422.0	263,840.0	61,355.0	378,410.0
Firewood (cubic metre)	32,491.0	324,910.0	1,462,614.0	1,914,133.0	156,531.0	2,996,362.4
Log forms (cft)	1,155,214.0	11,200,764.0	2,112,028.8	25,282,528.7	4,675.5	44,708.0
Sawn timber (cft)	5,169.4	7,318.9	6,962.0	123,178.0	5,537.3	47,056.1
Bamboo (numbers)	447,572.0		479,549.5	118,336.6	447,356.0	160,287.4
Stones (Truck Load)	46,041.0	1,841,640.0	28,576.8	1,134,294.0	75,695.5	1,002,300.0
Sand (Truck Load)	47,141.0	1,885,640.0	44,086.0	9,331,208.5	34,268.0	1,364,560.0
Stone chips (Truck Load)	28,481.5	1,139,260.0	13,808.0	347,860.0	715.5	27,630.0
Top Soil (Truck Load)	350.0	14,000.0	..	..	1,158.5	40,110.0
Wood chips (Truck Load)	206,858.0	103,429,000.0	..	..	536.0	231,595.0
Mashrrom Billet (numbers)	6,990.0	6,474.0	6,870.0	4,600.0	14,850.0	14,975.0
Resin (Kg)	7,391.5	29,566.0	24,954.5	85,503.0	54,408.0	136,620.0
Cordycep (Kg)	153.0	3,442,500.0	140.4	3,158,258.0	52.3	121,495.0
Daphne (Kg)	900.0	540.0	8,830.0	7,808.0	14,750.0	3,320.0
Lemon grass (Kg)	6,330.0	25,320.0	..	..	1,652.2	8,261.0
Leaf mould (Truck Load)	141.0	8,460.0	211.0	11,624.0	336.0	12,069.0
Cane (Head Load)	96.0	384.0	484.0	1,972.0	893.0	2,516.0
Chirrata (Kg)	..	..	-	-	-	-
<b>Total</b>		<b>130,664,599.9</b>		<b>43,408,635.8</b>		<b>11,016,608.2</b>

Source: Policy &amp; Planning Division, MoAF, Thimphu.

TABLE 5.16: DETAILS OF PROTECTED AREAS IN BHUTAN, BY YEAR OF ESTABLISHMENT AND AREA, 2010

Name of Area	Establishment year	Area (sq.Km)
Existing Protected Areas		
Wangchuck Centennial Park	n.a	4,914
Torsa Strict Nature Reserve	n.a	610
Jigme Dorji National Park	1995	4,316
Jigme Singye Wangchuck National Park*	1995	1,730
Thrumshingla National Park	2000	905
Royal Manas National Park	1966	1,057
Sakteng Wildlife Sanctuary	2003	741
Bomdeling Wildlife Sanctuary	1998	1,521
Phibsoo Wildlife Sanctuary	n.a	268
Khaling Wildlife Sanctuary	n.a	335
Royal Botanical Park	2004	47
Biological Corridors	n.a	3,307
<b>Total</b>		<b>19,750</b>

Source: Policy & Planning Division, MoAF, Thimphu.

TABLE 5.17: DISPOSAL OF LOGWOOD BY NATURAL RESOURCES DEVELOPMENT CORPORATION LIMITED(NRDCL), BHUTAN, 2005 TO 2010

Item	Units	2005	2006	2007	2008	2009	2010
Logwood							
Logwood (Urban/Commercial/Auction)	cft	1,925,871	1,791,035	1,853,056	1,559,657	2,068,852	1,999,407
Logwood (Rural)	cft	285,035	304,699	227,261	152,526	180,326	248,115
Firewood	M3	..	26,826	36,826	33,831	**470795	**529915
Woodchips	M3	“	“	“	10,510	21,539	16,641
Sand	Truck Load	“	“	2,470	27,374	17,329	28,646
Stone/ Stonechips/ Gravels	Truck Load	“	“	“	6,457	21,539	16,641
Poles	Numbers	“	12,780	18,080	36,710		
<b>Total</b>		<b>2,210,905</b>	<b>2,135,341</b>	<b>2,137,693</b>	<b>1,827,066</b>	<b>2,309,585</b>	<b>2,309,450</b>

Source: Policy & Planning Division, MoAF, Thimphu.

## CHAPTER 6

### INDUSTRIES

The subject 'Industries' covers the whole range of industrial activities carried out by businesses in all fields including mining, manufacturing, wholesale and retail trade, and other service industries. In Bhutan, the industrial sector has until recently played a relatively small role in the economy of the kingdom.

The mining industry in Bhutan is as yet relatively undeveloped. The kingdom has significant deposits of a number of mineral resources, including limestone, coal, graphite, gypsum, slate and dolomite. Most mining activities are limited to relatively small operations, mainly involved in the mining of dolomite, gypsum, limestone, slate, coal, marbles, quartzite and talc.

The manufacturing industry is dominated by a small number of major operators such as the Penden Cement Authority Ltd., the Bhutan Board Products Ltd., Bhutan Carbide and Chemicals Ltd., the Bhutan Ferro Alloys Ltd.; and Bhutan Agro Industries Ltd. Besides these, there are a number of other small manufacturing plants concentrated in the food processing activities. Cottage industry also plays a prominent role with its good timber resources and favorable agricultural conditions. There is lot of scope for expansion of the manufacturing sector particularly in these areas.

As the industrial sector grows in Bhutan, statistics on industry will become increasingly important. The Department of Trade keeps a record of all industrial licenses and activities. Besides, Censuses of Manufacturing Industries conducted at regular intervals viz. Industrial Census of 1998 and 2001 have been the source of important information on Industries. For example, information on the number of industries in operation, types of industries, and employment in industries etc. presented in this chapter is the results from those Censuses.

According to the information collected in 2010, the number of industrial license holders increased from 1,565 in 2009 to 1,777 in 2010, with more than 90% of the establishments operated by the private sectors. Most of the existing industrial establishments are small scale or cottage industries.

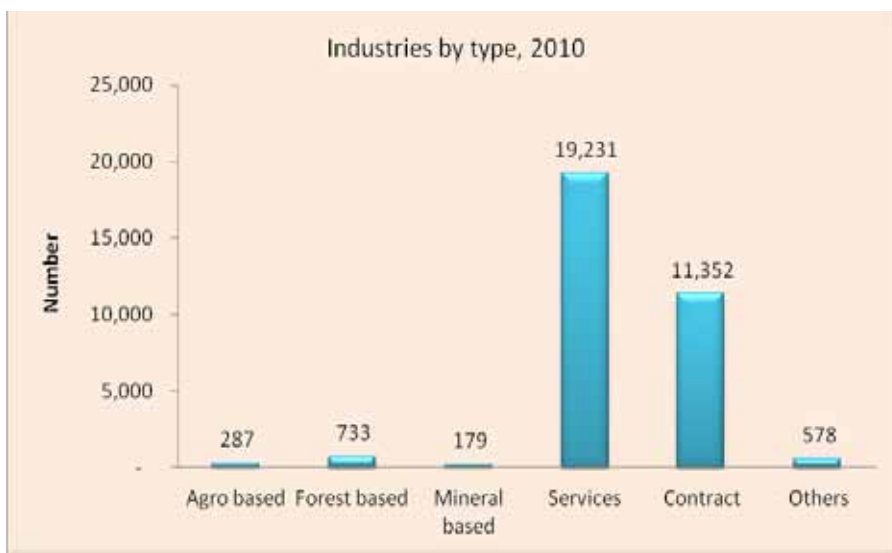


TABLE 6.1 NUMBER OF INDUSTRIAL ESTABLISHMENTS BY SECTOR, BHUTAN, 2006 TO 2010

Sector	2006	2007	2008	2009	2010
<b>Production &amp; manufacturing</b>	<b>1,133</b>	<b>1,254</b>	<b>1,389</b>	<b>1,565</b>	<b>1,777</b>
New registration	135	116	133	173	237
Existing establishments	998	1,138	1,256	1,392	1,540
<b>Services</b>	<b>13,597</b>	<b>14,923</b>	<b>16,253</b>	<b>17,907</b>	<b>19,231</b>
New registration	1,479	1,263	1,331	1,626	1,437
Existing establishments	12,118	13,660	14,922	16,281	17,794
<b>Contract</b>	<b>9,775</b>	<b>10,084</b>	<b>10,431</b>	<b>10,845</b>	<b>11,352</b>
New registration	269	307	347	410	503
Existing establishments	9,506	9,777	10,084	10,435	10,849
<b>All sectors</b>	<b>24,505</b>	<b>26,261</b>	<b>28,073</b>	<b>30,317</b>	<b>32,360</b>

Source: Department of Industry, MoEA, Thimphu.

TABLE 6.2 NUMBER OF LICENCESED FIRMS IN MANUFACTURING AND MINING INDUSTRIES BY SECTOR, BHUTAN, 2008 TO 2010

Industry	2008				2009				2010			
	Public	Joint	Private	Total	Public	Joint	Private	Total	Public	Joint	Private	Total
Mining	0	0	47	47	0	0	53	53	0	0	53	53
Manufacturing	15	6	1,321	1,342	17	6	1,489	1,512	42	23	1,659	1,724
Food processing/milling	5	1	211	217	6	1	245	252	3	2	215	220
Textiles and Clothing	0	0	1	1	0	0	1	1	1	2	33	36
Wood and Paper Products	2	2	570	574	2	2	647	651	2	6	707	715
Mineral Products	0	3	94	97	1	3	106	110	20	5	152	177
Others	8	0	445	453	8	0	490	498	16	8	552	576
<b>Total</b>	<b>15</b>	<b>6</b>	<b>1,368</b>	<b>1,389</b>	<b>17</b>	<b>6</b>	<b>1,542</b>	<b>1,565</b>	<b>42</b>	<b>23</b>	<b>1,712</b>	<b>1,777</b>

Source: Department of Industry, MoEA, Thimphu.



TABLE 6.3 NUMBER OF INDUSTRIES BY SECTOR, SIZE AND TYPE, BHUTAN, 2006 TO 2010

<b>Industrial establishments</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
<b>Sector</b>	<b>24,505</b>	<b>26,261</b>	<b>28,073</b>	<b>30,317</b>	<b>32,360</b>
Private	24,417	26,163	27,972	30,207	32,218
Joint	11	11	14	14	46
Public	77	87	87	96	96
<b>Size</b>	<b>24,505</b>	<b>26,261</b>	<b>28,073</b>	<b>30,317</b>	<b>32,360</b>
Large scale	72	85	91	103	114
Medium scale	78	112	128	156	201
Small scale	1,660	1,815	2,064	2,330	2,878
Cottage scale	12,920	14,165	15,359	16,883	17,815
Other (Contract)	9,775	10,084	10,431	10,845	11,352
<b>Type</b>	<b>24,505</b>	<b>26,261</b>	<b>28,073</b>	<b>30,317</b>	<b>32,360</b>
Production & Manufacturing	1,133	1,254	1,389	1,565	1,777
Agro based	199	207	217	252	287
Forest based	470	517	574	651	733
Mineral based	91	110	144	163	178
Others	373	420	454	499	579
Contract	9,775	10,084	10,431	10,845	11,352
Services	13,597	14,923	16,253	17,907	19,231
<b>All Industries</b>	<b>24,505</b>	<b>26,261</b>	<b>28,073</b>	<b>30,317</b>	<b>32,360</b>

Source: Department of Industry, MoEA, Thimphu.

TABLE 6.4 NUMBER OF CONTRACT FIRMS BY TYPE, BY DZONGKHAG, BHUTAN, 2010

Dzongkhag	Class of contract firm				Total
	A	B	C	Petty	
Bumthang	2	2	11	270	285
Chhukha	43	19	139	701	902
Dagana	1	0	10	287	298
Gasa	0	0	0	42	42
Haa	0	5	44	234	283
Lhuentse	0	0	23	138	161
Monggar	1	4	63	374	442
Paro	0	10	68	503	581
Pema Gatshel	1	3	31	241	276
Punakha	1	2	8	294	305
Samdrup Jongkhar	18	7	78	256	359
Samtse	1	1	49	310	361
Sarpang	8	2	40	492	542
Thimphu	138	86	531	3,570	4,325
Trashigang	5	24	69	478	576
Trongsa	0	0	41	201	242
Tsirang	0	0	5	157	162
Wangdue Phodrang	0	0	22	682	704
Zhemgang	0	0	86	209	295
<b>Bhutan</b>	<b>219</b>	<b>165</b>	<b>1,354</b>	<b>9,614</b>	<b>11,352</b>

Source: Department of Industry, MoEA, Thimphu.

TABLE 6.5 NUMBER OF INDUSTRIAL FIRMS, BY TYPE, BY DZONGKHAG, BHUTAN, 2010

Dzongkhag	Scale of industry				Total
	Small	Medium	Large	Cottage	
Bumthang	48	10	2	637	697
Chhukha	1,153	54	53	1,643	2,903
Dagana	7	0	1	365	373
Gasa	0	0	0	76	76
Haa	41	0	0	233	274
Lhuentse	1	0	0	185	186
Monggar	16	5	1	860	882
Paro	112	23	2	1,352	1,489
Pema Gatshel	12	6	4	488	510
Punakha	16	4	2	383	405
Samdrup Jongkhar	25	5	8	785	823
Samtse	356	12	8	397	773
Sarpang	51	7	5	1,253	1,316
Thimphu	940	63	25	6,296	7,324
Trashigang	5	0	0	224	229
Trashigang	19	1	0	776	796
Trongsa	7	3	0	427	437
Tsirang	10	0	0	330	340
Wangdue Phodrang	51	7	3	766	827
Zhemgang	8	1	0	339	348
<b>Bhutan</b>	<b>2,878</b>	<b>201</b>	<b>114</b>	<b>17,815</b>	<b>21,008</b>

Source: Department of Industry, MoEA, Thimphu.

TABLE 6.6 NUMBER OF INDUSTRIES BY TYPE, BY DZONGKHAG, BHUTAN, 2010

Dzongkhag	Agro based	Forest based based	Mineral based	Services	Contract	Others	All types types
Bumthang	19	52	2	618	285	6	982
Chhukha	53	52	30	2,663	902	105	3,805
Dagana	1	1	3	368	298	0	671
Gasa	1	1	0	74	42	0	118
Haa	2	44	1	225	283	2	557
Lhuentse	2	5	1	178	161	0	347
Monggar	13	49	6	808	442	6	1,324
Paro	15	133	15	1,298	581	28	2,070
Pema Gatshel	9	26	17	454	276	4	786
Punakha	1	7	1	395	305	1	710
Samdrup Jongkhar	16	20	5	770	359	12	1,182
Samtse	21	16	39	681	361	16	1,134
Sarpang	48	34	6	1,216	542	12	1,858
Thimphu	43	158	27	6,729	4,325	367	11,649
Trashhi Yangtse	2	45	1	180	211	1	440
Trashigang	8	38	4	736	576	10	1,372
Trongsa	7	7	0	423	242	0	679
Tsirang	10	6	4	320	162	0	502
Wangdue Phodrang	3	22	17	779	704	6	1,531
Zhemgang	13	17	0	316	295	2	643
<b>Bhutan</b>	<b>287</b>	<b>733</b>	<b>179</b>	<b>19,231</b>	<b>11,352</b>	<b>578</b>	<b>32,360</b>

Source: Department of Industry, MoEA, Thimphu.

TABLE 6.7 MINERAL PRODUCTION BY TYPE, BHUTAN, 2006 TO 2010

Minerals	2006	2007	2008	2009	2010
Dolomite (metric tonnes)	476,516.08	578,551.57	1,247,568.11	1,028,992.60	1,214,619.93
Lime stone (metric tonnes)	581,332.98	543,963.58	583,706.63	649,951.70	704,911.60
Gypsum (metric tonnes)	204,198.16	189,198.29	248,444.70	299,735.67	344,034.49
Coal (metric tonnes)	5,873.06	105,260.81	123,704.23	48,545.01	87,815.42
Marble (square feet)	97,965.46	12,070.80	12,301.06	13,074.00	71,277.95
Slate (square feet)	3,813.40	78,107.17	8,226.89	18,998.00	0.00
Quartzite (metric tonnes)	40,197.65	64,048.59	94,687.65	82,578.00	111,370.67
Talc (metric tonnes)	54,208.24	62,014.77	56,077.39	64,949.00	40,204.18
Stone (metric tonnes)	232,187.10	388,720.64	408,943.11	511,780.54	6,649,977.80
Granite ( metric tonnes)	8,310.90	14,430.33	8,226.89	19,905.00	9,396.44
Phyllite (metric tonnes)	n.a	n.a	n.a	n.a	11,699.98

Source: Department of Geology and Mines, MoEA, Thimphu.

TABLE 6.8 MINERAL PRODUCTION BY TYPE AND USE, BHUTAN, 2008 TO 2010

Minerals	2008			2009			2010		
	Export	Domestic use	Total	Export	Domestic use	Total	Export	Domestic use	Total
Dolomite (metric tonnes)	1,242,638	4,930	1,247,568	1,028,146	847	1,028,993	1,214,620	0	1,214,620
Lime stone (metric tonnes)	89,059	494,647	583,707	34,921	615,031	649,952	34,522	670,389	704,912
Gypsum (metric tonnes)	210,081	38,364	248,445	283,141	16,595	299,736	306,536	37,499	344,034
Coal mines (metric tonnes)	80,976	42,728	123,704	27,076	21,469	48,545	58,819	28,997	87,815
Marble (square feet)	n.a	12,301	12,301	0	13,074	13,074	70,701	187	70,888
Slate (square feet)	n.a	8,227	8,227	0	18,998	18,998	0	0	0
Quartzite (metric tonnes)	4,123	90,565	94,688	12,927	69,651	82,578	2,305	109,065	111,371
Talc (metric tonnes)	56,077	n.a	56,077	64,949	0.00	64,949	36,442	0	36,442
Stone (metric tonnes)	121,968	286,975	408,943	63,841	447,940	511,781	80,871	6,569,107	6,649,978
Granite (square feet)	n.a	8,227	8,227	0	19,905	19,905	0	9,396	9,396
Phyllite (metric tonnes)	n.a	n.a	n.a	n.a	n.a	n.a	0	11,700	11,700

Note: The unit for the Marble, Slate & Granite is in Metric tonnes for the year 2010.  
Source: Department of Geology and Mines, MoEA, Thimphu.

TABLE 6.9 NUMBER OF ESTABLISHMENT BY NATURE OF MAJOR ECONOMIC ACTIVITY, BHUTAN, 2010

Major Economic Activity	No. of Establishment	Percent
Agriculture, Hunting and Forestry	26	0
Mining and Quarring	22	0
Manufacturing	598	8
Electricity, Gas and Water Supply	40	1
Construction	82	1
Wholesale & Retail trade, Repair of motor vehicles, Motorcycles and personal and household goods	4,216	56
Hotels and Restaurants	1,768	24
Financial Intermediation	63	1
Real Estate, Renting and Business Activities	315	4
Public Administration and Defense, Compulsory Social Security	12	0
Education	19	0
Health and social work	17	0
Other community, social and Personal Service Activities	296	4
<b>All Activities</b>	<b>7,474</b>	<b>100</b>

Source: Establishment Census - 2010, MoLHR.

TABLE 6.10 ESTABLISHMENTS BY DZONGKHAG, BHUTAN, 2010

Dzongkhag	No. of Establishment	Percent
Bumthang	212	2.8
Chukha	965	12.9
Dagana	180	2.4
Gasa	17	0.2
Haa	115	1.5
Lhuentse	75	1.0
Mongar	261	3.5
Paro	602	8.1
Pemagatshel	144	1.9
Punakha	154	2.1
Samdrup Jongkhar	422	5.6
Samtse	382	5.1
Sarpang	632	8.5
Thimphu	2,224	29.8
Tashigang	241	3.2
Trashiyangtse	67	0.9
Trongsa	153	2.0
Tsirang	145	1.9
Wangdue	357	4.8
Zhemgang	126	1.7
<b>Bhutan</b>	<b>7,474</b>	<b>100</b>

Source: Establishment Census - 2010, MoLHR.

TABLE 6.11 ESTABLISHMENTS BY MAJOR ECONOMIC ACTIVITY BY DZONGKHAG, BHUTAN, 2010

(numbers)

Dzongkhag	Type of Establishment													Total
	Hunting & Forestry	Mining & Quarrying	Manufacturing	Electricity, Gas and Water Supply	Construction	Wholesale & retail trade, repair of motor vehicles & personal goods	Hotels & Restaurants	Financial Inter-mediation	Real estate, renting & business activities	Public adm & defence, compulsory social security	Education	Health & Social Work	Other community, social & personal service activities	
Bumthang	1	0	15	1	1	118	59	2	3	0	1	1	10	212
Chukha	0	3	61	4	16	481	265	5	70	3	3	2	52	965
Dagana	0	0	5	4	1	111	54	0	4	0	1	0	0	180
Gasa	0	0	0	0	0	14	1	1	1	0	0	0	0	17
Haa	0	0	21	3	0	71	14	3	2	0	0	0	1	115
Lhuentse	0	0	7	2	0	56	7	2	0	0	0	0	1	75
Mongar	1	0	23	2	4	173	43	5	4	0	1	0	5	261
Paro	1	1	56	1	1	339	143	1	27	1	2	1	28	602
Pemagatshel	0	1	9	0	0	83	40	5	2	0	0	0	4	144
Punakha	1	1	19	1	0	90	33	3	3	0	0	0	3	154
Samdrup Jongkhar	10	2	29	1	9	223	83	6	37	0	2	2	18	422
Samtse	1	3	20	3	14	204	119	1	4	1	0	2	10	382
Sarpang	1	1	48	3	4	347	168	2	34	0	2	1	21	632
Thimphu	6	7	200	5	11	1,282	469	5	94	7	4	7	127	2,224
Tashigang	2	0	9	3	5	164	41	5	7	0	0	0	5	241
Trashiyangtse	0	0	8	2	0	31	21	3	1	0	0	0	1	67
Trongsa	0	1	6	1	9	62	63	2	4	0	0	1	4	153
Tsirang	0	0	15	2	0	73	33	3	15	0	2	0	2	145
Wangdue	1	2	39	1	5	225	75	5	3	0	0	0	1	357
Zhemgang	1	0	8	1	2	69	37	4	0	0	1	0	3	126
<b>Bhutan</b>	<b>26</b>	<b>22</b>	<b>598</b>	<b>40</b>	<b>82</b>	<b>4,216</b>	<b>1,768</b>	<b>63</b>	<b>315</b>	<b>12</b>	<b>19</b>	<b>17</b>	<b>296</b>	<b>7,474</b>

Source: Establishment Census - 2010, MoLHR.



TABLE 6.12 ESTABLISHMENTS BY OWNERSHIP AND INVESTMENTS, BHUTAN, 2010

(numbers)

Ownership	Investment				Total
	Micro	Small	Medium	Large	
Privately owned	6,775	346	52	116	7,289
Government owned	121	10	5	18	154
Foreign control	8	0	0	1	9
Joint venture between Foreigner & Bhutanese	13	1	0	8	22
<b>Total</b>	<b>6,917</b>	<b>357</b>	<b>57</b>	<b>143</b>	<b>7,474</b>

Source: Establishment Census - 2010, MoLHR.

TABLE 6.13 ESTABLISHMENTS BY MAJOR ECONOMIC ACTIVITY AND OWNERSHIP, BHUTAN, 2010

(numbers)

Major Economic Activity	Ownership				Total
	Privately owned	Government owned	Foreign control	Joint venture between Bhutanese & Foreigner	
Agriculture, Hunting and Forestry	24	2	0	0	26
Mining and Quarrying	22	0	0	0	22
Manufacturing	583	12	0	3	598
Electricity, Gas and Water Supply	16	21	0	3	40
Construction	76	2	2	2	82
Wholesale & Retail Trade, Repair of motor vehicles, motorcycles & personal & household goods	4,187	24	3	2	4,216
Hotels & Restaurants	1,724	39	3	2	1,768
Financial Intermediation	18	38	0	7	63
Real Estate, Renting & Business Activities	309	5	0	1	315
Public Administration & Defence, Compulsory Social Security	8	2	0	2	12
Education	17	2	0	0	19
Health and Social Work	16	1	0	0	17
Other Community, Social & Personal Service Activities	289	6	1	0	296
<b>Total</b>	<b>7,289</b>	<b>154</b>	<b>9</b>	<b>22</b>	<b>7,474</b>

Source: Establishment Census - 2010, MoLHR.

TABLE 6.14 ESTABLISHMENTS BY TYPE OF LEGAL ORGANIZATION AND INVESTMENTS, BHUTAN, 2010

(numbers)

Legal Organization	Investments				Total
	Micro	Small	Medium	Large	
Individual Proprietorship	6,675	323	43	100	7,141
Partnership and Cooperatives	125	17	6	12	160
Private Limited Company	39	10	6	13	68
Public Limited Company	78	7	2	18	105
<b>Total</b>	<b>6,917</b>	<b>357</b>	<b>57</b>	<b>143</b>	<b>7,474</b>

Source: Establishment Census - 2010, MoLHR.

TABLE 6.15 ESTABLISHMENTS BY MAJOR ECONOMIC ACTIVITY AND TYPE OF LEGAL ORGANIZATION, BHUTAN, 2010

(numbers)

Major Economic Activity	Legal Organization				Total
	Individual Proprietorship	Partnership & Cooperatives	Private Limited Company	Public Limited Company	
Agriculture, Hunting and Forestry	20	2	1	3	26
Mining and Quarrying	12	4	5	1	22
Manufacturing	552	23	11	12	598
Electricity, Gas and Water Supply	13	6	2	19	40
Construction	70	5	7	0	82
Wholesale & Retail Trade, Repair of motor vehicles, motorcycles & personal & household goods	4,150	48	12	6	4,216
Hotels & Restaurants	1,701	31	14	22	1,768
Financial Intermediation	6	18	4	35	63
Real Estate, Renting & Business Activities	294	13	6	2	315
Public Administration & Defence, Compulsory Social Security	8	1	1	2	12
Education	17	0	2	0	19
Health and Social Work	14	2	1	0	17
Other Community, Social & Personal Service Activities	284	7	2	3	296
<b>Total</b>	<b>7,141</b>	<b>160</b>	<b>68</b>	<b>105</b>	<b>7,474</b>

Source: Establishment Census - 2010, MoLHR.

TABLE 6.16 ESTABLISHMENTS BY OWNERSHIP, BY DZONGKHAG, 2010

(numbers)

Dzongkhag	Ownership				Total
	Privately Owned	Government Owned	Foreign control	Joint venture between Bhutanese & Foreigner	
Bumthang	204	5	2	1	212
Chukha	952	8	1	4	965
Dagana	173	5	0	2	180
Gasa	16	1	0	0	17
Haa	109	6	0	0	115
Lhuentse	70	5	0	0	75
Mongar	248	13	0	0	261
Paro	597	3	0	2	602
Pemagatshel	137	3	0	4	144
Punakha	150	4	0	0	154
Samdrup Jongkhar	409	12	0	1	422
Samtse	374	8	0	0	382
Sarpang	624	4	2	2	632
Thimphu	2,190	31	1	2	2,224
Tashigang	230	10	0	1	241
Trashiyangtse	60	7	0	0	67
Trongsa	147	6	0	0	153
Tsirang	139	6	0	0	145
Wangdue	347	6	3	1	357
Zhemgang	113	11	0	2	126
<b>Bhutan</b>	<b>7,289</b>	<b>154</b>	<b>9</b>	<b>22</b>	<b>7,474</b>

Source: Establishment Census - 2010, MoLHR.

TABLE 6.17 ESTABLISHMENTS BY LEGAL ORGANIZATION, BY DZONGKHAG, 2010

(numbers)

Dzongkhag	Type of Legal Organization				Total
	Individual proprietorship	Partnership and Cooperatives	Private Limited Company	Public Limited Company	
Bumthang	200	5	3	4	212
Chukha	929	20	9	7	965
Dagana	173	2	0	5	180
Gasa	16	0	0	1	17
Haa	108	0	1	6	115
Lhuentse	70	3	0	2	75
Mongar	243	12	2	4	261
Paro	597	3	0	2	602
Pemagatshel	135	3	0	6	144
Punakha	147	5	2	0	154
Samdrup Jongkhar	406	4	5	7	422
Samtse	362	7	4	9	382
Sarpang	608	13	7	4	632
Thimphu	2,129	50	27	18	2,224
Tashigang	223	11	4	3	241
Trashiyangtse	60	5	0	2	67
Trongsa	143	5	0	5	153
Tsirang	137	6	0	2	145
Wangdue	343	4	4	6	357
Zhemgang	112	2	0	12	126
<b>Bhutan</b>	<b>7,141</b>	<b>160</b>	<b>68</b>	<b>105</b>	<b>7,474</b>

Source: Establishment Census - 2010, MoLHR.

TABLE 6.18 ESTABLISHMENTS BY NATIONALITY OF OWNERSHIP, BHUTAN, 2010

Ownership	Number of Establishments
Bhutanese	7,188
Foreigner	286
<b>Total</b>	<b>7,474</b>

Source: Establishment Census - 2010, MoLHR.

TABLE 6.19 ESTABLISHMENTS BY KIND OF RAW MATERIALS USED AND OWNERSHIP, 2010

Raw materials	Ownership				Total
	Privately owned	Government owned	Foreign control	Joint venture between Bhutanese & Foreigner	
Chemicals, paints, glues, cleaning agents, solvents, acids, petroleum, lubricants, gases and related	133	4	1	0	138
Minerals, ores, quarry products (boulders, sand, marble, etc)	74	4	0	0	78
Cement, steel, glass, rubber	81	2	0	1	84
Agricultural, forestry, animal, horticulture, paper products	96	3	1	1	101
Others	26	0	0	0	26
<b>Total</b>	<b>410</b>	<b>13</b>	<b>2</b>	<b>2</b>	<b>427</b>

Source: Establishment Census - 2010, MoLHR.

TABLE 6.20 ESTABLISHMENTS BY KIND OF RAW MATERIALS USED AND LEGAL ORGANIZATION, BHUTAN, 2010

Raw materials	Legal Organization				Total
	Individual Proprietorship	Partnership & Cooperatives	Private Limited Company	Public Limited Company	
Chemicals, paints, glues, cleaning agents, solvents, acids, petroleum, lubricants, gases and related	130	4	3	1	138
Minerals, ores, quarry products (boulders, sand, marble, etc)	73	2	1	2	78
Cement, steel, glass, rubber	79	3	1	1	84
Agricultural, forestry, animal, horticulture, paper products	95	3	1	2	101
Others	25	1	0	0	26
<b>Total</b>	<b>402</b>	<b>13</b>	<b>6</b>	<b>6</b>	<b>427</b>

Source: Establishment Census - 2010, MoLHR.

TABLE 6. 21 EQUIPMENTS AND MACHINERIES USED IN MAJOR ECONOMIC ACTIVITY, BHUTAN, 2010

(numbers)

Type of Establishment	Mechanical with power	Mechanical without power	Hand tools with power	Hand tools without power	Electronic Equipments	Other	Total
Agriculture, Hunting and Forestry	1	0	1	1	0	0	3
Mining and Quarrying	1	1	1	1	1	0	5
Manufacturing	13	11	12	12	5	1	54
Electricity, Gas and Water Supply	1	1	1	1	0	0	4
Construction	0	0	1	0	1	0	2
Wholesale & Retail Trade, Repair of motor vehicles, motorcycles & personal & household goods	97	78	84	78	41	4	382
Hotels & Restaurants	31	26	30	26	13	2	128
Financial Intermediation	1	0	0	0	0	0	1
Real Estate, Renting & Business Activities	3	0	2	2	1	1	9
Public Administration & Defence, Compulsory Social Security	0	3	0	0	0	0	3
Education	0	0	0	0	1	0	1
Health and Social Work	0	0	0	0	0	0	0
Other Community, Social & Personal Service Activities	4	4	5	6	4	0	23
Private households with employed persons	0	0	0	0	0	0	0
<b>Total</b>	<b>152</b>	<b>124</b>	<b>137</b>	<b>127</b>	<b>67</b>	<b>8</b>	<b>615</b>

Source: Establishment Census - 2010, MoLHR.

TABLE 6.22 NUMBER OF EMPLOYEES BY MAJOR OCCUPATION, NATIONALITY AND THEIR STATUS, BHUTAN, 2010

Major Occupation	Bhutanese				Total	Foreigners				Total
	Regular	Casual	Con-tract	Self em-ployed		Regular	Casual	Con-tract	Self em-ployed	
Legislators, Sr.Officials & Managers	1,457	29	39	158	1,683	186	27	10	17	240
Professionals	1,715	65	126	3,142	5,048	129	79	46	125	379
Technicians & Associate Profes-sionals	2,014	121	52	33	2,220	151	196	24	0	371
Clerks	1,963	73	44	28	2,108	79	59	5	4	147
Service workers & shop and market sales workers	3,094	199	90	2,391	5,774	797	216	31	110	1,154
Skilled Agriculture & Fishery workers	362	33	16	31	442	54	18	4	2	78
Craft & related trade workers	1,587	154	52	59	1,852	619	717	77	6	1,419
Plant & Machine operators & assem-blers	1,780	249	59	20	2,108	186	750	21	1	958
Elementary oc-cupations	2,967	392	89	45	3,493	271	1,438	33	6	1,748
Armed forces	0	0	0	0	0	0	0	0	0	0
Not stated	111	7	0	35	153	9	2	1	3	15
<b>Total</b>	<b>17,050</b>	<b>1,322</b>	<b>567</b>	<b>5,942</b>	<b>24,881</b>	<b>2,481</b>	<b>3,502</b>	<b>252</b>	<b>274</b>	<b>6,509</b>

Source: Establishment Census - 2010, MoLHR.

TABLE 6.23 NUMBER OF EMPLOYEES BY MAJOR OCCUPATION AND SEX, BHUTAN, 2010

Major Occupation	Sex		Total
	Male	Female	
Legislators, Sr.Officials & Managers	1,482	449	1,931
Professionals	2,751	2,704	5,455
Technicians & Associate Professionals	2,092	510	2,602
Clerks	1,375	922	2,297
Service workers & shop and market sales workers	3,398	3,590	6,988
Skilled Agriculture & Fishery workers	375	144	519
Craft & related trade workers	3,032	240	3,272
Plant & Machine operators & assemblers	2,971	98	3,069
Elementary occupations	4,630	627	5,257
<b>Total</b>	<b>22,106</b>	<b>9,284</b>	<b>31,390</b>

Source: Establishment Census - 2010, MoLHR.

TABLE 6.24 NUMBER OF EMPLOYEES BY DZONGKHAG AND SEX, 2010

Dzongkhag	Sex		Total
	Male	Female	
Bumthang	280	255	535
Chukha	3,376	1,257	4,633
Dagana	205	157	362
Gasa	7	14	21
Haa	161	94	255
Lhuentse	82	60	142
Mongar	596	247	843
Paro	762	761	1,523
Pemagatshel	240	107	347
Punakha	180	182	362
Samdrup Jongkhar	941	344	1,285
Samtse	1,583	369	1,952
Sarpang	940	567	1,507
Thimphu	7,143	3,817	10,960
Tashigang	296	213	509
Trashiyangtse	77	65	142
Trongsa	173	160	333
Tsirang	168	122	290
Wangdue	4,786	404	5,190
Zhemgang	110	89	199
<b>Bhutan</b>	<b>22,106</b>	<b>9,284</b>	<b>31,390</b>

Source: Establishment Census - 2010, MoLHR.



TABLE 6.25 NUMBER OF EMPLOYEES UNDER 18 YEARS OF AGE BY DZONGKHAG, 2010

Dzongkhag	Employees under 18 years		Total
	Male	Female	
Bumthang	1	3	4
Chukha	28	27	55
Dagana	2	0	2
Gasa	0	0	0
Haa	1	1	2
Lhuentse	1	0	1
Mongar	4	6	10
Paro	6	11	17
Pemagatshel	0	2	2
Punakha	2	1	3
Samdrup Jongkhar	11	7	18
Samtse	4	9	13
Sarpang	11	15	26
Thimphu	21	57	78
Tashigang	7	7	14
Trashiyangtse	1	3	4
Trongsa	2	7	9
Tsirang	3	8	11
Wangdue	7	8	15
Zhemgang	0	2	2
<b>Total</b>	<b>112</b>	<b>174</b>	<b>286</b>

Source: Establishment Census - 2010, MoLHR.

## CHAPTER 7

# TRANSPORT AND COMMUNICATIONS

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About two and half decades back, Bhutan had fragmented transport and communications network. An efficient road system for a landlocked country assumes paramount importance as it plays a crucial role in supporting all development activities and in stimulating domestic and international trade. The first appearance of motor vehicle was in 1962 and surface transport continues to be the main means of transport. The Bhutan Government Transport Service (BGTS) originally entrusted with goods transportation was restructured to concentrate on passenger transport. The gradual privatization of the passenger transport services began in 1985 on pilot basis and was achieved fully by October 1991 with 21 operators managing a fleet of more than 100 buses on 73 routes. As of December 2010, there were 54,123 registered vehicles in Bhutan.

The Government, in order to promote and develop the surface transport, with emphasis on safety, formulated the Roads Safety and Transport Act, which became operational since October 1997. In the last 27 years, tremendous achievements were made in establishing 6920.10 kilometers of motorable roads and several motorable bridges. In the difficult areas where the construction of motorable road has not yet begun, suspension bridges provide the vital transport links. Today the Department of Roads is responsible for the design and planning of roads and in setting standards for quality.

Druk Air, the national airline commenced providing services since February 1983 and was commercialized in 1985. Bhutan established its international air links first with Kolkata, India and today it flies to over eight destinations in the region. The Division of Civil Aviation was established in January 1986 to provide infrastructure and air traffic services and to regulate the airline industry. The Civil Aviation Act was enacted in 1990 and the Division of Civil Aviation became the member of ICAO (International Civil Aviation Organization). The Paro International Airport inaugurated on 10<sup>th</sup> April 1999 has taken the air transport sectors further ahead in providing reliable, safe and comfortable travel services.

Since the establishment of first telephone network in 1963 the ICT sector has come a long way. Telecommunication network has changed from physical wire network to a national digital network today. Telecommunication has been accorded high priority in Bhutan's development plans. Bhutan's first satellite international link was established in 1990 with the installation of the Earth satellite station and an international gateway switch in Thimphu. In September 1993 the telecommunication link between Thimphu and Tsirang was established and in March 1999 all the 20 district headquarters had access to telecommunication services.

Following the formulation and implementation of Bhutan Postal Act of 1996, Division of Post was incorporated under the Companies Act of Bhutan. In 1993, Bhutan Post introduced International Express Mail Service and after a year Domestic Express Services and Fax Mail Services were introduced. Fax Money Order Service started in 1996 followed by Post Overnight Courier and Bhutan Post Express Passengers Services in 1997. Within a short period, Bhutan Post increased the types of services from 4 to 13. There are now 114 postal infrastructures, where on an average one Post Office caters to around 6,103 Bhutanese People.

The national telecommunication network opened the path to global information network. On 2<sup>nd</sup> June 1999, the country established the first television network and also started the Internet Services. Since then, the information and communication technology such as Internet provides access to global information and plays an important role in the everyday affairs.

Yet another breakthrough was the launch of cellular mobile (B Mobile) services in the Kingdom, coinciding with the His Majesty's Birthday, 11 November 2003. The Bhutan Telecom Corporation Ltd. has now connected all 205 Gewogs by the cellular services. As of December 2010, there were 26,361 telephone sets in use and 305,215 B-Mobile subscribers and 83,903 Tashicell subscribers respectively.

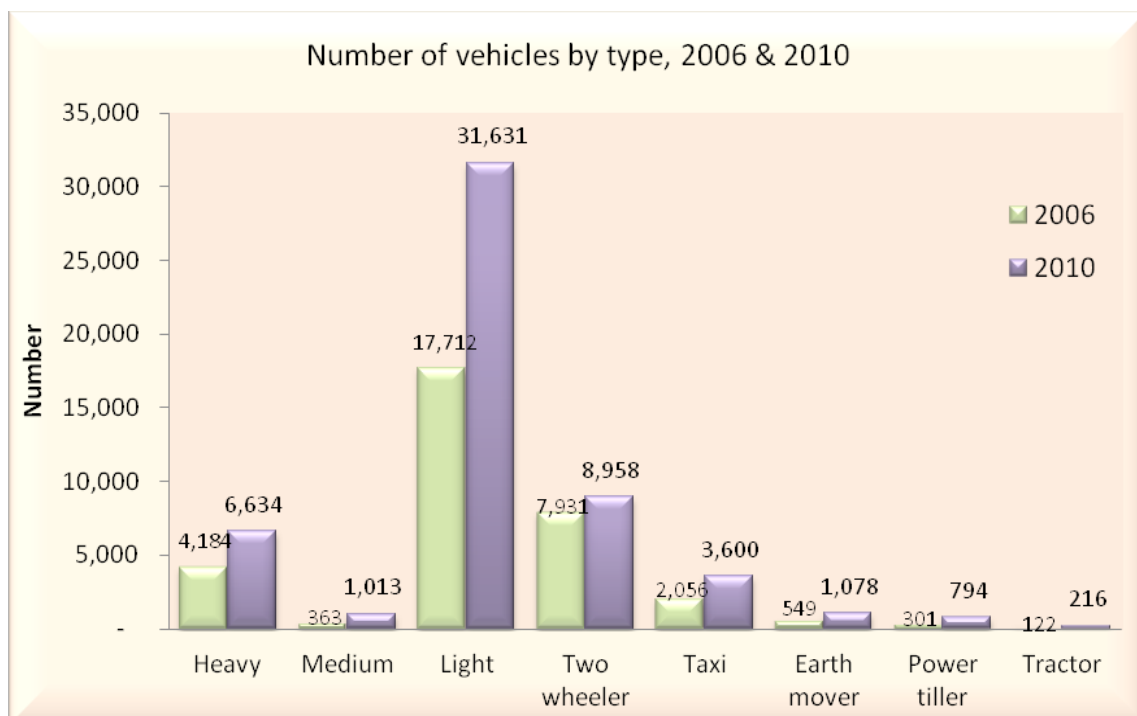


TABLE 7.1 LENGTH OF ROADS BY TYPE, BHUTAN, 2006 TO JUNE 2011

(Length in Km)

Type of road	Expressway	Primary National highway	Secondary National highway	Dzongkhag road	Feeder road	Urban road	Farm road	Forest road	Access Road	Power tiler track	All road
<b>2006</b>	0	n.a	n.a	511.0	1,246.9	130.2	525.9	574.8	n.a	n.a	4,544.7
Black topped	0	n.a	n.a	380.7	436.2	118.8	4.8	7.4	n.a	n.a	2,485.7
Non-black topped	0	n.a	n.a	130.3	810.7	11.5	521.0	567.4	n.a	n.a	2,059.0
<b>2007</b>	6.2	n.a	n.a	481.2	812.7	150.6	716.9	559.6	531.2	60.2	3,318.6
Black topped	6.2	n.a	n.a	449.5	158.5	137.7	n.a	7.0	291.5	0.0	1,050.4
Non-black topped	0	n.a	n.a	31.7	654.2	12.9	716.9	552.6	239.7	60.2	2,268.2
<b>2008</b>	6.2	n.a	n.a	482.0	820.8	163.1	1,045.6	528.9	554.1	140.8	3,741.5
Black topped	6.2	n.a	n.a	449.5	160.9	150.0	0.0	7.0	297.6	0.0	1,071.2
Non-black topped	0	n.a	n.a	32.5	659.9	13.1	1,045.6	521.9	256.5	140.8	2,670.3
<b>2009</b>	6.2	n.a	n.a	490.7	910.8	206.7	1,361.6	533.0	567.9	195.6	4,272.5
Black topped	6.2	n.a	n.a	454.2	174.1	190.0	2.7	7.0	294.0	0.0	1,128.2
Non-black topped	0	n.a	n.a	36.5	736.7	16.7	1,358.9	526.0	273.9	195.6	3,144.3
<b>2010</b>	6.2	n.a	n.a	1,066.1	n.a	295.0	1,980.3	583.4	580.6	149.2	4,660.7
Black topped	6.2	n.a	n.a	196.5	n.a	265.8	0.2	7.0	284.2	0.0	759.9
Non-black topped	0	n.a	n.a	869.6	n.a	29.2	1,980.1	576.4	296.4	149.2	3,900.8
<b>2011</b>	6.2	1,757.2	516.4	1,112.9	n.a	303.6	3,289.7	630.8	619.8	129.7	8,366.2
Black topped	6.2	1,604.2	473.9	203.1	n.a	272.8	0.7	7.0	289.6	0	2,857.4
Non-black topped	0	153.0	42.5	909.8	n.a	30.8	3,289.0	623.8	330.3	129.7	5,508.8

Note: Before year 2011, the national highway is now primary national highway, the district road is now secondary national highway and the feeder road is now Dzongkhag road, therefore it is not available for the previous year.

Source: Department of Roads, MoWHIS, Thimphu.

TABLE 7.2 LENGTH OF ROADS BY TYPE AND DZONGKHAG, BHUTAN, AS ON 30 JUNE 2011

(Length in Km)

Dzongkhag	Express-way	Primary National highway	Secondary National highway	Dzongkhag road	Urban road	Farm road	Forest road	Access road	Powerriller track	Total	Percentage
Bumthang	0.0	151.5	0.0	50.0	1.7	108.1	47.8	21.4	0.0	380.4	4.5%
Chukha	0.0	247.0	0.0	58.6	16.6	136.1	30.9	184.3	23.3	696.8	8.3%
Dagana*	0.0	0.0	87.0	69.6	1.5	226.6	0.0	2.2	28.1	415.0	5.0%
Gasa	0.0	0.0	48.7	0.0	0.0	9.2	0.0	0.0	0.0	57.8	0.7%
Haa	0.0	16.0	25.6	16.0	3.8	54.2	47.0	18.9	6.1	187.6	2.2%
Lhuentse	0.0	0.0	45.0	69.4	0.8	220.0	7.1	3.7	5.5	351.5	4.2%
Mongar	0.0	210.8	20.0	71.4	7.5	513.6	44.8	27.3	18.5	913.9	10.9%
Paro	0.0	103.0	36.4	26.2	5.2	261.7	5.2	58.6	2.0	498.4	6.0%
Pemagatshel	0.0	36.0	36.0	51.1	0.0	174.4	17.6	5.8	0.0	320.9	3.8%
Punakha	0.0	52.0	35.2	40.3	4.4	205.3	59.0	21.6	10.4	428.2	5.1%
Samdrup Jongkhar	0.0	73.8	48.0	31.5	7.6	120.8	11.5	19.2	0.0	312.4	3.7%
Samtse	0.0	44.3	49.0	114.6	8.3	16.8	7.0	7.8	0.0	247.6	3.0%
Sarpang	0.0	123.4	0.0	40.3	0.4	114.9	93.3	1.6	0.0	374.0	4.5%
Thimphu	6.2	68.0	0.0	51.4	208.3	40.1	103.9	44.0	0.0	521.9	6.2%
Tashigang	0.0	121.5	5.0	140.9	6.6	396.2	8.5	44.0	23.0	745.8	8.9%
Trashiyangtse	0.0	0.0	40.0	40.7	8.7	92.0	20.7	4.2	0.0	206.3	2.5%
Trongsa	0.0	164.0	0.0	23.9	0.6	122.8	0.0	10.2	4.6	326.1	3.9%
Tsirang	0.0	77.0	0.0	25.0	1.5	144.9	6.5	4.2	0.0	259.1	3.1%
Wangdue	0.0	139.0	2.5	110.8	6.0	137.0	117.8	120.1	0.0	633.1	7.6%
Zhemgang	0.0	129.9	38.0	81.1	14.1	195.2	2.3	20.8	8.2	489.5	5.9%
<b>Bhutan</b>	<b>6.2</b>	<b>1,757.2</b>	<b>516.4</b>	<b>1,112.9</b>	<b>303.6</b>	<b>3,289.7</b>	<b>630.8</b>	<b>619.8</b>	<b>129.7</b>	<b>8,366.2</b>	<b>1.0</b>

Source: Department of Roads, MoWHS, Thimphu.

TABLE 7.3 NUMBER AND LENGTH OF MOTORABLE BRIDGES BY TYPE, BHUTAN,  
JUNE 2011

(Length in m)

Type of bridges	Number	% by Number	Length	% by Length
<b>Total Permanent bridges</b>				
RCT Beam / T-Girder	59	21.50	1,156.30	14.00
RC Slab	29	10.60	521.25	6.30
Pre-Stressed Concrete	8	2.90	416.00	5.00
Rc Arch	3	1.10	265.00	3.20
Composite	20	7.30	376.06	4.60
Steel Pony Truss	4	1.50	190.00	2.30
Steel Langar Arch	5	1.80	424.45	5.10
Steel Hamilton	10	3.60	313.60	3.80
Steel Truss / Girder	12	4.40	741.60	9.00
M-Cell Box Culvert	3	1.10	48.00	0.60
Submersible	7	2.60	193.50	2.30
<b>Total Temporary (semi-permanent)bridges</b>				
Bailey	99	36.10	2,918.35	35.40
Bailey SN	1	0.40	310.98	3.80
Bailey bridges on Farm Roads	14	5.10	374.99	4.50
<b>All bridges</b>	<b>274</b>	<b>100.00</b>	<b>8,250.08</b>	<b>100.00</b>

Source: Bridge Division, DoR , MoWHS, Thimphu.

TABLE 7.4 NUMBER OF PEDESTRIAN BRIDGES CONSTRUCTED SINCE 4TH FIVE YEAR PLAN BY DZONGKHAG AS OF TILL DATE

Dzongkhag	Plan periods							X Till date	Total Con-structed	%	Existing bridge as of 25th Aug. 2011
	IV & Before	V	VI	VII	VIII	IX	(I - X)		(I - X)		
Bumthang	1	7	3	4	2	2	0	19	3.91	17	
Chukha	3	5	1	3	4	4	1	21	4.32	14	
Dagana	3	4	2	5	4	4	4	26	5.35	21	
Gasa	0	0	2	2	2	1	0	7	1.44	5	
Haa	3	6	1	4	2	0	0	16	3.29	13	
Lhuentse	3	4	2	4	4	7	2	26	5.35	20	
Mongar	9	5	2	5	6	7	1	35	7.20	27	
Paro	3	8	3	2	2	2	1	21	4.32	18	
Pemagatshel	5	11	2	4	6	4	2	34	7.00	25	
Punakha	3	4	1	1	1	3	1	14	2.88	11	
Samdrup Jongkhar	7	11	6	3	3	3	4	37	7.61	20	
Samtse	9	15	2	1	4	2	1	34	7.00	26	
Sarpang	6	8	5	0	5	3	1	28	5.76	21	
Thimphu	1	1	3	3	0	4	2	14	2.88	12	
Tashigang	7	10	2	4	7	7	1	38	7.82	27	
Trashiyangtse	3	6	4	3	3	3	3	25	5.14	21	
Trongsa	4	6	3	4	1	2	2	22	4.53	18	
Tsirang	5	4	1	2	2	1	1	16	3.29	13	
Wangdue	2	10	5	3	2	3	1	26	5.35	22	
Zhemgang	1	5	4	4	5	6	2	27	5.56	21	
<b>Bhutan</b>	<b>78</b>	<b>128</b>	<b>53</b>	<b>60</b>	<b>65</b>	<b>65</b>	<b>30</b>	<b>486</b>	<b>100.00</b>	<b>372</b>	

Notes: The completed bridges include two power tiller bridges funded by RGoB/JICA, six pedestrain bridges funded by DANIDA/RGoB,there pedestrain bridges funded by DSP (Decentralisation Support Program) besides our normal planned bridges under sus-pension bridges programme.12 of the planned bridgesof the 9th FYP are under various stages of construction currently.

Source: Bridge Division, DoR , MoWHS, Thimphu.

TABLE 7.5 NUMBER OF REGISTERED VEHICLES BY TYPE AND REGION, 2006 TO 2010

Region	Government								
	Heavy	Medium	Light	Two-wheeler	Power Tiller	TR	Earth mover	Others	Total
<b>2006</b>	<b>923</b>	<b>74</b>	<b>1,527</b>	<b>1,272</b>	<b>4</b>	<b>69</b>	<b>155</b>	<b>15</b>	<b>4,039</b>
Thimphu	461	0	965	428	2	3	108	0	1,967
Phuntsholing	365	72	338	130	0	4	33	0	942
Gelephu	30	2	85	62	0	0	8	15	202
S/Jongkhar	67	0	139	652	2	62	6	0	928
<b>2007</b>	<b>905</b>	<b>117</b>	<b>1,604</b>	<b>715</b>	<b>13</b>	<b>30</b>	<b>168</b>	<b>0</b>	<b>3,552</b>
Thimphu	468	9	1,028	442	4	11	107	0	2,069
Phuntsholing	371	76	352	135	0	6	33	0	973
Gelephu	30	3	86	71	0	0	8	0	198
S/Jongkhar	36	29	138	67	9	13	20	0	312
<b>2008</b>	<b>902</b>	<b>142</b>	<b>1,809</b>	<b>810</b>	<b>16</b>	<b>41</b>	<b>173</b>	<b>0</b>	<b>3,893</b>
Thimphu	465	10	1,179	469	7	15	105	0	2,250
Phuntsholing	372	97	388	193	0	13	39	0	1,102
Gelephu	29	6	94	79	0	0	9	0	217
S/Jongkhar	36	29	148	69	9	13	20	0	324
<b>2009</b>	<b>952</b>	<b>170</b>	<b>2,000</b>	<b>839</b>	<b>17</b>	<b>40</b>	<b>192</b>	<b>0</b>	<b>4,210</b>
Thimphu	478	16	1,268	470	8	14	107	0	2,361
Phuntsholing	393	114	453	204	0	13	42	0	1,219
Gelephu	28	7	100	82	0	0	9	0	226
S/Jongkhar	53	33	179	83	9	13	34	0	404
<b>2010</b>	<b>1009</b>	<b>183</b>	<b>2117</b>	<b>1342</b>	<b>17</b>	<b>42</b>	<b>202</b>	<b>0</b>	<b>4912</b>
Thimphu	502	24	1,305	498	8	13	111	0	2,461
Phuntsholing	438	115	505	541	0	14	46	0	1,659
Gelephu	30	7	109	98	0	1	10	0	255
S/Jongkhar	39	37	198	205	9	14	35	0	537



Table 7.5 contd...

Region	Private									
	Heavy	Medium	Light	Two-wheeler	Taxi	Power Tiller	TR	Earth mover	Others	Total
<b>2006</b>	<b>3,261</b>	<b>289</b>	<b>16,072</b>	<b>6,658</b>	<b>2,056</b>	<b>297</b>	<b>53</b>	<b>394</b>	<b>8</b>	<b>29,088</b>
Thimphu	1,268	7	10,695	3,070	1,452	225	4	165	0	16,886
Phuntsholing	1,696	279	4,537	1,926	538	35	30	229	0	9,270
Gelephu	129	3	452	797	39	11	1	0	8	1,440
S/Jongkhar	168	0	388	865	27	26	18	0	0	1,492
<b>2007</b>	<b>3,589</b>	<b>403</b>	<b>18,069</b>	<b>6,743</b>	<b>2,218</b>	<b>460</b>	<b>79</b>	<b>465</b>	<b>0</b>	<b>32,026</b>
Thimphu	1,369	44	11,916	3,153	1,575	242	18	194	0	18,511
Phuntsholing	1,803	333	5,179	1,985	569	36	44	248	0	10,197
Gelephu	132	4	486	724	44	19	0	1	0	1,410
S/Jongkhar	285	22	488	881	30	163	17	22	0	1,908
<b>2008</b>	<b>3,725</b>	<b>507</b>	<b>21,757</b>	<b>6,915</b>	<b>2,481</b>	<b>594</b>	<b>108</b>	<b>552</b>	<b>0</b>	<b>36,639</b>
Thimphu	1,402	79	13,942	3,239	1,748	337	34	211	0	20,992
Phuntsholing	1,901	401	6,597	2,049	656	43	55	315	0	12,017
Gelephu	134	5	577	733	46	51	2	3	0	1,551
S/Jongkhar	288	22	641	894	31	163	17	23	0	2,079
<b>2009</b>	<b>4,246</b>	<b>616</b>	<b>25,018</b>	<b>7,180</b>	<b>2,859</b>	<b>675</b>	<b>143</b>	<b>737</b>	<b>0</b>	<b>41,474</b>
Thimphu	1,427	104	15,706	3,309	1,983	378	48	259	0	23,214
Phuntsholing	2,377	468	7,788	2,148	773	50	72	450	0	14,126
Gelephu	141	12	676	768	60	69	3	5	0	1,734
S/Jongkhar	301	32	848	955	43	178	20	23	0	2,400
<b>2010</b>	<b>5,625</b>	<b>830</b>	<b>29,383</b>	<b>7,612</b>	<b>3,600</b>	<b>777</b>	<b>174</b>	<b>1,075</b>	<b>0</b>	<b>49,076</b>
Thimphu	1,816	171	18,066	3,451	2,522	430	58	336	0	26,850
Phuntsholing	3,294	578	9,355	2,344	939	59	89	687	0	17,345
Gelephu	193	48	848	818	99	82	3	14	0	2,105
S/Jongkhar	322	33	1,114	999	40	206	24	38	0	2,776

Table 7.5 contd...

Region	BHT							Total
	Heavy	Medium	Light	Two-wheeler	TR	Power Tiller	Earth mover	
<b>2006</b>	<b>0</b>	<b>0</b>	<b>53</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>53</b>
Thimphu	0	0	53	0	0	0	0	53
Phuntsholing	0	0	0	0	0	0	0	0
Gelephu	0	0	0	0	0	0	0	0
Samdrup Jongkhar	0	0	0	0	0	0	0	0
<b>2007</b>	<b>0</b>	<b>0</b>	<b>57</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>57</b>
Thimphu	0	0	57	0	0	0	0	57
Phuntsholing	0	0	0	0	0	0	0	0
Gelephu	0	0	0	0	0	0	0	0
Samdrup Jongkhar	0	0	0	0	0	0	0	0
<b>2008</b>	<b>0</b>	<b>0</b>	<b>57</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>57</b>
Thimphu	0	0	57	0	0	0	0	57
Phuntsholing	0	0	0	0	0	0	0	0
Gelephu	0	0	0	0	0	0	0	0
Samdrup Jongkhar	0	0	0	0	0	0	0	0
<b>2009</b>	<b>0</b>	<b>0</b>	<b>63</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>63</b>
Thimphu	0	0	63	0	0	0	0	63
Phuntsholing	0	0	0	0	0	0	0	0
Gelephu	0	0	0	0	0	0	0	0
Samdrup Jongkhar	0	0	0	0	0	0	0	0
<b>2010</b>	<b>0</b>	<b>0</b>	<b>63</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>63</b>
Thimphu	0	0	63	0	0	0	0	63
Phuntsholing	0	0	0	0	0	0	0	0
Gelephu	0	0	0	0	0	0	0	0
Samdrup Jongkhar	0	0	0	0	0	0	0	0

Table 7.5 contd...

Region	Diplomats / CD								All Types
	Heavy	Medium	Light	Two-wheeler	TR	Power Tiller	Earth mover	Total	
<b>2006</b>	<b>0</b>	<b>0</b>	<b>60</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>61</b>	<b>33,241</b>
Thimphu	0	0	60	1	0	0	0	61	18,967
Phuntsholing	0	0	0	0	0	0	0	0	10,212
Gelephu	0	0	0	0	0	0	0	0	1,642
S/Jongkhar	0	0	0	0	0	0	0	0	2,420
<b>2007</b>	<b>0</b>	<b>0</b>	<b>62</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>68</b>	<b>35,703</b>
Thimphu	0	0	62	6	0	0	0	68	20,705
Phuntsholing	0	0	0	0	0	0	0	0	11,170
Gelephu	0	0	0	0	0	0	0	0	1,608
S/Jongkhar	0	0	0	0	0	0	0	0	2,220
<b>2008</b>	<b>0</b>	<b>0</b>	<b>64</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>70</b>	<b>40,659</b>
Thimphu	0	0	64	6	0	0	0	70	23,369
Phuntsholing	0	0	0	0	0	0	0	0	13,119
Gelephu	0	0	0	0	0	0	0	0	1,768
S/Jongkhar	0	0	0	0	0	0	0	0	2,403
<b>2009</b>	<b>0</b>	<b>0</b>	<b>64</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>72</b>	<b>45,819</b>
Thimphu	0	0	64	8	0	0	0	72	25,710
Phuntsholing	0	0	0	0	0	0	0	0	15,345
Gelephu	0	0	0	0	0	0	0	0	1,960
S/Jongkhar	0	0	0	0	0	0	0	0	2,804
<b>2010</b>	<b>0</b>	<b>0</b>	<b>68</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>72</b>	<b>54,123</b>
Thimphu	0	0	68	4	0	0	0	72	29,446
Phuntsholing	0	0	0	0	0	0	0	0	19,004
Gelephu	0	0	0	0	0	0	0	0	2,360
S/Jongkhar	0	0	0	0	0	0	0	0	3,313

Notes: 1. Excludes vehicles of armed forces.

2. "Earth Movers" include bull dozers, road rollers, pay loaders, excavators, cranes, etc.

3. The figures are in cumulative

Source: Road Safety and Transport Authority, MOIC, Thimphu.

TABLE 7.6 NUMBER OF DRIVING LICENSES ISSUED BY REGION, AS ON 30TH JUNE 2011

Region	No. of Licenses
Thimphu	37,185
Phuentsholing	7,675
Gelephu	7,421
Samdrupjongkhar	6,063
<b>Total</b>	<b>58,344</b>
PDL (Professional Driving Licence)	8,890

Note: PDL includes the taxi driver licence holder, bus driver licence holder etc

Source: Road Safety and Transport Authority, MOIC, Thimphu.

TABLE 7.7 NUMBER OF PASSENGERS CARRIED &amp; REVENUE EARNED BY DRUK AIR FLIGHTS BY AREA OF OPERATION, 2006 TO 2010

Area of operation	2006	2007	2008	2009	2010
Paro to Kolkata	7,359	7,305	8,557	7,956	11,261
Kolkata to Paro	6,190	6,470	6,932	7,452	10,156
Paro to Bangkok	15,642	17,996	20,700	21,786	23,606
Bangkok to Paro	15,608	17,656	20,508	21,159	22,924
Paro to Dhaka	136	642	910	1,514	2,910
Dhaka to Paro	108	899	966	1,383	2,923
Paro to Delhi	7,866	8,325	10,619	10,080	11,288
Delhi to Paro	7,782	8,180	9,620	9,738	11,855
Paro to Kathmandu	4,945	6,251	8,015	8,539	10,386
Kathmandu to Paro	4,801	6,378	8,192	8,750	10,590
Kathmandu to Delhi	7,432	9,281	2,277	2,017	-
Delhi to Kathmandu	3,059	6,727	1,530	1,073	-
Kolkata to Bangkok	10,934	6,849	4,735	1,640	-
Bangkok to Kolkata	10,750	7,414	5,033	1,568	3
Dhaka to Bangkok	123	2,666	2,352	2,689	2,229
Bangkok to Dhaka	91	1,759	2,020	2,375	1,816
Gaya to Bangkok	3,203	2,748	2,256	1,444	685
Bangkok to Gaya	2,954	2,776	2,546	1,372	606
Paro to Gaya	711	852	650	988	718
Gaya to Paro	443	537	687	891	812
Paro to Bagdora	n.a	n.a	n.a	1,294	1,982
Bagdora to Paro	n.a	n.a	n.a	1,264	1,920
Bagdora to Bangkok	n.a	n.a	n.a	649	1,806
Bangkok to Bagdora	n.a	n.a	n.a	463	1,670
Paro to Guwahati	n.a	n.a	n.a	n.a	107
Guwahati to Paro	n.a	n.a	n.a	n.a	99
Guwahati to Bangkok	n.a	n.a	n.a	n.a	180
Bangkok to Guwahati	n.a	n.a	n.a	n.a	83
<b>Total Passengers</b>	<b>110,137</b>	<b>121,711</b>	<b>119,105</b>	<b>118,084</b>	<b>132,615</b>
<b>Revenue (Nu.in millions)</b>	<b>1,184</b>	<b>1,255</b>	<b>1,168</b>	<b>1,344</b>	<b>1,495</b>

Note: Revenue includes only total operating revenues. Source: Druk Air Corporation Ltd. Thimphu.

TABLE 7.8 NUMBER OF FLIGHTS MADE BY DRUK AIR BY AREA OF OPERATION, 2006 TO 2010

Area of operation	2006	2007	2008	2009	2010
Paro to Calcutta	267	239	199	175	218
Calcutta to Paro	265	240	199	172	224
Paro to Bangkok	394	376	376	369	353
Bangkok to Paro	390	375	384	371	353
Paro to Dhaka	18	87	89	106	121
Dhaka to Paro	18	83	79	105	112
Paro to Delhi	166	180	184	175	156
Delhi to Paro	161	185	185	180	159
Paro to Kathmandu	163	191	198	184	228
Kathmandu to Paro	164	188	186	183	230
Paro to Gaya	90	70	70	46	32
Gaya to Paro	94	72	75	46	32
Delhi to katmandu	155	178	160	132	0
katmandu to Delhi	154	171	158	134	0
Bangkok to kolkata	259	233	181	135	0
Kolkata to Bangkok	263	234	187	133	4
Gaya to Bangkok	93	69	70	46	24
Bangkok to Gaya	95	73	76	46	24
Dhaka to Bangkok	18	88	90	91	105
Bangkok to Dhaka	18	83	78	89	93
Paro to Bagdora	n.a	n.a	n.a	56	105
Bagdora to Paro	n.a	n.a	n.a	58	104
Bagdora to Bangkok	n.a	n.a	n.a	55	105
Bangkok to Bagdora	n.a	n.a	n.a	55	102
Paro to Guwahati	n.a	n.a	n.a	n.a	17
Guwahati to Paro	n.a	n.a	n.a	n.a	18
Guwahati to Bangkok	n.a	n.a	n.a	n.a	17
Bangkok to Guwahati	n.a	n.a	n.a	n.a	18
<b>All sectors</b>	<b>3,245</b>	<b>3,415</b>	<b>3,224</b>	<b>3,142</b>	<b>2,954</b>

Source: Druk Air Corporation Ltd. Thimphu.

TABLE 7.9 TELEPHONE CONNECTION CAPACITY BY EXCHANGE, 2006 TO 2010

Exchange (Switch type)	2006	2007	2008	2009	2010
Bubja(DRMASS)	128	128	128	128	128
Bartsham(DRMASS)	64	64	64	64	n.a
Basochu(DRMASS)	55	55	55	128	n.a
Bngtar(DAMA)	4	n.a	n.a	n.a	n.a
Chumey(SAU)	256	256	256	256	256
Chargarey(DRMASS)	42	64	64	n.a	n.a
Changmari(DRMASS)	128	128	128	n.a	n.a
Chapcha(DRMASS)	64	64	64	64	128
Dechencholing(ELU)	720	720	720	720	720
Damji(DRMASS)	30	30	30	30	30
Dramtse(DRMASS)	64	64	64	64	n.a
Deothang(SAU)	512	512	348	256	n.a
Dagana(DRMASS)	128	128	128	128	n.a
Dagana(VoIP)	400	400	n.a*	na	n.a
Dagana(SAU)	n.a	n.a	n.a	n.a	112
Drujegang(DRMASS)	64	64	64	64	n.a
Drujegang(SAU)	n.a	n.a	n.a	n.a	32
Dagapela(DRMASS)	64	64	64	64	n.a
Dagapela(SAU)	n.a	n.a	n.a	n.a	24
Damphu(RLU)	n.a	n.a	n.a	n.a	n.a
Damphu(E10)	992	992	992	992	992
Damphu(corVAN)	n.a	900	900	900	900
Damthang(SAU)	256	256	256	256	128
Gepshing(DRMASS)	128	n.a	n.a	n.a	n.a
Gepshing(RLU)	n.a	508	380	380	n.a
Gepshing(SAU)	n.a	n.a	n.a	n.a	256
Gelephu(LS)	2164	2164	2148	1868	1868
Gelephu(corDECT)	1000	324	325	324	324
Gedu(CDOT)	672	n.a	n.a	n.a	n.a
Gedu(SAU)	n.a	640	640	640	512
Gomtu(SAU)	384	384	384	384	256
Gasa(DRMASS)	128	128	128	128	128
Haa(DRMASS)	n.a	n.a	n.a	n.a	n.a
Haa(RLU)	732	732	732	732	732
Jakar(RLU)	892	892	892	892	892
Jomotsangkha(EPOST)	108	n.a	n.a	n.a	n.a
Jomotsangkha(VoIP)	n.a	108	104	104	104
Jengkha(DRMASS)	64	64	64	64	64
Khasadrapchu(SAU)	384	384	384	384	256

Table 7.9 contd...

Khaling(DRMASS)	128	128	128	128	n.a
Kanglung(DRMASS)	n.a	n.a	n.a	n.a	n.a
Kanglung(RLU)	n.a	n.a	n.a	n.a	n.a
Kanglung(E10)	1008	1008	1008	1008	1008
Kanglung(corVAN)	n.a	1550	1550	1550	1550
Lhuentse(DRMASS)	127	n.a	n.a	n.a	n.a
Lhuntse(SAU)	n.a	256	256	256	256
Lobesa(DRMASS)	128	128	128	128	n.a
Lobesa(SAU)	n.a	n.a	n.a	n.a	256
Laya(EPOST)	1	1	1	1	1
Lingshi(DAMA)	4	n.a	n.a	n.a	n.a
Lingshi(VoIP)	n.a	4	4	4	4
Lhamoi Zhingkha(DAMA)	4	n.a	n.a	n.a	n.a
Mongar(RLU)	892	892	892	892	n.a
Mongar (corVAN)	n.a	900	900	900	900
Mongar (CSN)	n.a	n.a	n.a	n.a	592
Merak(EPOST)	8	1	1	1	1
Menjowong(EPOST)	8	1	1	1	1
Nganglam(DAMA)	4	n.a	n.a	n.a	n.a
Nganglam(SAU)	n.a	128	128	128	128
Ngabiphu (SAU)	n.a	n.a	n.a	n.a	128
Pemagatshel(LS)	504	504	504	384	384
Pemagatshel(SAU)	n.a	n.a	n.a	n.a	384
Phontsholing(LS)	6,008	6,008	5,624	5,624	4,728
Phuntsholing(corDECT)	560	400	400	400	400
Padechu(DRMASS)	20	n.a	n.a	n.a	n.a
Pasakha(SAU)	640	384	384	384	256
Paro(LS)	3,192	3,192	3,192	3,192	3,192
Paro(corDECT)	1,000	650	650	650	650
Paro (corVAN)	n.a	n.a	n.a	n.a	650
Punakha(RLU)	632	632	632	632	632
Panbang(DAMA)	104	n.a	n.a	n.a	n.a
Panbang(VoIP)	n.a	8	8	n.a	n.a
Rangjung(DRMASS)	128	128	128	128	n.a
Ramitey(DRMASS)	64	64	128	n.a	n.a
Simtokha(ELU)	720	720	720	720	720
Samdrupjongkhar(LS)	1,396	1,396	1,396	1,396	n.a
Samdrupjongkhar(CSN)	n.a	n.a	n.a	n.a	720
Samdrupjongkhar(corVAN)	n.a	850	850	850	850
Sinkhar Lauri(EPOST)	8	1	1	1	1
Sarpang(DRMASS)	n.a	n.a	n.a	n.a	n.a

Table 7.9 contd...

Sarpang(RLU)	892	892	892	508	508
Surey(DRMAS)	64	64	64	30	30
Sinchekha(SAU)	384	384	384	384	384
Samtse(LS)	1,788	1,788	1,772	1,772	1,772
Samtse(corVAN)	n.a	550	550	550	550
Sibsu(SAU)	384	384	384	384	256
Satsam(SAU)	512	512	512	512	256
Sombekha(EPOST)	8	1	1	1	1
Sakten(DAMA)	4	n.a	n.a	n.a	n.a
Thimphu(TLS)	17,376	18,416	18,416	18,416	18,416
Thimphu(corDECT)	4,000	n.a	n.a	n.a	n.a
Thimphu(corVAN)	n.a	800	649	800	800
Trongsa(LS)	892	892	892	892	892
Tshangkha(DRMAS)	64	80	80	80	80
Trongsa(corVAN)	4,000	650	650	650	650
Tashigang(LS)	1,756	1,756	1,756	384	n.a
Tashigang(SAU)	n.a	n.a	n.a	n.a	384
Tshenkherla(DRMAS)	128	128	128	128	n.a
Trashiyangtse(DRMAS)	128	128	256	256	n.a
Trashiyangtse(SAU)	n.a	n.a	n.a	n.a	256
Tangmachu(DRMAS)	64	64	64	64	n.a
Tala(DRMAS)	64	64	64	n.a	n.a
Tashijong(DRCS)	5	5	n.a	n.a	n.a
Tshimasham(RLU)	764	764	764	764	764
Tshimasham(CorDECT)	1,000	250	250	250	n.a
VoIP	48	4	3	n.a	n.a
Wangdue(RLU)	n.a	n.a	n.a	n.a	n.a
Wangdue(E10)	1,376	1,376	1,376	1,376	1,200
Wangdue(corVAN)	n.a	950	950	950	950
Wamrong(DRMAS)	128	128	128	128	n.a
Yusipang(DRMAS)	125	125	n.a	n.a	n.a
Yadi(DRMAS)	64	64	64	64	n.a
Yosel Tshe(DRMAS)	12	n.a	n.a	n.a	n.a
Zhemgang(RLU)	376	376	376	376	376
Zhemgang(corDECT)	1,000	284	225	284	284
Zhemgang(corVAN)	n.a	500	119	500	500
<b>Total capacity</b>	<b>59,024</b>	<b>56,702</b>	<b>61,889</b>	<b>59,875</b>	<b>56,543</b>

Note: ALL DRMAS/SAU capacity are included in the HOST exchanges  
 LS-Local Switch, TS- Toll Switch,INTS- International Switch,  
 RLU-Remote Line Unit,DRMAS-Digital Radio Multiple Access System,  
 E10-(IN Switch) Intelligent Network< EPOST-(VSAT) Very Small Aperture Terminals  
 DAMA-Damand Assigned Multiple Access,SAU-Subscriber Access Unit,  
 VoIP- Voice over Internet Protocol,  
 Source: Bhutan Infocom Media Authority, Thimphu.



TABLE 7.10 NUMBER OF TELEPHONE TRUNK CIRCUITS, BHUTAN, 2010

Sector	Type of connection	Existing circuits
Thimphu INTS-London (BT)	Bothway	19
Thimphu INTS-Singapore (ST)	Bothway	25
Thimphu INTS-Janpan (KDD)	Bothway	88
Thimphu INTS-Telco214(USA)	Bothway	60
Thimphu INTS-Nepal	Bothway	7
Thimphu INTS-Thailand	Bothway	88
Thimphu INTS-India	Bothway	390
Thimphu INTS-Thimphu TLS	Bothway	119
Thimphu INTS-Phuentsholing	N/A	
Thimphu INTS-Wangdue Phodrang	Bothway	30
Thimphu INTS-Tashi Cell	Bothway	60
Thimphu TLS-Trongsa	Bothway	90
Thimphu TLS-Gelephu	Bothway	60
Thimphu TLS-Trashigang	N/A	
Thimphu TLS-Trashigang	N/A	
Thimphu TLS-Samdrup Jongkhar	N/A	
Thimphu TLS-Samdrup Jongkhar	N/A	
Thimphu TLS-Paro	Bothway	120
Thimphu TLS-Wangdue Phodrang	Bothway	91
Thimphu TLS-Punakha	N/A	
Thimphu TLS-Decholing	N/A	
Thimphu TLS - Basochu	N/A	
Thimphu TLS - Kasa Dapchu	N/A	
Thimphu TLS - Yoese pang	N/A	
Thimphu TLS - Lobesa	N/A	
Thimphu TLS - VoIP National	Bothway	30
Thimphu TLS - VoIP International	N/A	
Thimphu TLS - Gasa	N/A	
Thimphu TLS - Damjee (Gasa)	N/A	
Thimphu TLS - Simtokha	N/A	
Thimphu TLS - DAMA	N/A	
Thimphu TLS - DAMA	N/A	
Thimphu TLS - Thimphu corVAN	Bothway	60
Thimphu TLS - Kanglung	Bothway	152
Thimphu TLS - Samtse	Bothway	59
Thimphu TLS - Damphu	Bothway	60
Thimphu TLS - Druknet	OG	60
Thimphu TLS - Phuentsholing	Bothway	243
Thimphu TLS - Tashi cell	Bothway	246

Table 7.10 contd...

Trongsa - Jakar	N/A	
Trongsa - Zhemgang	N/A	
Trongsa - Tshangkha	N/A	
Trongsa - Bubja	N/A	
Trongsa-Chumey	N/A	
Trongsa-Gelephu	Bothway	60
Trongsa-S/Jongkhar	N/A	
Trongsa-S/Jongkhar	N/A	
Trongsa-DAMA	N/A	
Trongsa-DAMA	N/A	
Trongsa-Zemgang cor DECT	Bothway	30
Trongsa-Zemgang cor VAN	Bothway	30
Trongsa-Trongsa cor VAN	Bothway	60
Trongsa-Kanglung	Bothway	60
Tashigang-Mongar	N/A	
Tashigang-Trashiyangtse	N/A	
Tashigang-Yonphula	N/A	
Tashigang-Khaling	N/A	
Tashigang-Wamgrong	N/A	
Tashigang-Tshengkherla	N/A	
Tashigang-Rangjung	N/A	
Tashigang-Dremetse	N/A	
Tashigang-Bartsham	N/A	
Tashigang-Kanglung	N/A	
Tashigang-Yadi	N/A	
TashigangDAMA	N/A	
TashigangDAMA	N/A	
Mongar-Lhuentse	N/A	
Mongar-Tangmachu	N/A	
Mongar - Gelpoishing	N/A	
Kanglung - Kanglung corVAN	Bothway	60
Kanglung - Mongar corVAN	Bothway	60
Kanglung - S/Jongkhar corVAN	Bothway	60
S/Jongkhar - Pemagatshel	N/A	
S/Jongkhar - Deothang	N/A	
S/Jongkhar - Tashigang	N/A	
S/Jongkhar - DAMA	N/A	
S/Jongkhar - DAMA	N/A	
Jomoitshangkhar DAMA	N/A	
Nanglam DAMA	N/A	
Bangtar DAMA	N/A	

Table 7.10 contd...

Gelephu- DAMA	N/A	
Gelephu - Sarpang	N/A	
Gelephu - Damphu	Bothway	60
Gelephu - Surey	N/A	
Gelephu - Gelephu corDECT	Bothway	30
Gelephu - Kanglung E10	Bothway	60
Panbang DAMA	N/A	
Tsirang - Dagana	N/A	
Tsirang - Dagapela	N/A	
Tsirang - Drukjegang	N/A	
Tsirang - Tsirang corVAN	Bothway	60
Phuentsholing - Samtse	Bothway	58
Phuentsholing - Gedu	N/A	
Phuentsholing - Pasakha	N/A	
Phuentsholing - Remetey	N/A	
Phuentsholing - Paro	Bothway	60
Phuentsholing - Phuentsholing corDECT	Bothway	60
Phuentsholing - Kolkata	OG	
Phuentsholing - Kolkata	IC	
Phuentsholing - Delhi	N/A	
Paro - Tsimatsham	N/A	
Paro - Haa	N/A	
Paro - Chapcha	N/A	
Paro - Haa Damthang	N/A	
Paro - Haa Jengkhana	N/A	
Paro - Paro corDECT	Bothway	60
Paro - Tsimasham corDECT	N/A	
Thimphu B-Mobile MSC -PSTN Thimphu	Bothway	337
Thimphu B-Mobile MSC (3G) -PSTN Thimphu	Bothway	330
Thimphu B-Mobile MSC -PSTN Intl gateway switch	Bothway	180
Thimphu B-Mobile MSC-PSTN Wangdue	Bothway	122
Samtse - DAMA	N/A	
Samtse - DAMA	N/A	
Samtse - Samtse corVAN	Bothway	61
Wangdue - Tsirang	Bothway	60
Wangdue - Kanglung	N/A	
Wangdue - Wangdue corVAN	Bothway	60
<b>Total trunk lines (National, International and DAMA)</b>		<b>4,175</b>

Source: Bhutan Infocom Media Authority, Thimphu.

TABLE 7.11 NUMBER OF TRUNK LINES, CONNECTION CAPACITIES & SETS IN USE, 2006 TO 2010

Details	2006	2007	2008	2009	2010
Trunk lines	3,140	3,358	4,018	3,868	3,498
Satellite Communications	232	205	402	662	677
International Lines	168	205	402	662	677
Domestic (DAMA)	64	n.a	n.a	n.a	n.a
Digital Microwave	480	480	480	480	2,250
Digital Radio Concentrator System	15	15	15	n.a	n.a
DRMASS	120	120	120	120	120
VOIP	56	30	3	n.a	n.a
SDH	11,340	11,340	11,340	11,340	120,960
Connection capacity	59,024	56,702	55,750	54,482	55,188
Telephone sets in use	31,526	30,279	27,937	26,384	26,361
Cellular Mobile Subscribers	82,078	148,179	236,294	322,829	165,452
B-Mobile	82,078	148,179	178,346	262,052	305,215
Tashi-Cell	n.a	n.a	57,948	60,777	83,903

Source: Bhutan Infocom Media Authority, Thimphu.

TABLE 7.12 NUMBER OF TELEPHONE TRUNK CALLS AND REVENUE EARNINGS, BHUTAN, 2006 TO 2010

Type of call	2006	2007	2008	2009	2010
Domestic calls	25,784,563	24,421,096	19,324,867	17,462,920	19,085,989
International calls	1,949,680	1,899,478	1,266,838	979,362	957,168
India	1,686,267	1,660,127	1,247,812	819,727	784,701
Other	263,413	239,351	19,026	159,635	172,467
<b>All calls</b>	<b>27,734,243</b>	<b>26,320,574</b>	<b>20,591,705</b>	<b>18,442,282</b>	<b>20,043,157</b>
Revenue earnings (Nu.in Million)	877	1,158	1,217	1,314	1,515

Source: Bhutan Infocom Media Authority, Thimphu.

TABLE 7.13 NUMBER OF TASHI-CELL TRUNK CALLS AND REVENUE EARNINGS, BHUTAN, 2008 TO 2010

Type of call	2008	2009	2010
Total no. of subscribers	57,948	60,777	83,903
Domestic calls	n.a	n.a	26,725,740
International calls	n.a	2,221,560	3,580,560
India	n.a	1,999,440	3,222,360
Other	n.a	222,120	358,200
Mobile/GPRS subscribers	854	1,229	2,356
<b>Revenue earnings (Nu.in Million)</b>	<b>33,641,017.35</b>	<b>189,047,254.77</b>	<b>280,984,687.16</b>

Note: The figures mentioned here for the domestic and international calls are counts not minutes of calls.

And the figures includes both prepaid and postpaid calls made.

Source: Tashi Infocomm Ltd. Thimphu.

TABLE 7.14 NUMBER OF COMMUNICATION FACILITIES, 2006 TO 2010

Postal infrastructure	2006	2007	2008	2009	2010
General Post Offices	2	2	2	2	4
Post Offices	41	41	41	41	40
Community Mail Offices	47	47	47	32	30
Fax Offices	35	37	37	37	40
<b>Total</b>	<b>125</b>	<b>127</b>	<b>127</b>	<b>112</b>	<b>114</b>

Note: WT.Stations are merged with Telecommunication Division since July 1995, includes 3 stations installed at New Delhi, Dhaka and Kalingpong.

Fax Offices are Post Offices having facsimile services, they are not different establishment.

Source: Bhutan Postal Corp. Ltd, Thimphu.

TABLE 7.15 VOLUME OF MAIL, BY TYPE OF ARTICLE, 2006 TO 2010

Type of service	2006	2007	2008	2009	2010
<b>Domestic Mail</b>					
Ordinary Mail	534,469	574,661	662,204	594,295	323,680
Registered	69,388	96,147	86,925	54,073	57,905
Parcel	984	2,614	1,428	1,742	1,108
Facsimile message	0	28,391	25,219	24,742	9,997
Newspapers	604,282	360,039	122,758	144,114	120,616
Local Urgent Mail (LUM)	109,842	88,816	123,093	138,775	132,241
Express mail service (EMS)	6,147	33,341	26,556	10,536	8,367
<b>International Mail Dispatch</b>					
Ordinary Mail	143,971	113,573	95,509	102,330	52,252
Registered	16,718	14,120	11,829	9,110	7,353
Parcel	320	227	294	333	325
FedEx	n.a	n.a	98	120	178
Facsimile message	n.a	916	644	600	433
Post Overnight Courier (POC)	5,229	5,318	3,449	4,525	2,677
Express mail service (EMS)	3,923	4,260	3,918	4,258	4,209
<b>International Mail Receipt</b>					
Ordinary Mail	569,755	609,700	604,469	411,909	185,428
Registered	18,191	20,246	11,694	9,377	9,700
Parcel	1,653	1,722	1,287	1,852	2,071
FedEx	n.a	n.a	162	1,030	1,588
Facsimile message	n.a	1,485	439	661	233
Post Overnight Courier (POC)	3,276	3,305	3,537	3,671	2,083
Express mail service (EMS)	5,605	6,271	5,426	6,364	7,360
<b>Total mail items</b>	<b>2,093,753</b>	<b>1,965,152</b>	<b>1,790,938</b>	<b>1,524,417</b>	<b>929,804</b>

Source: Bhutan Postal Corp. Ltd, Thimphu.

TABLE 7.16 FINANCIAL SERVICES, NUMBER AND VALUE BY TYPE, BHUTAN, 2006 TO 2010

Type	2006	2007	2008	2009	2010
<b>Total money orders</b>	<b>115,158,748</b>	<b>160,653,350</b>	<b>174,813,413</b>	<b>237,187,603</b>	<b>278,043,480</b>
Number of orders ('000)	43,927	69,403	76,139	102,119	104,514
Amount of orders ('000 Nu.)	115,114,821	160,583,947	174,737,274	237,085,484	277,938,966
<b>Domestic money order</b>	<b>91,285,293</b>	<b>139664976</b>	<b>160,619,058</b>	<b>227,665,217</b>	<b>274,081,739</b>
Number of orders ('000)	34,387	62,033	71,201	98,809	102,967
Amount of orders ('000 Nu.)	91,250,905.9	139,602,943	160,547,857	227,566,408	273,978,772
<b>International money order</b>	<b>23749106</b>	<b>20,526,157</b>	<b>13,722,292</b>	<b>9,453,586</b>	<b>3,873,145</b>
Number of orders ('000)	9,129	7,331	4,773	3,285	1,517
Amount of orders ('000 Nu.)	23,739,977	20,518,826	13,717,519	9,450,301	3,871,628
<b>Receipts</b>	<b>124349.1</b>	<b>462,217</b>	<b>472,063</b>	<b>68,800</b>	<b>88,596</b>
Number of orders ('000)	411	39	165	25	30
Amount of orders ('000 Nu.)	123,938.1	462,178	471,898	68,775	88,566
<b>Others</b>	<b>116,865</b>	<b>7,617,938</b>	<b>13,105,988</b>	<b>18,599,692</b>	<b>26,844,106</b>
Number of pensioners ('000)	203	323	528	732	1,006
Amount of pensioners ('000 Nu.)	116,662	7,617,615	13,105,460	18,598,960	26,843,100

Source: Bhutan Postal Corp. Ltd, Thimphu.

TABLE 7.17 VOLUME OF MAIL, BY TYPE OF ARTICLE, WHITE PEGION COURIER SERVICE, 2009 AND 2010

Type of service	2009	2010
<b>Domestic Mail</b>		
Ordinary Mail	n.a	n.a
Registered	7,950	10,580
Parcel	396	589
Facsimile message	n.a	n.a
Newspapers	n.a	n.a
Local Urgent Mail (LUM)	35,000	43,000
Express mail service (EMS)	n.a	n.a
<b>International Mail Dispatch</b>		
Ordinary Mail	n.a	n.a
Registered	n.a	n.a
Parcel	363	561
FedEx	n.a	n.a
Facsimile message	n.a	n.a
Post Overnight Courier (POC)	n.a	n.a
Express mail service (EMS)	n.a	n.a
<b>International Mail Receipt</b>		
Ordinary Mail	n.a	n.a
Registered	n.a	n.a
Parcel	n.a	n.a
FedEx	n.a	n.a
Facsimile message	n.a	n.a
Post Overnight Courier (POC)	n.a	n.a
Express mail service (EMS)	n.a	n.a
<b>Total mail items</b>	<b>43,709</b>	<b>54,730</b>

Source: White Pegion Courier Service, Thimphu.



TABLE 7.18 VOLUME OF MAIL, BY TYPE OF ARTICLE, TAMU COURIER, 2006 TO 2010

Type of service	2006	2007	2008	2009	2010
Domestic Mail					
Ordinary Mail	n.a	n.a	n.a	n.a	n.a
Registered	n.a	n.a	n.a	n.a	n.a
Parcel	100	150	140	160	150
Facsimile message	n.a	n.a	n.a	n.a	n.a
Newspapers	n.a	n.a	n.a	n.a	n.a
Local Urgent Mail (LUM)	2	2	2	2	2
Express mail service (EMS)	n.a	n.a	n.a	n.a	n.a
<b>International Mail Dispatch</b>					
Ordinary Mail	n.a	n.a	n.a	n.a	n.a
Registered	n.a	n.a	n.a	n.a	n.a
Parcel	50	40	55	70	65
FedEx	n.a	n.a	n.a	n.a	n.a
Facsimile message	n.a	n.a	n.a	n.a	n.a
Post Overnight Courier (POC)	n.a	n.a	n.a	n.a	n.a
Express mail service (EMS)	n.a	n.a	n.a	n.a	n.a
<b>International Mail Receipt</b>					
Ordinary Mail	n.a	n.a	n.a	n.a	n.a
Registered	200	350	333	340	400
Parcel	n.a	n.a	n.a	n.a	n.a
FedEx	n.a	n.a	n.a	n.a	n.a
Facsimile message	n.a	n.a	n.a	n.a	n.a
Post Overnight Courier (POC)	n.a	n.a	n.a	n.a	n.a
Express mail service (EMS)	n.a	n.a	n.a	n.a	n.a
<b>Total mail items</b>	<b>352</b>	<b>542</b>	<b>530</b>	<b>572</b>	<b>617</b>

Source: Tamu Courier Blue Dart, Thimphu.

## CHAPTER 8 ENERGY

The major source of energy in Bhutan has traditionally been firewood, and still represents the major source of energy consumption. Electricity generation, though still relatively small in comparison with the rest of the world is growing in importance. Up until recently, electricity generation was based on small diesel generating and micro hydro stations, providing limited supply of electricity, which was supplemented by imports from India. With the commissioning of the first two units of Chhukha Hydro Projects in 1986, and the other two units in 1998 Bhutan substantially increased its electricity generation and became a significant exporter of electricity to India.

The Chhukha Hydro power with the installed capacity of 336 MW, the Kurichu Hydro power with 60 MW and Basochu Hydro Power with 24 MW generated 1839.90 MU, 368.35 MU and 322.20 MU respectively in 2009/10. With the commissioning of mega Tala Hydro Power Project with the installed capacity of 1020 MW, there is a substantial increase in the energy generation of the country. During the year 2009/10 it has generated 4441.24 Million Unit of electricity. In 2009/10, the total electricity generation was 6971.71 Million Unit (MU). Domestic consumption of electricity has been marginal but should increase with the ongoing emphasis on Rural Electrification Programs. Other forms of energy such as the solar, wind and biomass energy are being explored. Number of villages electrified increased from 1981 in 2008/09 to 1998 villages in 2009/10. This trend is a positive indication of the prospective reduction of dependence on fuel wood as a source of energy, in the near future.

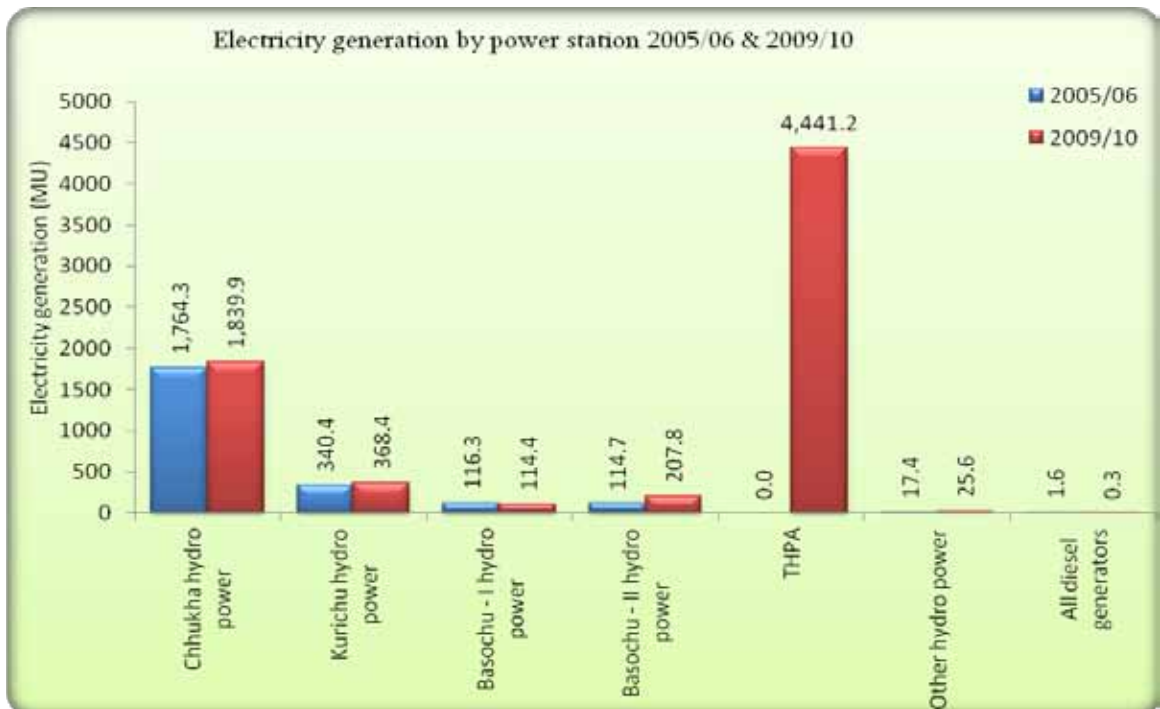


TABLE 8.1 HYDRO GENERATING STATIONS AND THEIR CAPACITIES, BHUTAN, 2008/09 & 2009/10

Generating stations	2008/09						2009/10			
	Installed capacity (No. x MW)	Generating capacity (MW)	Peak generation (MW)	Energy generation (GWh)	Year of Commissioning	Installed capacity (No. x MW)	Generating capacity (MW)	Peak generation (MW)	Energy generation (GWh)	Year of Commissioning
<b>Large Hydroelectric plants</b>										
Chukha	4 x 84.000	360.000	360.000	1767.703	1986-88	4 x 84.00	360.000	360.000	1839.909	1986-88
Kurichu (Mongar)	4 x 15.000	60.000	60.000	375.915	2001	4 x 15.00	60.000	64.000	368.347	2001
Basochu..I (W/phodrang)	2 x 12.000	24.000	24.000	115.715	2002	2 x 12.00	24.000	24.000	114.388	2002
Basochu..II (W/phodrang)	2 x 20.000	40.000	40.000	206.292	2004	2 x 20.00	40.000	40.000	207.822	2004
Tala (Chukha)	6 x 170.000	1020.000	1122.000	4473.072	2006-07	6 x 170.00	1020.000	1122.000	4441.244	2006-07
<b>Total</b>						<b>1,480.00</b>	<b>1504.000</b>		<b>6971.710</b>	
<b>Mini and Micro Hydels</b>	<b>(No. x KW)</b>	<b>(KW)</b>	<b>(MW)</b>	<b>(GWh)</b>	<b>1967</b>	<b>(No. x KW)</b>	<b>(KW)</b>	<b>(MW)</b>	<b>(GWh)</b>	
Jushina (Thimphu)	4 x 90	270	0.246	1.435	1972	4 x 90	270	0.260	1.296	1967
Hesothangkha (Wangdue)	3 x 100	200	0.090	0.492	1972	3 x 100	200	0.082	0.334	1972
Chenari (Tashigang)	3 x 250	500	0.000	0.000	1973	3 x 250	300	0.000	0.000	1972
Gidakom (Thimphu)	5 x 250	816	0.965	5.334	1976	5 x 250	816	0.995	6.318	1973
Khalanzi (Mongar)	3 x 130	260	0.262	0.445	1988	3 x 130	260	0.202	0.498	1976
Chumey (Bumthang)	3 x 500	1080	1.360	4.320	2000	3 x 500	750	1.090	4.098	1988
Gangzur (Lhuentse)	2 x 60	80	0.050	0.114	1986-87	2 x 60	120	0.066	0.119	2000
Rukubji (Wangdue)	1 x 40	40	0.022	0.043	1986-87	1 x 40	40	0.016	0.063	1986-87
Tangsibji (Trongsa)	1 x 30	30	0.018	0.046	1986-87	1 x 30	30	0.020	0.047	1986-87
Sherabling (Trongsa)	1 x 50	50	0.040	0.096	1986-87	1 x 50	50	0.035	0.044	1986-87

Table 8.1 contd...

Bubja (Trongsa)	1 x 30	30	0.028	0.145	1986-87	1 x 30	30	0.026	0.143	1986-87
Tamzhing (Bumthang)	1 x 30	30	-	0.085	1986-87	1 x 30	30	-	0.103	1986-87
Ura (Bumthang)	1 x 50	50	-	0.149	1986-87	1 x 50	50	-	0.153	1986-87
Kekhar (Zhemgang)	1 x 20	20	-	0.026	1986-87	1 x 20	20	-	0.026	1986-87
Surey (Sarpang)					1986-87					1986-87
			Dicommisioned					Discommisioned		
Changchey (Tsirang)	2 x 100	200	0.119	0.744	1991	2 x 100	200	0.114	1.049	1991
Tingtibi (Zhemgang)	2 x 100	200	0.120	0.118	1992	2 x 100	200	0.105	0.459	1992
Darachhu (Dagana)	2 x 100	200	0.150	0.857	1992	2 x 100	200	0.125	0.053	1992
Lingzhi (Thimphu)	1 x 8	8	-	-	1999	1 x 8	8	-	-	1999
Rangjung (Tashigang)	2 x 1100	2200	1.020	5.917	1996	2 x 1100	2200	2.278	9.756	1996
Rongchu (Lhuentse)	2 x 100	200	0.210	0.634	2001	2 x 100	200	0.180	0.816	2001
Chendebji (Trongsa)	1 x 70	70	-	0.572	2005	1 x 70	70	-	0.089	2005
Sengor (Mongar)	1 x 100	100	0.030	0.206	2007	1 x 100	100	-	0.119	2007
<b>Total</b>	<b>8098</b>	<b>6634</b>		<b>21.777</b>		<b>8098</b>	<b>6144</b>		<b>25.582</b>	

Source: Department of Energy, MoEA, Thimphu

TABLE 8.2 DETAILS OF DIESEL GENERATOR SETS, BHUTAN, 2009/10

Generating stations/ Locations	2009/10				
	No of Machines	Capacity of Ma- chines	Total capacity (MW)	Energy generated (MU)	Year of commissioning
Thimphu	7	1 x 0.500	3.314	0.141	1978
		2 x 0.255		0.141	1980
		1 x 1.000		0.141	1982
		1 x 0.950		0.141	1984/85
		1 x 0.104			-
		1 x 0.250			1999/00
Paro	1	1 x 0.088	0.088	0.000	1997
Phuentsholing	3	2 x 0.248	0.624	0.022	1966
		1 x 0.128			1979
Tsirang	3	1 x 0.048	0.433	0.000	1969
		1 x 0.135			1991
		1 x 0.250			1999/00
Trongsa	2	1 x 0.056	0.306	0.000	1976
		1 x 0.250			1999/00
Gelephu	2	1 x 0.280	0.692	0.001	1989
		1 x 0.412			1991
Sarpang	2	1 x 0.255	0.505	0.000	1991
		1 x 0.250			1999/00
Kalikhola	2	1 x 0.100	0.152	-	1998/99
		1 x 0.052			1991
Zhemgang	2	1 x 0.080	0.330	0.124	1983
		1 x 0.250			1999/00
Panbang	1	1 x 0.050	0.050	-	1998/99
Dagana	2	1 x 0.040	0.290	0.000	1983
		1 x 0.250			1999/00
Trashigang	4	1 x 0.054	0.528	0.000	1991
		1 x 0.144			1998/99

Table 8.2 contd...

		1 x 0.080			1996
		1 x 0.250			1999/00
Mongar	1	1 x 0.250	0.250	0.000	1999/00
Samdrup Jongkhar	2	1 x 0.030	0.280	0.003	1999/00
		1 x 0.250			1999/00
Bumthang	2	1 x 0.056	0.806	0.007	1988
		3 x 0.250			1999/00
Trashiyangtse	1	1 x 0.250	0.250	0.002	1999/00
Pema gatshel	1	1 x 0.250	0.250	0.001	1999/00
Samtse	1	1 x 0.043	0.043	0.000	2000/01
<b>Total</b>			<b>9.191</b>	<b>0.301</b>	
Tala Hydro Power Plant					
Penden Cement Authority Ltd.	1	2 x 1.000 (MVA)	1.800	0.199	1981/84
Bhutan Board Products Ltd.	2	1 x 0.160 (MVA)	0.458	-	-
		1 x 0.349 (MVA)			
Chukha Hydro Power Corp.	2	2 x 0.450 (MVA)	1.250	-	-
		2 X 0.280 (MVA)			
Bhutan Ferro Alloys Ltd.	1	2 x 0.380 (MVA)	0.684	0.065	1,995
Bhutan Carbide & Chemical Ltd.	1	3 X 0.125 (MVA)	0.338	0.028	1,987
Basochu Hydro Power Plant	1	1 x 0.130 (MVA)	0.117	0.001	2,000
Kurichu Hydro Power Plant	2	2 X 0.32 (MVA)	0.576	0.082	1998/00
		1 x 0.5 (MVA)	0.500		2,007.000
Tala Hydro Power Plant	1	1 X 2.5 (MVA)	2.250	0.001	2006/07
S.D.Eastern Bhutan Ferro Silicon Pvt.Ltd.	1	2 X 0.125 (MVA)	0.225	-	2007/08
<b>Total</b>			<b>8.198</b>	<b>0.376</b>	

Source: Department of Energy, MoEA, Thimphu

TABLE 8.3 TOTAL ELECTRICITY GENERATION AND SUPPLY, BHUTAN, 2005/06 TO 2009/10

Details	2005/06	2006/07	2007/08	2008/09	2009/10
<b>Installed capacity (MW)</b>	<b>477.26</b>	<b>1,497.36</b>	<b>1,497.36</b>	<b>1,497.29</b>	<b>1,497.29</b>
Chukha hydro power	336.00	336.00	336.00	336.00	336.00
Kurichu hydro power	60.00	60.00	60.00	60.00	60.00
Basochu - I hydro power	24.00	24.00	24.00	24.00	24.00
Basochu - II hydro power	40.00	40.00	40.00	40.00	40.00
THPA	-	1020.00	1,020.00	1,020.00	1,020.00
Other hydro power	8.07	8.17	8.17	8.10	8.10
All diesel generators	9.19	9.19	9.19	9.19	9.19
<b>Electricity generation (MU)</b>	<b>2,647.72</b>	<b>4,520.25</b>	<b>6,562.40</b>	<b>6,960.64</b>	<b>6,997.59</b>
Chukha hydro power	1931.91	1830.42	1,774.37	1,767.70	1,839.91
Kurichu hydro power	365.62	374.45	379.11	375.92	368.35
Basochu - I hydro power	117.83	110.73	115.59	115.72	114.39
Basochu - II hydro power	213.84	203.52	210.57	206.29	207.82
THPA	-	1979.62	4,056.13	4,473.07	4,441.24
Other hydro power	16.65	19.83	24.81	21.78	25.58
All diesel generators	1.87	1.68	1.82	0.17	0.30
Exports (MU)	1943.43	3643.71	5,429.12	5,609.37	5,352.51
Imports (MU)	34.14	11.06	7.25	16.72	19.55
Total energy requirement (MU)	738.09	887.76	1,140.49	1,368.17	1,665.00
Total energy sales (MU)	620.89	766.72	989.80	1,202.71	1,498.01
Energy losses (MU)	117.20	121.05	150.69	165.47	166.99
Percentage losses (%)	16.00	14.00	13.00	12.00	10.00
Peak system demand (MW)	128.00	157.00	194.00	211.00	237.17
<b>Length of HT lines (33/11 KV)</b>					
Overhead lines (km)	2004.70	2433.18	2,643.71	2,734.95	2,906.79
Underground lines (km)	43.03	49.76	57.53	60.79	63.53
<b>Length of LT lines</b>					
Overhead lines (km)	2272.49	3080.50	3,351.49	3,570.93	3,724.52
Underground lines (km)	229.44	194.62	165.77	173.30	187.48

Source: Department of Energy, MoEA, Thimphu

TABLE 8.4 MAJOR TRANSMISSION LINES, 2010

Stations	400 KV Line D/C	220 KV line S/C	220 KV line D/C	132 KV line S/C	66 KV line S/C	66 KV line D/C	66 KV line Q/C	Remarks
Tala- Khogla	24.615	-	-	-	-	-	-	
Tala- Malbasse - Pugli	49.528	-	-	-	-	-	-	
CHP- Gedu- Indian border	-	-	35.780	-	-	-	-	
CHP- Gedu- Malbasse	-	29.841	-	-	-	-	-	
Malbase- Indian border	-	4.075	-	-	-	-	-	
CHP- Semtokha (II)	-	54.010	-	-	-	-	-	
Simtokha- Rurichu	-	44.900	-	-	-	-	-	
Rurichu - Tsirang	-	46.600	-	-	-	-	-	Charged at 66 kv
Malbase- Singhigaon Fdr-I	-	1.706	-	-	-	-	-	
Malbase- Singhigaon Fdr-II	-	2.607	-	-	-	-	-	
Gyelposhing - Kilikhar	-	-	-	10.060	-	-	-	
Kilikhar - Kunglung	-	-	-	29.600	-	-	-	
Kilikhar - Tangmachu	-	-	-	42.800	-	-	-	Charged at 33 kv
Gyleposhing - Nangkhor	-	-	-	31.000	-	-	-	
Nangkhor - Deothang	-	-	-	23.300	-	-	-	
Nangkhor - Nganglam	-	-	-	34.070	-	-	-	
Nganglam - Tintibi	-	-	-	83.330	-	-	-	
Tintibi - Gelephu	-	-	-	45.740	-	-	-	
Gelephu - Indian border	-	-	-	0.100	-	-	-	
Deothang - Motanga	-	-	-	10.500	-	-	-	
Montanga - Indian border	-	-	-	1.500	-	-	-	
Tintibi - Yurmoo	-	-	-	32.628	-	-	-	
Yurmoo - Bumthang	-	-	-	34.856	-	-	-	Charged at 33 kv



Table 8.4 contd...

CHPC - Gedu	-	-	-	-	-	-	-	-	20.400	-	-
Gedu - Phuntsholing	-	-	-	-	-	-	-	-	16.700	-	-
Phuntsholing - Malbasse	-	-	-	-	-	-	-	-	8.986	-	-
Phuntsholing - Gomtu	-	-	-	-	-	-	-	-	26.900	-	-
CHPC - Chumdo	-	-	-	-	-	-	-	-	36.980	-	-
Chumdo - Olakha	-	-	-	-	-	-	-	-	17.520	-	-
Chumdo - Haa	-	-	-	-	-	-	-	-	33.400	-	-
Chumdo - Paro	-	-	-	-	-	-	-	-	24.010	-	-
Semtokha - Lobeysa	-	-	-	-	-	-	-	-	24.330	-	-
Semtokha - Olakha	-	-	-	-	-	-	-	-	1.700	-	-
Hebesa - Rurichu	-	-	-	-	-	-	-	-	3.080	-	-
Semtokha - Dechenchholing	-	-	-	-	-	-	-	-	11.450	-	-
Khasadrapchu - Jemina	-	-	-	-	-	-	-	-	-	5.960	-
Lobeysa - Rurichhu	-	-	-	-	-	-	-	-	20.300	-	-
Tie - Line - Watsa	-	-	-	-	-	-	-	-	0.500	-	-
Yurmoo - Trongsa	-	-	-	-	-	-	-	-	20.940	-	-
Malbase Multi Circuit	-	-	-	-	-	-	-	-	-	-	3.405
<b>Total</b>	<b>74.143</b>	<b>183.739</b>	<b>35.780</b>	<b>379.484</b>	<b>267.196</b>	<b>5.960</b>	<b>3.405</b>	<b>3.405</b>	<b>267.196</b>	<b>5.960</b>	<b>3.405</b>

Note: D/C stands for double circuit and S/C for single circuit

Source: Department of Energy, MoEA, Thimphu

TABLE 8.5 DETAILS OF DOMESTIC ELECTRICAL ENERGY CONSUMPTION, 2006/07 TO 2009/10

Details	2006/07	2007/08	2008/09	2009/10
Towns electrified (numbers)	71	71	71	71
Villages electrified (numbers)	1761	1934	1981	1998
Consumers ('000)	74.8	81.2	89.1	95.5
Sales of energy (million Nu.)	766.7	989.8	1202.7	1498.0
Per capita energy consumption (Units)	1362.4	1773.0	2038.8	2392.9

Note: Per capita energy consumption for 2009/10 is based on population of 695,822

Source: Department of Energy, MoEA, Thimphu

TABLE 8.6 MONTHLY REVENUE FROM SALE OF ENERGY FROM CHHUKHA HYDROPOWER, 2007 TO 2010

Month	2007			2008			2009			2010		
	Export	Internal	Total	Export	Internal	Total	Export	Internal	Total	Export	Internal	Total
January	113.29	6.49	119.78	97.18	7.38	104.56	112.47	7.17	119.64	103.53	9.34	112.87
February	99.15	5.74	104.89	71.50	6.71	78.22	79.89	6.05	85.94	68.00	8.37	76.37
March	142.07	6.29	148.36	87.55	6.14	93.69	83.01	7.02	90.04	94.87	8.40	103.27
April	206.94	4.31	211.25	156.10	5.05	161.15	151.47	6.31	157.77	152.02	7.05	159.07
May	257.95	3.82	261.77	201.72	5.20	206.92	224.78	5.80	230.58	227.78	7.07	234.85
June	368.99	3.74	372.73	515.68	5.28	520.96	392.15	5.72	397.87	399.16	6.93	406.09
July	542.25	3.99	546.24	580.67	5.32	585.99	575.94	6.31	582.25	584.95	7.74	592.70
August	590.46	3.89	594.35	590.57	4.30	594.87	576.81	6.57	583.38	579.56	3.45	583.01
September	576.65	3.85	580.50	554.57	5.66	560.24	546.64	6.82	553.45	556.59	3.43	560.02
October	469.03	4.40	473.43	460.82	6.27	467.09	504.96	6.96	511.92	515.30	3.73	519.03
November	234.06	5.55	239.61	248.22	6.89	255.11	261.07	8.06	269.13	261.79	3.99	265.78
December	148.30	6.65	154.95	159.89	7.18	167.07	157.43	9.19	166.63	143.80	4.57	148.38
<b>Total</b>	<b>3749.14</b>	<b>58.72</b>	<b>3807.86</b>	<b>3724.467</b>	<b>71.39</b>	<b>3795.86</b>	<b>3666.62</b>	<b>81.98</b>	<b>3748.60</b>	<b>3687.36</b>	<b>74.07</b>	<b>3761.42</b>

Source: Department of Energy, MoEA, Thimphu

TABLE 8.7 MONTHLY REVENUE FROM SALE OF ENERGY FROM TALA HYDROPOWER, 2007 TO 2010

Month	2007			2008			2009			2010		
	Export	Internal	Total	Export	Internal	Total	Export	Internal	Total	Export	Internal	Total
January	144.40	15.18	159.58	332.42	16.02	348.43	338.50	19.12	357.62	73.69	27.86	101.55
February	126.64	13.97	140.61	197.46	16.92	214.38	340.69	38.86	379.54	22.07	26.89	48.96
March	207.25	13.69	220.94	133.35	31.69	165.04	72.10	18.58	90.68	52.76	29.34	82.1
April	317.62	11.28	328.90	226.77	14.69	241.45	67.16	23.93	91.1	146.28	27.50	173.79
May	0.00	0.00	0.00	260.52	15.15	275.67	173.55	0.00	173.55	277.88	28.31	306.20
June	0.00	50.00	50.00	0.00	16.44	16.44	0.00	24.39	24.39	672.27	27.57	699.83
July	871.31	13.33	884.64	1,236.35	15.25	1251.60	360.40	22.83	383.22	1,292.99	28.03	1321.03
August	820.11	16.21	836.32	0.00	16.87	16.87	1,584.20	47.97	1632.17	1,272.74	12.07	1284.81
September	1,080.03	16.12	1,096.15	2,598.84	18.58	2617.42	1,282.61	49.70	1332.31	1,238.96	11.81	1250.77
October	1,056.77	31.53	1,088.30	1,245.84	18.34	1264.18	1,942.73	25.64	1968.37	820.22	11.18	831.39
November	736.45	101.04	837.49	0.00	0.00	0.00	329.24	25.83	355.07	362.88	11.13	374.01
December	0.00	15.73	15.73	707.44	21.31	728.75	156.77	28.22	184.99	163.97	12.99	176.96
<b>Total</b>	<b>5,360.58</b>	<b>298.08</b>	<b>5,658.66</b>	<b>6,938.99</b>	<b>201.26</b>	<b>7140.23</b>	<b>6,647.95</b>	<b>325.07</b>	<b>6973.01</b>	<b>6396.71</b>	<b>254.68</b>	<b>6651.40</b>

Source: Department of Energy, MoEA, Thimphu

TABLE 8.8 MONTHLY REVENUE FROM SALE OF ENERGY FROM KURICHU HYDROPOWER, 2007 TO 2010

Month	2007			2008			2009			2010		
	Export	Internal	Total	Export	Internal	Total	Export	Internal	Total	Export	Internal	Total
January	19.25	1.25	20.50	2.82	13.98	16.79	2.79	15.04	17.83	0.73	14.64	15.37
February	13.60	5.03	18.62	2.97	11.18	14.15	4.92	10.37	15.29	4.18	8.95	13.13
March	17.03	8.48	25.50	6.76	15.04	21.8	5.14	14.51	19.64	13.50	10.54	24.04
April	33.54	10.04	43.58	24.13	12.61	36.73	23.63	14.53	38.16	14.14	15.64	29.78
May	35.83	13.51	49.34	42.23	15.41	57.64	28.27	14.62	42.89	29.93	16.02	45.95
June	45.38	14.83	60.22	46.02	14.67	60.69	41.68	14.22	55.89	41.86	16.89	58.75
July	45.58	15.04	60.62	50.92	16.29	67.2	50.90	14.49	65.39	48.07	17.17	65.24
August	51.71	13.31	65.02	51.51	15.90	67.41	52.61	14.65	67.26	51.15	13.86	65.02
September	47.98	13.45	61.43	52.22	13.96	66.18	52.03	14.40	66.42	46.82	13.23	60.04
October	49.75	14.06	63.81	43.22	14.58	57.8	41.19	15.04	56.23	49.32	14.40	63.73
November	24.32	14.00	38.32	19.45	14.82	34.27	15.34	15.44	30.77	23.27	15.28	38.55
December	8.17	16.37	24.54	6.74	16.05	22.79	7.72	14.55	22.27	4.44	17.29	21.73
<b>Total</b>	<b>392.14</b>	<b>139.37</b>	<b>531.50</b>	<b>348.99</b>	<b>174.49</b>	<b>523.45</b>	<b>326.22</b>	<b>171.86</b>	<b>498.04</b>	<b>327.41</b>	<b>173.91</b>	<b>501.33</b>

Source: Department of Energy, MoEA, Thimphu

TABLE 8.9 CONSUMPTION OF ELECTRICITY BY TYPE OF CONSUMER, 2009/10

Type of consumer	Energy sold (Mu)	Percentage of total sales	No. of consumers
<b>Total consumption (MU)</b>	<b>1,498.01</b>	<b>100.00</b>	<b>95,544</b>
Domestic	147.85	9.87	80,810
Commercial	40.70	2.72	8,786
Government Offices	43.58	2.91	4,152
Industrial	1,109.69	74.08	828
Bulk consumers	153.62	10.25	729
Public lighting	2.58	0.17	239

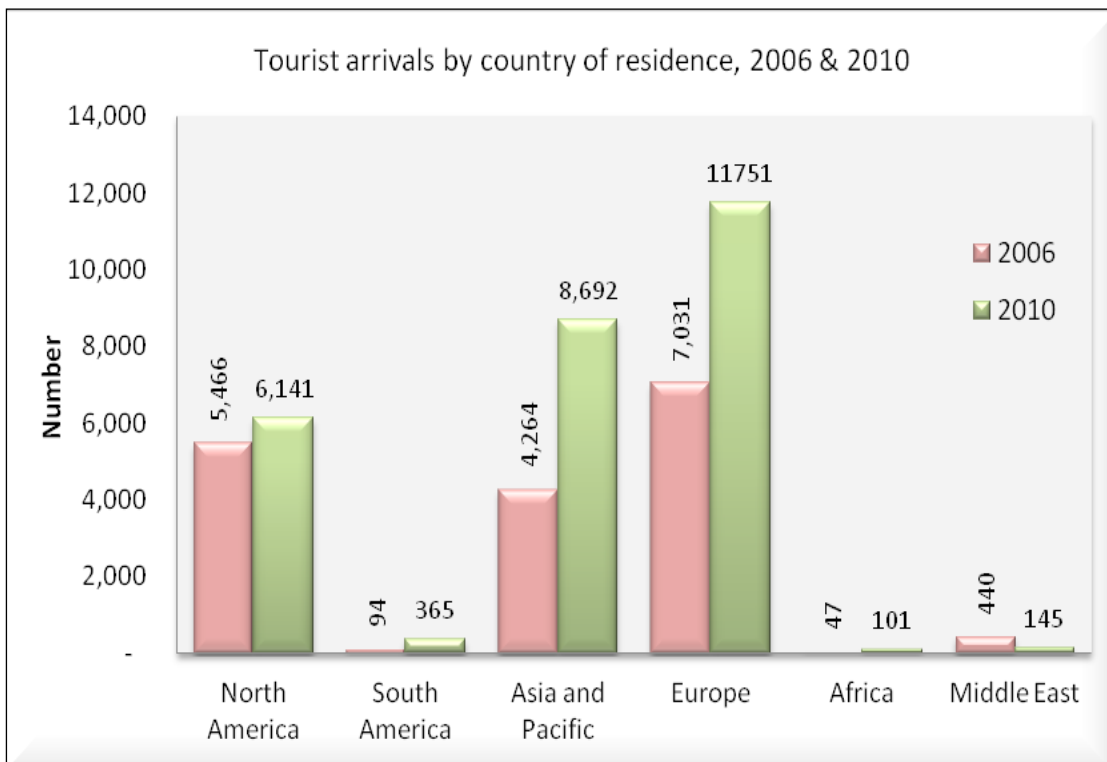
Source: Department of Energy, MoEA, Thimphu

## CHAPTER 9

### TOURISM

The tourism industry in Bhutan began in 1974. The government agency, erstwhile Bhutan Tourism Corporation, controlled tourism until its privatization in 1991. There were 676 registered local tour operators in 2010 in Bhutan which marked an increase of plus 8.68% compared to in 2009 but only 318 were operational in 2010. The potential as far as foreign exchange earnings are concerned is very high. The revenue generation from the tourism sector has increased from over US\$ 2 million in the late 1980's to over US\$ 38 million in 2008. The gross earnings from international tourism also increased to a total USD 35.98 million, an increase of plus 12.86% over 2009.

The tourism industry in Bhutan enjoyed continued growth rate with the tourist arrivals in the country rising steadily during the 1990s through 2000, while in 2001 there was a comparative decrease in tourist arrivals owing to terrorism and outbreak of SARS. However, the industry saw growing number of international tourist arrival thereafter. In 2008 tourist arrivals had grown significantly than the usual trends owing to the Coronation and the Centenary celebrations where Bhutan had unprecedented media coverage. Also the Smithsonian festival in 2008 also put Bhutan into the international limelight and must have contributed to the growth in numbers. In 2010 there were 27,195 tourist arrivals compared to 23,483 in 2009 which has increased by 3712.



Following similar trend from the previous years, tourist arrivals from the European region dominated in 2010. Country wise, the highest number of tourist came from the United States of

America accounting to 19.08% of the total arrivals in 2010, followed by Japan 10.89%, Germany 8.27% and United Kingdom 6.52%. There was also significant increase in visitors from other countries too.

There is unequal distribution of tourist arrival in Bhutan in terms of time of their visit. Majority of tourist arrivals are in autumn (August-October) and spring (February-April) season. “Culture and Nature” has always been the Unique Selling Proposition (USP) for the tourism industry of Bhutan.

TABLE 9.1 ANNUAL TOURIST ARRIVALS BY REGION/CONTINENT, BHUTAN, 2006 TO 2010

(numbers)

Country	2006	2007	2008	2009	2010
<b>Africa</b>	<b>47</b>	<b>66</b>	<b>77</b>	<b>70</b>	<b>101</b>
Algeria	0	1	0	0	0
Benin	0	0	0	0	1
Chad	0	0	0	0	1
Egypt	0	1	0	18	10
Kenya	0	0	1	2	4
Liberia	0	0	1	0	0
Lithuania	0	0	0	4	6
Mauritius	0	1	3	5	1
Morocco	0	0	0	4	0
Namibia	0	0	5	0	1
Reunion	0	0	0	0	0
Somalia	0	0	1	0	0
South Africa	47	62	65	32	70
Swaziland	0	0	1	4	3
Tanzania	0	0	0	0	3
Tunisia	0	0	0	1	0
Uganda	0	1	0	0	1
<b>Asia &amp; Pacific</b>	<b>4,204</b>	<b>5,257</b>	<b>7,514</b>	<b>7,800</b>	<b>8,692</b>
American Samoa	0	0	0	0	70
Australia	774	1,181	1,524	970	1,318
Bangladesh	0	0	1	0	0
Brunei Darussalam	0	0	0	0	1
Burma	0	0	5	5	0
Cambodia	0	3	1	2	0
China	362	504	1,069	1,143	1,494
Chinese – Macau	0	0	0	1	3
Fiji	0	1	0	0	0
Indonesia	0	46	36	98	110
Japan	1,815	2,008	2,743	3,136	2,963
Kazakistan	0	0	1	5	0



Malaysia	49	94	221	367	356
Maldives	0	0	0	0	1
Mongolia	0	1	0	0	1
Myanmar	0	0	0	0	1
Nepal	25	31	78	41	60
New Zealand	116	127	180	122	105
North Korea	..	..	43	0	0
Pakistan	0	1	1	5	2
Phillipines	72	42	72	59	119
Singapore	180	350	667	708	785
South Korea	..	..	97	49	182
Sri Lanka	0	4	26	6	30
Taiwan	35	132	114	83	184
Thailand	776	707	627	975	875
Uzbekistan	0	0	1	0	1
Vietnam	0	25	7	25	31
<b>Europe</b>	<b>7,031</b>	<b>8,777</b>	<b>11,698</b>	<b>9,699</b>	<b>11,751</b>
Andorra	0	0	0	3	1
Austria	484	443	472	420	505
Belarus	0	0	2	2	2
Belgium	220	291	432	364	404
Bosnia	0	0	0	1	0
Bulgaria	0	2	13	12	11
Croatia	0	0	8	4	1
Cyprus	0	0	6	5	5
Czech Republic	49	71	65	77	71
Denmark	85	170	127	153	412
Estonia	0	37	54	14	31
Finland	35	76	191	161	174
France	708	738	1,402	1,189	1,454
Germany	1,074	1,456	1,717	1,587	2,250
Gibraltar	0	0	0	0	1
Greece	42	29	45	107	88
Hungary	0	112	54	49	65
Iceland	0	7	13	0	0

Ireland	51	56	98	59	59
Italy	648	614	751	759	1,028
Latvia	0	24	9	3	9
Liechtenstein	0	0	0	2	0
Lithuania	0	9	32	4	7
Luxembourg	8	24	14	16	23
Malta	0	0	0	0	5
Netherlands	389	497	915	780	847
Norway	104	116	109	92	136
Poland	133	252	233	184	268
Portugal	64	208	91	116	116
Russia	125	204	245	270	275
Romania	0	3	12	19	52
Serbia and Montenegro	0	0	0	0	2
Slovakia	0	18	55	53	32
Slovenia	0	21	63	30	64
Spain	281	444	803	485	528
Sweden	103	166	177	88	137
Switzerland	427	396	597	543	789
Turkey	51	94	91	51	100
Ukraine	0	5	44	28	27
United Kingdom	1,950	2,193	2,758	1,968	1,772
Yugoslavia	0	1	0	1	0
<b>Middle East</b>	<b>46</b>	<b>152</b>	<b>78</b>	<b>171</b>	<b>145</b>
Iran	0	0	0	2	1
Israel	46	152	78	159	127
Jordan	0	0	0	0	1
Kuwait	0	0	0	4	2
Lebanon	0	0	0	1	5
Oman	0	0	0	1	1
Saudi Arabia	0	0	0	3	0
United Arab Emirates	0	0	0	1	8
<b>North America</b>	<b>5,466</b>	<b>6,488</b>	<b>7,931</b>	<b>5,467</b>	<b>6,141</b>
Canada	375	588	852	556	786
Mexico	73	127	138	125	166

USA	5,018	5,773	6,941	4,786	5,189
<b>South America</b>	<b>94</b>	<b>165</b>	<b>309</b>	<b>276</b>	<b>365</b>
Argentina	39	43	21	59	40
Bahamas	0	0	0	0	1
Brazil	55	79	249	178	229
Belize	0	2	0	0	1
Chile	0	5	15	8	18
Colombia	0	11	5	14	27
Costa Rica	0	1	0	0	10
Cuba	0	1	1	0	0
Dominican Republic	0	0	0	0	4
Ecuador	0	1	0	0	1
Guatemala	0	0	0	2	0
Honduras	0	0	1	0	2
Jamaica	0	0	0	0	3
Paraguay	0	0	0	0	1
Peru	0	0	7	6	19
Trinidad and Tobago	0	0	0	0	4
Uruguay	0	0	0	1	1
Venezuela	0	22	10	8	3
Virgin Islands U.S	0	0	0	0	1
<b>Total arrivals</b>	<b>16,888</b>	<b>20,905</b>	<b>27,607</b>	<b>23,483</b>	<b>27,195</b>

Note:- The total number of tourist arrival shows only dollar paying tourist.

Source: Tourism Council of Bhutan, Thimphu.

TABLE 9.2 TOURIST ARRIVALS BY COUNTRY OF RESIDENCE AND REVENUE RECEIPTS, BHUTAN, 2006 TO 2010

(Number)

Region	2006	2007	2008	2009	2010
North America	5,466	6,488	7,931	5,467	6,141
South America	94	165	309	276	365
Asia and Pacific	4,264	5,429	7,514	7,800	8,692
Europe	7,031	8,777	11,698	9,697	11,751
Africa	47	66	77	66	101
Middle East	440	169	107	172	145
<b>All regions (persons)</b>	<b>17,342</b>	<b>21,094</b>	<b>27,636</b>	<b>23,480</b>	<b>27,195</b>
Tourism revenue receipts					
Ngultrums (million)	1083.60	1234.30	1689.49	1402.72	4036.05
Or					
US Dollars (million)	23.92	29.85	38.83	31.88	35.98

Source: Tourism Council of Bhutan, Thimphu.

TABLE 9.3 NUMBER OF TOURIST ARRIVALS BY SEASON AND MONTH, BHUTAN, 2006 TO 2010

Season & Month	2006	2007	2008	2009	2010
<b>Winter</b>	<b>3,350</b>	<b>4,265</b>	<b>5,848</b>	<b>4,291</b>	<b>8,375</b>
November	2,084	2,733	4,126	2,607	4,432
December	854	1,091	1,190	1,017	2,277
January	412	441	532	667	1,666
<b>Spring</b>	<b>5,257</b>	<b>6,019</b>	<b>7,996</b>	<b>7,258</b>	<b>10,046</b>
February	532	814	1,311	811	2,125
March	1,381	2,539	3,512	2,184	4,401
April	3,344	2,666	3,173	4,263	3,520
<b>Summer</b>	<b>1,875</b>	<b>2,213</b>	<b>3,816</b>	<b>3,365</b>	<b>8,009</b>
May	999	1,045	1,862	1,743	3,559
June	422	580	869	764	2,618
July	454	588	1,085	858	1,832
<b>Autumn</b>	<b>6,860</b>	<b>8,597</b>	<b>9,976</b>	<b>8,566</b>	<b>14,569</b>
August	896	1,133	1,386	1,220	2,442
September	2,187	2,952	2,428	3,020	4,927
October	3,777	4,512	6,162	4,326	7,200
<b>Total Arrival</b>	<b>17,342</b>	<b>21,094</b>	<b>27,636</b>	<b>23,480</b>	<b>40,999</b>

Note:- The total number of tourist arrival here shows dollar paying high end tourist, international business and regional business tourist.

Source: Tourism Council of Bhutan, Thimphu.

TABLE 9.4 PERCENTAGE OF TOURIST ARRIVALS BY PURPOSE OF VISIT, BHUTAN, 2006 TO 2010

Purpose	2006	2007	2008	2009	2010
Culture	67.0	69.0	70.6	66.2	67.1
Buddhism	27.6	31.0	58.1	30.2	32.5
Trekking	18.5	19.3	34.1	14.7	15.5
Undiscovered	35.5	35.7	32.0	31.0	24.7
Nature	57.0	59.0	17.5	52.4	48.7
Flora/Fauna	10.7	12.0	9.4	9.0	11.1
Work/Business	7.0	3.2	3.7	6.1	7.3
Others	5.8	1.8	1.5	1.9	5.0

Source: Tourism Council of Bhutan, Thimphu.

TABLE 9.5 NUMBER OF TOURIST ARRIVALS BY MODE OF TRANSPORT, BHUTAN, 2006 TO 2010

Mode of transport	2006	2007	2008	2009	2010
By Air	13,968	16,053	22,563	19,564	36,443
By Road	3,374	5,041	5,073	3,916	25,784
<b>Total arrivals</b>	<b>17,342</b>	<b>21,094</b>	<b>27,636</b>	<b>23,480</b>	<b>62,227</b>

Note: The total number of tourist arrival here shows dollar paying tourist, regional high end tourist, international business, regional business and regional tourist.

Source: Tourism Council of Bhutan, Thimphu.

TABLE 9.6 TOTAL NUMBER OF TOURIST ARRIVALS BY DZONGKHAG, 2010

<b>Dzongkhag</b>	<b>No. of visitors</b>
Paro	27,195
Thimphu	26,667
Wangdue	18,978
Punakha	13,135
Bumthang	10,169
Trongsa	5,424
Chhukha	4,705
Gasa	1,896
Mongar	1,822
Trashigang	1,607
Haa	1,579
Samdrup Jongkhar	1,216
Trashi Yangtse	189
Zhemgang	157
Lhuentse	155
Sarpang	33
Pema Gatshel	9
Tsirang	9
Dagana	2

Source: Tourism Council of Bhutan, Thimphu.

TABLE 9.7 TOUR OPERATOR SHARE OF MARKET (BASED ON BED NIGHTS) 2010

Tour Operator	Tourists Arrivals	Proportion of Annual Tourist Arrivals (%)
Norbu Bhutan Travels	3351.00	12.32
Bhutan Tourism Corp Ltd ( Including Luxury Division)	1810.00	6.66
Etho Metho Tours and Treks	1124.00	4.13
Yangphel Tours and Travels	1082.00	3.98
International Treks and Tours	1026.00	3.77
All Bhutan Connection	926.00	3.40
Bhutan Mandala Tours and Treks	698.00	2.57
Windhorse Tours and Treks	663.00	2.44
Rainbow Tours and Treks	636.00	2.34
Gangri Tours and Treks	594.00	2.18
Kingyal Tours and Treks	521.00	1.92
Himalayan Kingdom	491.00	1.81
<b>Cumulative Totals</b>	<b>12922.00</b>	<b>47.52</b>

Source: Tourism Council of Bhutan, Thimphu.

TABLE 9.8 ACCOMODATION PROVIDERS BY BED NIGHTS 2010

Accommodation Providers	Bed Nights	Proportion of Annual Bed Nights (%)
Olathang Hotel – Paro	7,832	3.78
Meri Phensum Resort – Punakha	6,434	3.10
River View Hotel – Thimphu	6,175	2.98
Hotel Phuentsho Pelri – Thimphu	6,071	2.93
Zangto Pelri Hotel - Punakha	5,897	2.84
Dewachen Hotel – Wangdue	5,778	2.79
Damchen Resort - Punakha	5,748	2.77
Tashi Namgay Resort - Paro	5,443	2.63
Uma Resort – Paro	5,260	2.54
Zhiwaling Hotel - Paro	4,810	2.32
Dragon Nest Hotel- Thimphu	4,791	2.31
Wangdichholing Lodge - Bumthang	4,781	2.31
<b>Cumulative Total</b>	<b>69,020</b>	<b>30.46</b>
<b>Total</b>	<b>207,290</b>	<b>100</b>

Source: Tourism Council of Bhutan, Thimphu.

## CHAPTER 10

### FOREIGN TRADE

The importance of foreign trade statistics is instrumental in gauging the overall economic performance in relation with other countries. Foreign Trade Statistics are vital to the policy maker, the economic planner and the public in general. The data related to merchandise is being compiled by the Department of Revenue and Custom, Ministry of Finance and the services by the Royal Monetary Authority of Bhutan.

Balance of Payments statistics are designed to show the difference between the total payments made to foreign countries and the total receipts from foreign countries. Thus, it provides systematic summary of economic transaction, for a specific time period, between an economy and the rest of the world. The transactions included goods, services, income, transfers and financial claims. Balance of payments statistics in Bhutan are compiled by the Royal Monetary Authority based on information from its own accounts and those of the Banks, together with information on imports and exports.





TABLE 10.1: VALUE OF EXPORTS AND IMPORTS WITH TRADE IN ELECTRICITY, BHUTAN, 2006 TO 2010

(Nu. In Million)

Trade	2006	2007	2008	2009	2010
Exports	18,771.00	27,859.06	22,590.64	23,992.74	29,324.39
India	14,488.00	22,723.72	21,480.02	22,434.39	26,000.89
Third Countries	4,283.00	5,135.34	1,110.62	1,558.35	3,323.50
Imports	19,011.00	21,745.44	23,495.12	25,650.18	39,084.09
India	13,053.00	15,099.54	17,339.55	19,968.01	29,338.00
Third Countries	5,958.00	6,645.90	6,155.57	5,682.17	9,746.09
Balance of trade	(240.00)	6,113.62	(904.48)	(1,657.44)	(9,759.70)
India	1,435.00	7,624.18	4,140.47	2,466.38	(3,337.11)
Third Countries	(1,675.00)	(1,510.56)	(5,044.95)	(4,123.82)	(6,422.59)

Note: Figures within bracket indicate deficit (-).

Source : Department of Revenue & Customs, Ministry of Financ, Thimphu.

TABLE 10.2 (i): TOP TEN COMMODITIES OF EXPORTS, BHUTAN, 2010

Commodity	Million Nu.	Percent share
Ferro-silicon	5,653.42	39.45
Other (Disc, tapes, solid-state non-volatile storage devices, smart cards and other media for the recording of sound or of other phenomena, whether or not recorded, including the production of discs, matrices and masters for the production of discs)	2,145.97	14.98
Other (Copper wire)	1,723.88	12.03
Of calcium	965.82	6.74
Portland pozzolana cement	813.23	5.67
Manganese and articles thereof, including waste and scrap	765.61	5.34
Bars and rods of iron or non alloy steel, twisted	738.70	5.15
Ingots	595.06	4.15
Portland slag cement	478.83	3.34
Of silicon	449.77	3.14
<b>Total</b>	<b>14,330.3</b>	<b>100.00</b>

TABLE 10.2 (ii): TOP TEN COMMODITIES OF IMPORTS, BHUTAN, 2010

Commodity	Million Nu.	Percent share
Other light oils and preparations (HSD)	2,803.88	23.66
Of which the maximum cross-sectional dimension exc	1,848.47	15.60
Ferrous products obtained by direct reduction of iron ore	1,232.70	10.40
Machinery with a 360° revolving (excavators)	1,176.91	9.93
Motor spirit (gasolene) including aviation spirit	969.20	8.18
Dumpers designed for off-highway use	921.21	7.77
Rice	847.06	7.15
Coke and semi-coke	738.99	6.24
Other (Wood charcoal, including shell and nutcharcoal, whether or not agglomerated.)	711.54	6.00
Manganese ores and concentrates, including ferrugi	599.28	5.06
<b>Total</b>	<b>11,849.2</b>	<b>100.00</b>

Source : BACS, Department of Revenue & Customs, Ministry of Finance, Thimphu

TABLE 10.3: VALUE AND ITS PERCENTAGE SHARE OF IMPORTS FROM TOP TEN SELECTED COUNTRIES, BHUTAN, 2010

Country	Million Nu.	Percent share
India	29,329.11	79.81
South Korea	2,004.70	5.46
Thailand	988.10	2.69
Singapore	903.04	2.46
Japan	845.11	2.30
China	611.03	1.66
Nepal	585.50	1.59
Indonesia	567.69	1.54
Sweden	550.30	1.50
Germany	362.01	0.99
<b>Total</b>	<b>36,746.60</b>	<b>100.00</b>

Source: Department of Revenue & Customs, Ministry of Finance, Thimphu.

TABLE 10.4: VALUE AND ITS PERCENTAGE SHARE OF EXPORTS TO TOP TEN SELECTED COUNTRIES, BHUTAN, 2010

Country	Million Nu.	Percent share
India	15,589.43	82.47
Hong Kong	2,188.29	11.58
Bangladesh	906.08	4.79
Japan	132.47	0.70
Nepal	39.68	0.21
Singapore	19.60	0.10
Italy	15.47	0.08
United States of America	7.60	0.04
Thailand	4.67	0.02
France	0.56	0.00
<b>Total</b>	<b>18,903.84</b>	<b>100.00</b>

Source: Department of Revenue & Customs, Ministry of Finance, Thimphu.

TABLE 10.5: OVERALL BALANCE OF PAYMENTS ESTIMATES, BHUTAN, FY 2005/06 TO 2009/10

(Nu. In Million)

Item	2005/06	2006/07	2007/08	2008/09	2009/10
A. Current Account	(1,695.7)	6417.2	(1,080.2)	(948.7)	(8,768.1)
Exports cif	13,959.8	25,333.8	24,170.8	24,657.5	25,401.8
Imports, cif	(19,456.5)	(23,271.9)	(27,092.4)	(28,980.0)	(39,340.0)
Trade balance	(5,496.7)	2,061.8	(2,921.6)	(4,322.4)	(13,938.2)
Services	(573.0)	137.0	(1,562.6)	(903.4)	(1,015.2)
Credit	2,313.8	2,661.2	2,206.9	2,700.0	3,205.3
Debit	(2,886.8)	(2,524.2)	(3,769.5)	(3,603.4)	(4,220.5)
Income	(312.5)	(7.2)	(1,310.1)	(1,749.4)	(2,666.5)
Credit	813.3	1,161.9	1,419.9	1,012.6	761.0
Debit	(1,125.8)	(1,169.1)	(2,730.0)	(2,762.0)	(3,427.5)
Current Transfers	4,686.50	4,225.60	4,714.00	6,026.50	8,851.80
Credit	7,313.7	6,533.7	6,780.2	7,730.8	10,414.7
Of Which, Budgetary Grants	6,424.7	6,000.9	5,935.4	6,575.1	8,909.0
Debit	(2,627.2)	(2,308.1)	(2,066.2)	(1,704.3)	(1,562.9)
B. Capital and Financial Account	5,847.1	5,095.4	5,650.7	5,065.1	7,016.4
Capital Transfers	1,751.5	1,111.8	635.5	1,413.2	3,719.5
Foreign Direct Investment	273.9	3,238.1	1,198.3	710.8	534.6
Portfolio Investment	0.0	0.0	0.0	0.0	0.0
Other Investment	3,821.7	745.5	3,816.9	2,941.1	2,762.3
Foreign Aid (Loans net)	3,474.7	783.3	1,015.0	4,193.3	2,215.2
Other loans	347.0	(37.8)	2,801.9	(1,252.2)	547.1
C. Net Errors and Omissions	1,057.7	(6,091.4)	(2,613.4)	1,578.3	6,153.0
D. Overall balance	5,209.1	5,421.2	1,957.0	5,694.8	4,401.4

Notes: Figures within bracket indicate deficit (-).

Source : Royal Monetary Authority of Bhutan, Thimphu

TABLE 10.6: GROSS INTERNATIONAL RESERVES, BHUTAN, 2006/07 TO 2009/2010

End of Period

Item	2006/07	2007/08	2008/09	2009/10
<b>1. Rupee reserves</b>	<b>769.60</b>	<b>914.40</b>	<b>628.10</b>	<b>1,378.56</b>
Royal Monetary Authority of Bhutan	136.30	191.40	118.40	137.25
Bank of Bhutan Ltd	387.40	435.80	373.00	922.98
Bhutan National Bank Ltd	245.90	287.30	136.70	196.26
TBank Ltd	n.a	n.a	n.a	50.00
Druk PNB Ltd	n.a	n.a	n.a	72.07
Bhutan Development Bank Ltd.	n.a	n.a	n.a	n.a
<b>2. Convertible currency reserves</b>	<b>589.50</b>	<b>633.90</b>	<b>759.60</b>	<b>745.10</b>
Royal Monetary Authority of Bhutan (a)	510.70	545.83	666.60	730.66
Bank of Bhutan Limited	47.30	11.20	7.64	15.36
Bhutan National Bank Limited	31.50	12.05	17.03	15.85
TBank Limited	n.a	n.a	n.a	0.00
Druk PNB Limited	n.a	n.a	n.a	0.18
Bhutan Development Bank Ltd.	n.a	n.a	n.a	n.a
<b>3. Total reserves(1+2)</b>	<b>608.40</b>	<b>589.12</b>	<b>704.42</b>	<b>791.65</b>
<b>4. Total reserves</b>	<b>12.80</b>	<b>12.40</b>	<b>15.40</b>	<b>11.24</b>
Rupee reserves	0.60	0.50	0.30	0.58
Convertible currency reserves	42.40	54.73	72.70	38.63

Note: (a) Includes reserve tranche position in the fund. From March 2004, the definition of Bhutan's gross international reserves has been revised and backtracked to exclude reserves of the RICBL's Rupee and convertible currency reserves. Months of imports are calculated using gross international reserves and merchandise imports figures. RMA convertible currency reserves for 2004/2005 onwards have been revised due to change in classification as of May 2005. Trade figures for the last two years have been revised affecting the import cover of reserves.

TABLE 10.7: MONTHLY AVERAGE EXCHANGE RATES, NGULTRUMS PER US \$, 2006 TO 2010

Month	2006	2007	2008	2009	2010
January	44.40	44.33	39.37	48.83	45.96
February	44.33	44.16	39.73	49.26	46.33
March	44.48	44.03	40.36	51.23	45.50
April	44.95	42.15	40.03	50.06	44.50
May	45.41	40.78	42.13	48.53	45.81
June	46.06	40.77	42.82	47.77	46.56
July	46.46	40.41	42.84	48.48	46.84
August	46.54	40.82	42.94	48.34	46.57
September	46.12	40.34	45.56	48.44	46.06
October	45.47	39.51	48.66	46.72	44.41
November	44.85	39.44	49.00	46.57	45.02
December	44.54	39.44	48.64	46.63	45.16
Calendar year average exchange rate	45.31	41.35	43.50	48.41	45.73
Fiscal year	2005/2006	2006/2007	2007/2008	2008/2009	2009/10
Fiscal year average exchange Rate	44.74	44.19	40.37	47.78	46.65

Source: International Financial Statistics, IMF, Royal Monetary Authority, Thimphu.

## CHAPTER 11

# MONEY, BANKING AND FINANCE

The sound growth of financial institutions plays pivotal role in developing countries in pursuit of economic growth responding to monetary problems to the government's task of nation building. The financial sector in Bhutan comprises of Royal Monetary Authority (Bhutan's Central Bank); the Bank of Bhutan, Bhutan National Bank and two private banks: Druk Punjab Bank and Tashi Bank both established in 2010. The non-bank financial institutions are the Royal Insurance Corporation of Bhutan, Bhutan Development Finance Corporation and National Pension & Provident Fund.

The Royal Monetary Authority has developed a comprehensive statistical system for the money, banking and finance sector. The main element of the system is the monetary survey, which is a consolidation of the accounts of the Royal Monetary Authority and other Banks and Financial Institutions showing the financial relationship between these institutions and other sectors of the economy. In addition, financial statements are also available for the two non-bank financial institution.

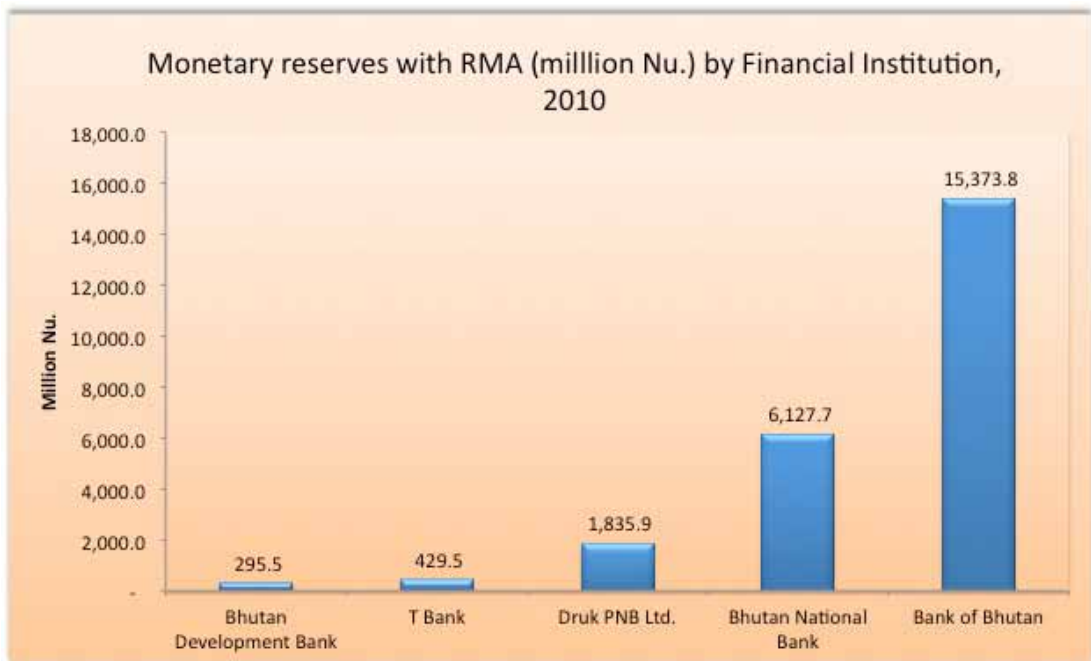


TABLE 11.1: MONETARY SURVEY: ROYAL MONETARY AUTHORITY, BHUTAN NATIONAL BANK AND BANK OF BHUTAN, 2006 TO 2010

(Nu. in Million)

Item	2006	2007	2008	2009	2010
Assets total	33,537.52	38,602.48	46,906.29	57,425.01	66,979.70
Reserves	24,425.41	27,888.32	36,081.88	39,074.97	38,964.01
Foreign Assets	24,425.41	27,888.32	36,081.88	39,074.97	38,964.01
Rupee	3,786.04	4,024.71	3,471.11	2,532.87	3,069.06
Others	20,639.37	23,863.61	32,610.77	36,542.10	35,894.95
Domestic Credit	9,112.10	10,714.16	10,824.41	18,350.05	26,818.67
Claims on Government. (Net)	(1,495.73)	(2,955.01)	(7,417.91)	(3,239.27)	(3,583.76)
Claims on Government Corps	1,268.77	1,188.81	1,054.01	1,183.97	363.92
Claims on Joint Corps.	142.84	383.39	365.93	49.64	50.52
Claims on private sector	8,658.33	11,528.93	16,267.17	19,768.96	29,987.99
Claims on NMFIs(1)	537.90	568.03	555.22	586.74	1,197.02
Liabilities total	33,537.50	38,602.48	46,906.29	57,425.01	66,979.70
Broad money (M2)	24,671.80	27,670.05	31,384.37	43,862.76	51,112.05
Narrow Money (M1)	12,553.40	17,474.94	16,233.40	22,622.78	29,042.95
Nu. Outside Banks	2,762.53	3,229.14	3,839.10	4,980.12	5,608.53
Demand Deposits	9,790.90	14,245.80	12,394.29	17,642.66	23,434.42
Quasi Money (2)	12,118.40	10,195.12	15,150.98	21,239.98	22,069.10
Capital accounts	3,312.54	4,018.83	4,272.44	4,789.83	9,332.73
Other items(net)	8,831.77	9,167.09	14,521.93	13,527.29	15,842.64

Notes: Starting from January 2003 onwards, a major reclassification has been carried out in the accounts of all the economic sectors. Data prior to 2003 cannot always be directly compared with the subsequent data, because of a break in continuity.

Broad money (M2)=M=Narrow Money+Quasi Money

Narrow Money (M1)=Nu. Outside banks+Demand deposits+NMFIs Deposits

(1)NMFIs stands for Non Monetary Financial Institutions.

(2)Quasi Money stands for time deposits plus foreign currency deposits.

\* Figures in the brackets ( ) are negative

Source : Royal Monetary Authority of Bhutan, Thimphu.



TABLE 11.2: FINANCIAL DETAILS OF ROYAL INSURANCE CORPORATION OF BHUTAN, 2006 TO 2010

(Nu. in Million)

Item	2006	2007	2008	2009	2010
Assets total	1,772.98	2,030.75	2,600.73	3,328.88	5,584.08
Reserves	71.03	98.57	332.92	313.73	330.10
Foreign Assets	10.65	7.51	31.14	30.00	1.76
Rupee	0.04	0.04	0.04	0.04	0.04
Others	10.61	7.47	31.10	29.96	1.72
Domestic Credit**	1,633.18	1,916.54	2,227.29	2,975.77	4,842.85
Claims on Government (Net)	0.00	0.00	0.00	0.26	62.12
Claims on Government Corps.	0.00	0.00	0.00	0.00	0.19
Claims on Joint Corps.	18.24	37.29	46.14	43.68	69.09
Claims on private sector	1,611.94	1,876.25	2,178.15	2,928.83	4,708.46
Claims on NFIs	3.00	3.00	3.00	3.00	3.00
Claims on DMBs	58.13	8.13	9.38	9.38	409.38
Liabilities total	1,773.00	2,030.75	2,600.73	3,328.88	5,584.08
Life fund	153.64	198.97	261.40	342.29	472.45
Private provident funds	117.66	141.40	183.42	233.07	308.26
Group Insurance Fund	253.94	303.76	206.08	433.73	498.44
Credit from DMB	172.38	0.00	0.00	0.00	300.00
Credit from NBFIs	300.00	480.00	780.00	1,184.00	2,660.98
Capital accounts	445.06	531.54	644.15	799.83	974.42
Other items (net)	330.31	375.07	525.69	335.95	369.54

Notes: NFIs = Non Monetary Financial Institutions, Including Bhutan National bank. NBFIs = Non Bank Financial Institutions.

\*\*Domestic credit excluding the claims on DMBs

Source: Royal Monetary Authority of Bhutan, Thimphu.

TABLE 11.3: FINANCIAL DETAILS OF BHUTAN NATIONAL BANK, 2006 TO 2010

(Nu. in Million)

Item	2006	2007	2008	2009	2010
Assets total	9,553.1	10,189.8	15,704.4	20,601.4	20,896.1
Reserves with RMA	2,210.9	1,595.5	5,232.4	7,833.2	6,127.7
Foreign Assets	1,707.6	790.8	754.5	1,152.6	734.2
Rupee	448.9	265.1	290.9	467.5	172.8
Others	1,258.7	525.8	463.6	685.1	561.4
Domestic Credit	5,634.6	7,803.4	9,717.5	11,615.6	14,030.6
Claims on Government	-	-	59.3	-	527.0
Claims on Government Corps	635.2	608.5	527.0	578.3	234.3
Claims on Joint Sector	7.6	7.6	7.6	7.6	7.6
Claims on private sector	4,988.0	7,183.6	9,119.9	11,026.0	13,261.7
Claims on NBFIs	3.7	3.7	3.7	3.7	3.7
Liabilities total	9,553.1	10,189.8	15,704.4	20,601.4	20,896.1
Demand Deposits (Current and saving Deposits)	2,119.6	2,528.0	3,125.8	3,866.8	7,370.5
Time Deposits	6,020.2	4,507.1	9,862.9	15,910.1	14,609.1
Foreign currency Deposits	320.5	351.4	259.4	322.9	320.3
Capital accounts	919.1	1,125.1	1,518.1	1,610.6	1,794.1
Other items (net)	173.7	1,678.2	938.2	(1,108.9)	(2,877.5)

Notes: (a) RICB stands for Royal Insurance Corporation of Bhutan Limited, (b) RMA stands for Royal Monetary Authority.

\*\* Since central government deposits are already in the RMA's balance sheet, government deposits as reported by BNBL has been reclassified starting from June 2006 onwards.

Source: Royal Monetary Authority and Bank of Bhutan, Thimphu.

TABLE 11.4 (i): MONEY AND BANKING DETAILS OF BHUTAN DEVELOPMENT FINANCE CORPORATION, 2006 TO 2009

Item	(Nu. in Million)			
	2006	2007	2008	2009
Assets total	1,814.1	2,118.7	2,764.5	3,125.0
Reserves	131.3	66.6	139.9	195.7
Foreign assets	21.1	11.9	22.6	0.0
Rupees	21.1	11.9	22.6	0.0
Others	0.0	0.0	0.0	0.0
Domestic Credit*	1,581.7	2,039.6	2,502.0	2,819.4
Claims on Government	0.0	0.0	0.0	0.0
Claims on Government Corporations	0.0	0.0	0.0	0.0
Claims on joint Corporations	9.6	3.0	0.9	0.9
Claims on private sector	1,572.1	2,036.7	2,501.1	2,818.5
Claims on DMBs(a)	80.0	0.6	100.0	110.0
Claims on other NMFIs(b)	0.0	0.0	0.0	0.0
Liabilities total	1,814.1	2,118.7	2,764.5	3,125.0
Foreign liabilities	278.9	252.7	265.0	287.3
Credit from DMB(a)	374.6	565.0	594.0	615.2
Credit from other NMFIs	150.0	180.0	665.0	655.0
Grants	50.0	50.0	0.0	0.0
Capital account	693.8	767.8	869.3	1,125.3
Other items net	266.8	303.3	371.2	442.3

Notes: The summary exclude Agriculture Credit Program (a) represents deposits other than demand deposit (b) represents purchase of unit shares of UTB

\* Domestic Credit excluding claims on DMBs and NMFIs

Source: Royal Monetary Authority of Bhutan, Thimphu.

TABLE 11.4 (ii) MONETARY AND FINANCIAL STATISTICS OF BHUTAN DEVELOPMENT BANK, DECEMBER 2010

Item	( In Million Nu.)	
	2010	2010
Assets total	3,937.2	3,937.2
Reserves With RMA	295.5	295.5
Foreign Assets	0.0	0.0
Rupee	0.0	0.0
Others	0.0	0.0
Domestic Credit	3,641.8	3,641.8
Claims on Govt.	0.0	0.0
Claims on Govt. Corps.	5.0	5.0
Claims on joint sector	0.9	0.9
Claims on private sector	3,635.9	3,635.9
Claims on other NBFIs	0.0	0.0
Liabilities total	3,937.2	3,937.2
Demand Deposits (Current and Saving Deposits)	338.4	338.4
Time Deposits	147.0	147.0
Foreign Currency Deposits	0.0	0.0
Foreign Liabilities	352.9	352.9
Domestic Borrowing	1,065.0	1,065.0
Capital accounts	1,342.6	1,342.6
Other items(net)	691.2	691.2

Source: Royal Monetary Authority of Bhutan, Thimphu.

TABLE 11.5: MONEY AND BANKING OF ROYAL MONETARY AUTHORITY OF BHUTAN, 2006 TO 2010

(Nu. in Million)

Item	2006	2007	2008	2009	2010
Assets total	18,510.7	25,986.2	33,768.3	39,468.1	40,249.5
Foreign assets	18,397.7	24,659.8	33,636.9	39,281.5	39,997.7
Indian rupee	200.8	2,554.0	2,291.9	3,830.4	4,919.3
Convertible Foreign Currency (Including Gold)	18,197.0	22,105.7	31,345.0	35,451.1	35,078.4
Claims on deposit money banks	103.1	157.4	114.6	170.8	232.0
Claims of private sector	9.9	11.5	16.8	15.8	19.7
Liabilities total	18,510.7	25,986.2	33,768.3	39,468.1	40,249.5
Reserve money	12,284.8	14,516.8	15,525.3	21,741.2	27,248.6
Currency outside banks	2,762.5	3,229.1	3,839.1	4,980.1	5,608.5
Foreign Liabilities	0.0	0.0	0.0	3,000.0	3,000.0
Rupee	0.0	0.0	0.0	3,000.0	3,000.0
Others	0.0	0.0	0.0	0.0	0.0
Government deposits	1,495.7	2,955.0	7,477.2	3,239.3	4,110.8
RMA Bills Outstanding	100.0	2,000.0	1,000.0	2,022.3	1,021.4
Capital Account	1,039.9	1,437.7	946.1	1,006.5	3,183.1
Other items (net)	3,590.3	5,076.7	8,819.8	8,458.8	1,685.6

Source: Royal Monetary Authority of Bhutan, Thimphu.

TABLE 11.6: MONEY AND BANKING, BANK OF BHUTAN, 2006 TO 2010

(In Million Nu.)

Item	2006	2007	2008	2009	2010
Assets total	16,930.9	18,431.2	19,645.0	24,905.4	27,908.6
Reserve with RMA	7,647.5	10,139.2	9,387.2	13,306.6	15,373.8
Foreign assets	4,320.0	2,437.7	1,690.5	1,640.9	815.9
Rupee	3,136.3	1,205.6	888.3	1,235.0	446.6
Other	1,183.7	1,232.1	802.2	405.9	369.3
Claims on Government's corpns.	633.5	580.3	527.0	605.7	124.6
Claims on joint's Corporations	135.3	375.8	358.3	42.1	42.1
Claims on private sector	3,660.4	4,333.9	7,130.5	8,727.1	10,358.9
Claims on NMFIs	534.2	564.3	551.5	583.0	1,193.3
Liabilities total	16,930.9	18,431.2	19,645.0	24,905.4	27,908.6
Demand deposit (a)	7,671.3	11,718.0	9,271.4	13,774.4	14,092.6
Time deposit	5,366.3	4,736.7	4,218.5	4,352.3	5,021.5
Foreign currency deposits	411.4	600.0	810.1	654.7	695.9
Capital accounts	1,353.6	1,456.0	1,808.2	2,172.8	2,596.5
Other items (net)	2,128.3	(79.5)	3,536.7	3,951.2	6,198.1

Notes: Figures in brackets ( ) are negative. In 1997 the Bhutan National Bank included with Bank of Bhutan. (a) Saving deposits included in demand deposits. \* Since central government deposits are already in the RMA's balance sheet, government deposits as reported by BOBL has been reclassified starting from June 2006 onwards.

Source: Royal Monetary Authority of Bhutan, Thimphu.

TABLE 11.7: MONETARY AND FINANCIAL STATISTICS DETAILS OF T-BANK LTD,  
DECEMBER 2010

(In Million Nu.)

Item	2010
Assets total	1,668.0
Reserve with RMA	429.5
Foreign assets	95.2
Rupee	90.3
Other	5.0
Domestic Credit	1,143.3
Claims on Government	0.0
Claims on Government's corpns.	0.0
Claims on joint's Corporations	0.0
Claims on private sector	1,143.3
Claims on NMFIs	0.0
Liabilities Total	1,668.0
Demand deposit	181.2
Time deposit	453.7
Foreign currency deposits	0.0
Foreign liabilities	0.0
Rupee	0.0
Other	0.0
Credit from RMA	0.0
Capital accounts	119.7
Other items (net)	913.4

Source: Royal Monetary Authority, Thimphu.

TABLE 11.8: MONETARY AND FINANCIAL STATISTICS DETAILS OF DRUK PNB LTD,  
DECEMBER 2010

(In Million Nu.)

Item	2010
Assets total	4,078.3
Reserve with RMA	1,835.9
Foreign assets	673.9
Rupee	440.1
Other	233.8
Domestic Credit	1,568.5
Claims on Government	0.0
Claims on Government's corpns.	0.0
Claims on joint's Corporations	0.0
Claims on private sector	1,568.5
Claims on NMFIs	0.0
Liabilities total	4,078.3
Demand deposit	1,451.7
Time deposit	1,837.8
Foreign currency deposits	385.1
Foreign liabilities	0.0
Rupee	0.0
Other	0.0
Credit from RMA	0.0
Capital accounts	296.8
Other items (net)	491.9

Source: Royal Monetary Authority, Thimphu.

TABLE 11.9: MONETARY AND FINANCIAL DETAILS OF BHUTAN INSURANCE LIMITED, DECEMBER 2010

( In Million Nu.)

Item	2010
Assets total	230.2
Reserves	60.9
Foreign Assets	-
Rupee	-
Others	-
Domestic Credit	123.3
Claims on Govt. (Net)	-
Claims on Govt. Corps.	-
Claims on Joint Corps.	-
Claims on private sector	123.3
Claims on NBFIs	46.0
Claims on DMBs	-
Liabilities total	230.2
General Insurance reserve funds	-
Life fund	50.0
Private provident funds	13.2
Group Insurance Fund	-
Credit from DMB	50.0
Credit from NBFIs	-
Capital accounts	109.7
Other items (net)	7.3

Notes: NBFIs stands for Non Bank Financial Institutions.

Source: Royal Monetary Authority of Bhutan, Thimphu.



TABLE 11.10: INVESTMENTS OF FINANCIAL INSTITUTIONS BY INDUSTRY, AMOUNTS OUTSTANDING, 2006 TO 2010

(In Million Nu.)

Industry	2006	2007	2008	2009	2010
Agriculture	242.53	289.14	573.50	403.27	499.45
Bank of Bhutan Ltd	0.89	1.18	1.10	3.04	2.99
Royal Insurance Corporation of Bhutan Ltd	1.89	1.72	0.00	0.00	0.00
Bhutan Development Bank Ltd	239.75	286.25	572.40	400.23	494.96
Bhutan National Bank Ltd	0.00	0.00	0.00	0.00	0.00
Druk PNB Ltd	n.a	n.a	n.a	n.a	n.a
T Bank Ltd	n.a	n.a	n.a	n.a	1.50
Bhutan Insurance Ltd	n.a	n.a	n.a	n.a	n.a
Service and Tourism**	1,663.64	2,422.94	2,958.90	3,718.64	5,905.93
Bank of Bhutan Ltd	883.28	1,068.73	1,312.10	1,698.16	3,076.13
Royal Insurance Corporation of Bhutan Ltd	125.67	74.78	70.40	72.97	114.39
Bhutan Development Bank Ltd	380.16	647.14	631.50	800.78	847.49
Bhutan National Bank Ltd	274.53	632.29	944.90	1,146.73	1,524.53
Druk PNB Ltd	n.a	n.a	n.a	n.a	56.68
T Bank Ltd	n.a	n.a	n.a	n.a	286.70
Bhutan Insurance Ltd	n.a	n.a	n.a	n.a	n.a
Manufacturing	2,278.39	3,039.33	4,364.40	4,727.27	5,928.52
Bank of Bhutan Ltd	1,029.89	1,221.53	1,906.30	1,973.92	1,918.05
Royal Insurance Corporation of Bhutan Ltd	157.64	205.22	271.00	289.18	463.13
Bhutan Development Bank Ltd	270.53	323.03	425.60	453.79	513.19
Bhutan National Bank Ltd	820.33	1,289.56	1,761.50	2,010.38	2,714.96
Druk PNB Ltd	n.a	n.a	n.a	n.a	101.34
T Bank Ltd	n.a	n.a	n.a	n.a	217.86
Bhutan Insurance Ltd	n.a	n.a	n.a	n.a	n.a
Building and construction	4,473.67	5,380.38	5,768.20	6,615.33	8,936.13
Bank of Bhutan Ltd	998.18	1,277.78	1,497.60	1,767.85	2,130.60
Royal Insurance Corporation of Bhutan Ltd	676.70	692.92	723.40	873.05	1,545.83
Bhutan Development Bank Ltd	500.29	440.07	370.40	367.62	440.43
Bhutan National Bank Ltd	2,298.50	2,969.62	3,176.80	3,606.81	4,118.84
Druk PNB Ltd	n.a	n.a	n.a	n.a	279.88
T Bank Ltd	n.a	n.a	n.a	n.a	410.34
Bhutan Insurance Ltd	n.a	n.a	n.a	n.a	10.21
Trade and commerce	1,925.39	2,681.73	3,772.50	4,478.44	5,706.99
Bank of Bhutan Ltd	672.42	830.52	954.80	769.11	668.80

Table 11.10 contd...

Royal Insurance Corporation of Bhutan Ltd	435.53	598.83	690.40	939.64	1,296.83
Bhutan Development Bank Ltd	113.97	173.23	285.10	304.13	325.80
Bhutan National Bank Ltd	703.47	1,079.15	1,842.20	2,465.56	2,766.42
Druk PNB Ltd	n.a	n.a	n.a	n.a	173.85
T Bank Ltd	n.a	n.a	n.a	n.a	466.91
Bhutan Insurance Ltd	n.a	n.a	n.a	n.a	8.39
Transport (Heavy)	346.24	440.02	580.50	875.57	2,093.59
Bank of Bhutan Ltd	161.04	136.49	209.20	281.61	401.41
Royal Insurance Corporation of Bhutan Ltd	38.80	66.32	111.50	234.21	698.79
Bhutan Development Bank Ltd	47.57	108.31	117.10	167.73	272.46
Bhutan National Bank Ltd	98.83	128.90	142.70	192.02	422.18
Druk PNB Ltd	n.a	n.a	n.a	n.a	100.84
T Bank Ltd	n.a	n.a	n.a	n.a	124.67
Bhutan Insurance Ltd	n.a	n.a	n.a	n.a	73.25
Transport (Light)	506.58	584.61	744.90	888.28	1,103.27
Bank of Bhutan Ltd	266.16	273.34	337.60	370.47	325.87
Royal Insurance Corporation of Bhutan Ltd	58.18	65.80	86.90	142.47	188.70
Bhutan Development Bank Ltd	0.00	0.00	0.00	0.00	0.00
Bhutan National Bank Ltd	182.24	245.46	320.40	375.34	449.85
Druk PNB Ltd	n.a	n.a	n.a	n.a	69.57
T Bank Ltd	n.a	n.a	n.a	n.a	69.27
Bhutan Insurance Ltd	n.a	n.a	n.a	n.a	n.a
Personal loans	1,077.91	1,404.19	2,746.70	3,989.10	5,094.26
Bank of Bhutan Ltd	292.24	377.56	1,716.50	2,404.04	2,437.02
Royal Insurance Corporation of Bhutan Ltd	96.61	148.17	218.70	360.58	423.94
Bhutan Development Bank Ltd	19.39	38.95	69.90	292.84	723.72
Bhutan National Bank Ltd	669.67	839.51	741.60	931.64	1,039.14
Druk PNB Ltd	n.a	n.a	n.a	n.a	361.05
T Bank Ltd	n.a	n.a	n.a	n.a	109.08
Bhutan Insurance Ltd	n.a	n.a	n.a	n.a	0.31
Staff loan	79.61	108.69	324.87	379.38	437.42
Bank of Bhutan Ltd	64.03	74.45	138.90	143.17	130.61
Royal Insurance Corporation of Bhutan Ltd	0.13	0.10	0.07	0.05	15.52
Bhutan Development Bank Ltd	-	20.92	28.70	17.50	22.36
Bhutan National Bank Ltd	15.45	13.23	157.20	218.66	237.15
Druk PNB Ltd	n.a	n.a	n.a	n.a	n.a

Table 11.10 contd...

T Bank Ltd	n.a	n.a	n.a	n.a	13.25
Bhutan Insurance Ltd	n.a	n.a	n.a	n.a	18.53
EDP loans	5.50	7.13	7.42	6.51	50.29
Bank of Bhutan Ltd	3.45	4.16	3.80	3.83	47.94
Royal Insurance Corporation of Bhutan Ltd	0.38	0.35	0.62	0.55	0.00
Bhutan Development Bank Ltd	0.00	0.00	0.00	0.00	0.00
Bhutan National Bank Ltd	1.67	2.63	3.00	2.13	2.35
Druk PNB Ltd	n.a	n.a	n.a	n.a	n.a
T Bank Ltd	n.a	n.a	n.a	n.a	n.a
Bhutan Insurance Ltd	n.a	n.a	n.a	n.a	n.a
Small Business and Artisan Schemes	2.12	1.80	1.60	0.88	15.44
Bank of Bhutan Ltd	2.12	1.80	1.60	0.88	0.00
Royal Insurance Corporation of Bhutan Ltd	0.00	0.00	0.00	0.00	0.00
Bhutan Development Bank Ltd	0.00	0.00	0.00	0.00	0.00
Bhutan National Bank Ltd	0.00	0.00	0.00	0.00	0.00
Druk PNB Ltd	n.a	n.a	n.a	n.a	n.a
T Bank Ltd	n.a	n.a	n.a	n.a	15.44
Bhutan Insurance Ltd	n.a	n.a	n.a	n.a	n.a
Loan Against Shares	46.26	93.47	118.00	200.43	221.11
Bank of Bhutan Ltd	7.78	4.88	6.80	28.72	1.44
Royal Insurance Corporation of Bhutan Ltd	0.37	21.07	13.10	21.73	54.43
Bhutan Development Bank Ltd	8.27	0.00	0.00	12.94	0.00
Bhutan National Bank Ltd	29.85	67.53	98.10	137.04	157.40
Druk PNB Ltd	n.a	n.a	n.a	n.a	0.16
T Bank Ltd	n.a	n.a	n.a	n.a	7.69
Bhutan Insurance Ltd	n.a	n.a	n.a	n.a	n.a
Others	0.00	0.00	0.00	0.00	12.63
Bank of Bhutan Ltd	0.00	0.00	0.00	0.00	0.00
Royal Insurance Corporation of Bhutan Ltd	0.00	0.00	0.00	0.00	0.00
Bhutan Development Bank Ltd	0.00	0.00	0.00	0.00	0.00
Bhutan National Bank Ltd	0.00	0.00	0.00	0.00	0.00
Druk PNB Ltd	n.a	n.a	n.a	n.a	n.a
T Bank Ltd	n.a	n.a	n.a	n.a	n.a
Bhutan Insurance Ltd	n.a	n.a	n.a	n.a	12.63
<b>Total</b>	<b>12,647.85</b>	<b>16,453.42</b>	<b>21,961.49</b>	<b>26,283.10</b>	<b>36,005.02</b>

Note: Loan availed by Ministry of Finance has been reported under Service and Tourism in case of BoB Manufacturing and Industry in case of BNB.

Source: Royal Monetary Authority of Bhutan, Thimphu.

TABLE 11.11: INTEREST RATES OF DEPOSITS IN FINANCIAL INSTITUTIONS, 2006 TO 2010

Type of deposit	2006	2007	2008	2009	2010
Savings	4.5	4.5	4.5	4.5	4.5
Fixed deposit					
a) 3 months to less than 1 year	4.5	4.5	4.5	4.5	4.5
b) 1 year to less than 3 years	6.0	6.0	6.0	6.0	6.0
d) More than 3 years	7.0	7.0	7.0	7.0	7.0
For Institutions & Companies					
(46 days < 1 Year)	2.0	2.0	2.0	2.0	n.a

Note: \*\* "Data for the year 2010 Temporarily suspended

Source: Bank of Bhutan, Main Branch, Phuntsholing

TABLE 11.12: INTEREST RATES AND REPAYMENT PERIOD BY SECTOR AND TYPE OF LOAN, FINANCIAL INSTITUTIONS, BHUTAN, 2008 TO 2010

Sector	2008		2009		2010	
	Interest rate (% p.a)	Repayment period (yrs.)	Interest rate (% p.a)	Repayment period (yrs.)	Interest rate (% p.a)	Repayment period (yrs.)
Export finance						
(convertible currency areas)**	13.0	0.5	13.0	-	13.0	-
(convertible currency areas)***	14.0	0.5	14.0	-	14.0	-
General trade	13.8	1.0	13.8	1.0	13.8	1.0
Buses and trucks						
Term Loan	13.0	5	13.0	5	13.0	5
Working Capital	15.0	1	14.0	1	14.0	1
Other passanger vehicles	14.0	5	14.0	5	12.0	7
Agriculture and Live-stock	13.0	10	13.0	10	13.0	10
Manufacturing Industry						
Term Loan	12.0	10	12.0	10	12.0	10
Working Capital	13.0	1	13.0	1	13.0	1
Service Industries *						
Term Loan	10.0	10	10.0	10	10.0	10
Working Capital	12.0	1	12.75	1	12.75	1
Personal loans	15.0	3	15.0	5	15.0	5
Equity finance	13.0	5	12.0	5	12.0	5
Housing						
New Construction	10.00	10-20 yrs	10.00	25	10.00	25
Repair/Renovation	13.00	10-20 yrs	10.00	10	10.00	10
Consumer Loans	12.00	5	12.00	7	12.00	7

Notes: (a) Rates applicable since August 22, 1994. \* includes tourism, contract services, and other service activities. \*\* Up to 60 days of credit\*\*\* More than 60 days of credit

Source: Bank of Bhutan, Main Branch, Phuntsholing.

TABLE 11.13: ROYAL SECURITIES EXCHANGE OF BHUTAN LTD. NUMBER OF SHARE HOLDERS, BHUTAN, 2006 TO 2010

(In Numbers)

Company	2006	2007	2008	2009	2010
Bhutan Beverages & Company Ltd. *	4,372	..	..	..	..
Bhutan Board Products Ltd.	489	492	491	491	494
Bhutan Carbide & Chemical Ltd.	269	264	259	259	259
Bhutan Dairy and Agro Products Ltd. **	96	96	96	96	..
Bhutan Ferro Alloys Ltd.	46	46	44	44	43
Bhutan Insurance Ltd.	..	..	..	4,432	4,393
Bhutan National Bank Ltd.	4,193	4,440	4,357	4,374	4,308
Bhutan Polymers Company Ltd.	102	129	129	128	128
Bhutan Times Ltd.	..	..	288	289	289
Bhutan Tourism Corpn. Ltd	161	164	162	162	159
Druk Ferro Alloys Ltd.	..	..	..	366	471
Druk Mining Ltd. ***	69	67	67	67	67
Druk Petroleum Corpn. Ltd.****	71	71	71	71	71
Druk plaster & Chemicals Ltd.	203	213	213	213	212
Druk PNB Bank	..	..	..	..	23,216
Druk Satair Corporation Ltd.	1,150	1,277	1,276	1,279	1,277
Druk Wang Alloys Ltd.			504	507	501
Jigme Mining Corporation Ltd.	..	..	426	418	418
Kuensel corporation Ltd.	..	253	233	233	232
Penden Cement Authority Ltd.	1,477	1,471	1,472	1,462	1,467
Royal Insurance Corpn. of Bhutan	1,641	1,585	1,556	1,556	1,553
S.D Eastern Bhutan Coal Company Ltd.	1,152	1,089	1,082	1,082	1,081
State Trading Corpn. of Bhutan Ltd.	125	125	125	125	135
<b>Total</b>	<b>15,616</b>	<b>8,983</b>	<b>10,088</b>	<b>14,891</b>	<b>40,774</b>

Note: \* Delisted from 2007, \*\* Delisted in June 2010, \*\*\* Delisted in June 2011, \*\*\*\* Delisted in March 2011

Source: Royal Securities exchange of Bhutan Ltd, Thimphu.

TABLE 11.14: ROYAL SECURITIES EXCHANGE OF BHUTAN LTD. MARKET INFORMATION AT THE END OF DECEMBER 2010

Company	Price per share (Nu)	Paid-up Shares	Market capitalization (Nu)
Bhutan Board Products Ltd.	140	1,400,014	196,001,960
Bhutan Carbide & Chemical Ltd.	900	1,000,000	900,000,000
Bhutan Ferro Alloys Ltd.	600	1,500,000	900,000,000
Bhutan Insurance Ltd.	200	1,000,000	200,000,000
Bhutan National Bank Ltd.	470	3,555,175	1,670,932,250
Bhutan Polymers Company Ltd.	100	249,334	24,933,400
Bhutan Times Ltd.	105	400,000	42,000,000
Bhutan Tourism Corpn. Ltd	400	209,400	83,760,000
Druk Ferro Alloys Ltd.	100	2,897,762	289,776,200
Druk Mining Ltd. *	429	37,702	16,174,158
Druk PNB Bank	350	3,000,000	1,050,000,000
Druk Petroleum Corpn. Ltd. **	120	62,370	7,484,400
Druk plaster & Chemicals Ltd.	200	100,000	20,000,000
Druk Satair Corporation Ltd.	300	913,086	273,925,800
Druk Wang Alloys Ltd.	200	1,940,000	388,000,000
Jigme Mining Corporation Ltd.	650	426,532	277,245,800
Kuensel corporation Ltd.	100	500,000	50,000,000
Penden Cement Authority Ltd.	750	3,400,007	2,550,005,250
Royal Insurance Corpn. of Bhutan	350	2,400,000	840,000,000
S.D Eastern Bhutan Coal Company Ltd.	300	521,000	156,300,000
State Trading Corpn. of Bhutan Ltd.	190	400,000	76,000,000
<b>Total</b>	<b>6,954</b>	<b>25,912,382</b>	<b>10,012,539,218</b>

Note: \* Delisted in June 2010, \*\* Delisted in March 2011

Source: Royal Securities exchange of Bhutan Ltd, Thimphu.

TABLE 11.15: ROYAL SECURITIES EXCHANGE OF BHUTAN LTD, VOLUME TRADED, BHUTAN 2006 TO 2010

Company	2006	2007	2008	2009	2010
Bhutan Beverages & Company Ltd. *	1,867	n.a	n.a	n.a	n.a
Bhutan Board Products Ltd.	3,030	..	100	..	..
Bhutan Carbide & Chemicals Ltd.	61	1,000,000	970	20,000	..
Bhutan Ferro Alloys Ltd.	..	..	534	..	50
Bhutan Insurance Ltd.	..	..	..	1,001,428	32,247
Bhutan National Bank Ltd.	136,383	23,444	2,413,164	187,789	26,913
Bhutan Polymers Company Ltd.	50	71	..	..	..
Bhutan Times Ltd.	..	400,000	..	300	..
Bhutan Tourism Corpn. Ltd	1,000	..	19,160	..	80
Druk Ferro Alloys Ltd.			1,222,600	..	1,973,715
Druk Mining Ltd. **	24,185	2,026	n.a	n.a	n.a
Druk Plaster & Chemicals Ltd.	70,000	50.0	..	..	..
Druk Punjab Bank					3,029,820
Druk Satair Corpn. Ltd.	154	3,063	..	..	456,543
Druk Wang Alloys Ltd.	..	417,500	1,252,500	270,000	11,450
Jigme Mining Corporation Ltd.	..	..	199,180	143,053	..
Kuensel Corporation Ltd.	245,000	..	216	..	..
Penden Cement Authority Ltd.	8,260	5,260	1,134,737	50,895	1,220
Royal Insurance Corpn. of Bhutan Ltd.	3,500	5,010	3,500	1,440,550	1,350
S.D Eastern Bhutan Coal Company Ltd.	4500	11,607	2,986	..	150.0
State Trading Corpn. of Bhutan Ltd.	..	..	30	200	209,800
<b>Total</b>	<b>497,990</b>	<b>1,868,031</b>	<b>6,249,677</b>	<b>3,114,215</b>	<b>5,743,338</b>

Note: \* Delisted from 2007, \*\* Delisted in June 2011

Source: Royal Securities Exchange of Bhutan Ltd.

TABLE 11.16: ROYAL SECURITIES EXCHANGE OF BHUTAN LTD. TRADED VALUES, BHUTAN, 2006 TO 2010

Company	Sector	2006	2007	2008	2009	2010
Bhutan Beverages Company Ltd. *	Primary	..	..	..	..	..
	Secondary	0.240	..	..	..	..
Bhutan Board Products Ltd.	Primary	..	..	..	..	..
	Secondary	0.303	..	0.020	..	..
Bhutan Carbide & Chemicals Ltd.	Primary	..	100.000	..	..	..
	Secondary	0.366	..	0.780	18.000	..
Bhutan Ferro-Alloys Ltd.	Primary	..	..	..	..	..
	Secondary	..	..	0.290	..	0.030
Bhutan National Bank	Primary	77.742	..	236.520	..	..
	Secondary	11.307	17.401	21.000	76.450	12.030
Bhutan Polymers Company Ltd.	Primary	..	..	..	..	..
	Secondary	0.005	0.007	..	..	..
Bhutan Tourism Corpn. Ltd	Primary	..	..	..	..	..
	Secondary	0.170	..	5.750	..	0.030
Bhutan Times Ltd.	Primary	..	40.000	..	..	..
	Secondary	..	..	..	0.030	..
Druk plaster & Chemicals Ltd.	Primary	..	..	..	..	..
	Secondary	7.000	0.010	..	..	..
Druk Satair Corpn. Ltd.	Primary	..	..	..	..	..
	Secondary	0.042	0.868	..	..	..
Druk Mining Ltd. **	Primary	..	..	..	..	..
	Secondary	9.289	0.869	..	..	..
Druk PNB Bank Ltd.	Primary	..	..	..	..	300.000
	Secondary	..	..	..	..	8.810
Druk Wang Alloys Ltd.	Primary	..	41.750	125.250	27.000	..
	Secondary	..	..	..	..	2.280
S.D Eastern Bhutan Coal Company Ltd.	Primary	..	..	..	..	..
	Secondary	0.450	1.175	0.550	..	0.050
Kuensel corporation Ltd.	Primary	24.500	..	..	..	..
	Secondary	..	..	0.030	..	..
Penden Cement Authority Ltd.	Primary	..	..	113.340	..	..
	Secondary	6.155	3.641	1.120	37.050	0.920



Table 11.16 contd...

Royal Insurance Corpn. of Bhutan Ltd.	Primary	..	..	..	144.000	..
	Secondary	1.219	1.607	1.460	0.190	0.470
State Trading Corpn. of Bhutan Ltd.	Primary	..	..	..	..	..
	Secondary	..	..	0.010	0.040	1.860
Jigme Mining Corporation Ltd.	Primary	..	..	19.900	14.220	..
	Secondary	..	..	0.150	0.450	..
Druk Ferro Alloys Ltd.	Primary	..	..	122.260	..	12.640
	Secondary	..	..	..	..	115.040
Bhutan Insurance Ltd.	Primary	..	..	..	100.000	..
	Secondary	..	..	..	0.150	4.360
<b>Total</b>		<b>138.79</b>	<b>207.33</b>	<b>648.43</b>	<b>417.58</b>	<b>458.520</b>

Note: \* Delisted in 2007, \*\* Delisted in June 2010

Source: Royal Securities Exchange of Bhutan Ltd.

## CHAPTER 12 PUBLIC FINANCE

The system of modern public finance in Bhutan is of very recent origin. Traditionally taxes were being collected in kind; the levy on agricultural produce being on an average one fourth of the production of each farming family and labour contribution amounting to about two months labour for every adult. By 1960, as the government began to grow, institutionalization of public finance became a necessity. In 1963, the position of a Finance Secretary was created in the Royal Secretariat and in 1968 the Ministry of Finance; one of the first few Ministries was formed. In 1970, the system of payment of taxes in kind was largely dispensed with so as to be taken up by the system of cash taxes based on the type of land holding.

The Ministry of Finance presented the first budget on modern lines in 1971. It was called the Civil Budget as it covered the needs of the Ministry of Finance, Home affairs and Foreign Affairs. The requirements of development oriented Ministries like Communication and Tourism, Trade and Industry, Forest and Development were provided under a separate development budget administered first by the Development Secretariat and then by its successor, the Planning Commission. With the commencement of the Fifth Five Year Plan the classification of the government budget into Civil and Development was replaced by the concept of Maintenance and Development Expenditures. Maintenance or Current Expenditures reflected mostly the current or consumption expenditures of the government while development expenditures were identified largely with the expenditures of the government on fixed capital formation.

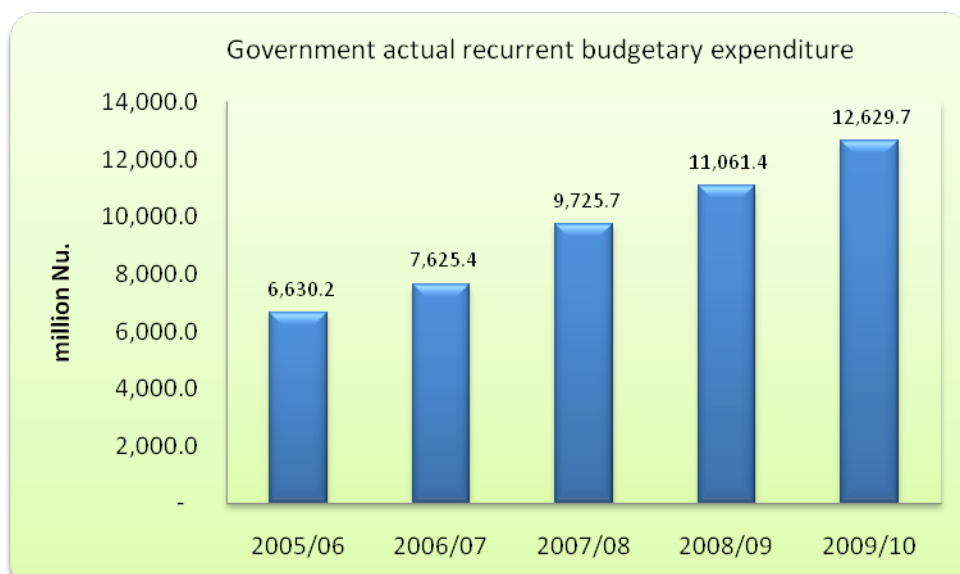


TABLE 12.1: ACTUAL RECURRENT BUDGETARY EXPENDITURE OF THE GOVERNMENT BY MINISTRY/AGENCY BHUTAN, 2005/06 TO 2009/10

(Nu. in Million)

Organization	2005/06	2006/07	2007/08	2008/09	2009/10
Ministry	3875	4216	5719	6236	6974
Ministry	3,875.22	4,215.69	5,718.65	6,236.16	6,973.99
Agriculture	697.58	725.71	725.49	828.68	1,011.58
Education	155.07	156.65	154.52	154.71	218.77
Finance	1,060.54	1,181.54	2,518.32	2,678.36	2,805.83
Foreign Affairs	207.29	220.84	242.81	255.46	325.22
Health	560.83	626.95	636.49	751.46	886.67
Home and Cultural Affairs	562.12	603.39	706.79	822.52	869.56
Information & communications	94.16	100.68	103.27	111.46	137.87
Labour & Human Resources	90.53	114.88	126.57	132.15	153.98
Economic Affairs	158.45	178.07	187.23	169.17	208.54
Works & Human Settlement	288.65	306.98	317.14	332.17	355.98
Non Ministerial organization	675.33	810.31	1,283.79	1,593.62	1,626.63
His Majesty's Secretariat (4th King)	15.34	16.34	15.08	15.61	16.67
His Majesty's Secretariat	na	na	16.54	30.22	49.11
National Assembly	29.02	28.49	19.16	51.32	60.16
Royal Advisory Council	9.38	10.47	13.01	n.a	n.a
National Council of Bhutan	n.a	n.a	n.a	33.83	43.60
Cabinet Secretariat	9.04	8.01	12.58	39.83	36.73
Royal Civil Service Commission	20.04	17.55	16.85	19.94	25.62
Judiciary	81.15	91.78	97.60	113.72	145.65
Royal Audit Authority	42.71	47.83	50.79	58.13	75.80
Bhutan Olympic Committee	10.63	23.44	25.94	29.83	29.07
Centre for Bhutan Studies	8.26	11.70	17.59	13.89	23.91
Council for Religious Affairs	192.62	205.12	242.27	373.19	398.53
Office of legal Affairs	16.72	7.14	n.a	n.a	n.a
Dzongkhag Development Commission	n.a	n.a	11.02	11.88	13.48

Table 12.1 contd...

National Environment Commission	25.93	18.59	17.00	16.54	19.41
GNH commission	n.a	11.57	17.91	27.16	29.47
Royal Institute of Management	17.80	20.49	21.26	25.06	36.69
Royal University of Bhutan	181.28	210.34	233.00	300.57	328.39
National Statistics Bureau	9.31	17.31	13.28	14.60	19.75
Anti-Corruption Commission	1.99	8.84	9.47	11.89	19.49
Office Of The Election Commission	4.12	54.31	256.26	18.95	22.11
Bhutan Narcotic Control Agency	n.a	1.01	3.13	4.70	8.92
Office of the Attorney General	n.a	n.a	9.94	11.90	12.83
Bhutan Information Communication Media Authority	n.a	n.a	6.04	6.65	11.88
National Land Commission	n.a	n.a	59.01	114.13	147.48
Thimphu Thromdey Schools	n.a	n.a	99.05	207.84	n.a
Drug Regulatory Authority	n.a	n.a	n.a	3.10	4.37
Tourism Council of Bhutan	n.a	n.a	n.a	28.97	32.78
National Commission For Women And Children	n.a	n.a	n.a	10.18	14.73
Gewog Administration & Services (Local Government)	63.29	69.56	90.64	107.14	n.a
Dzongkhags Administration	2,016.37	2,529.87	2,632.64	3,124.51	4,029.03
<b>Total current expenditure</b>	<b>6,630.20</b>	<b>7,625.43</b>	<b>9,725.71</b>	<b>11,061.43</b>	<b>12,629.66</b>

Source : Department of Budget & Accounts, MoF, Thimphu.

TABLE 12.2: ACTUAL ANNUAL CAPITAL EXPENDITURE OF THE GOVERNMENT BY MINISTRY/ AGENCY, 2005/06 TO 2009/10

(Nu. in Million)

Ministerial/Non-Ministerial	2005/06	2006/07	2007/08	2008/09	2009/10
Ministry	5,372.10	5,365.07	7,818.60	7,245.16	7,442.69
Agriculture	588.58	408.91	511.37	629.24	776.70
Education	476.83	527.82	539.84	571.01	579.70
Finance	510.30	543.11	1,974.89	2,195.49	981.47
Foreign Affairs	19.22	16.05	38.70	16.74	28.02
Health	687.33	539.62	695.80	591.51	470.38
Home and Cultural Affairs	130.40	200.45	241.88	327.87	435.86
Information & Communications	279.94	161.84	141.87	80.51	380.53
Labour & Human Resources	125.19	150.90	110.83	98.55	170.61
Economic Affairs	543.14	503.76	595.41	658.18	839.68
Works & Human Settlement	2,011.17	2,312.62	2,968.01	2,076.06	2,779.74
Non ministerial organization	314.27	531.78	720.86	815.43	1,643.77
His Majesty's Secretariat (4th King)	0.23	0.57	0.18	0.18	0.17
His Majesty's Secretariat	n.a	n.a	44.21	64.10	13.55
National Assembly	6.28	12.98	55.79	32.34	3.60
Royal Advisory Council	0.71	0.45	20.72	n.a	n.a
National Council of Bhutan	n.a	n.a	n.a	26.14	7.08
Cabinet Secretariat	0.65	0.80	10.92	4.97	2.42
Royal Civil Service Commission	50.20	80.52	67.31	90.63	124.54
Judiciary	31.80	113.48	25.08	58.51	132.06
Royal Audit Authority	7.62	4.64	5.08	14.71	18.48
Bhutan Olympic Committee	1.41	0.07	1.63	2.43	9.54
Centre for Bhutan Studies	2.97	2.34	3.01	2.40	4.68
Council for Religious Affairs	33.61	35.92	43.55	49.69	57.40
Dzongkha Dev. Commission	na	na	3.33	2.88	3.38
National Environment Commission	33.70	20.76	26.20	29.00	56.67

Table 12.2 contd...

Gross National Happiness Commission	na	6.51	20.74	48.01	313.80
Royal Institute of Management	24.28	26.06	29.76	35.73	17.13
Royal University of Bhutan	108.41	116.03	191.11	123.48	381.08
National Statistics Bureau	1.76	1.67	7.53	10.51	27.01
Office of the Anti-corruption Commission	7.38	5.48	11.46	18.74	21.45
Office of the Election Commission	3.28	102.27	47.18	13.31	16.06
Bhutan Narcotic Control Agency	n.a	1.22	2.24	2.22	2.20
Office of the Attorney General	n.a	n.a	4.76	4.33	5.45
Bhutan Information Communication Media Authority	n.a	n.a	1.69	7.99	190.58
National Land Commission	n.a	n.a	77.14	80.75	134.17
Thimphu Thromdey Schools	n.a	n.a	20.23	12.67	n.a
Drug Regulatory Authority	n.a	n.a	n.a	2.02	2.79
Tourism Council of Bhutan	n.a	n.a	n.a	72.93	96.45
National Commission For Women And Children	n.a	n.a	n.a	4.78	2.04
Gewog Administration & Services (Local Government)	254.93	407.07	255.21	559.36	n.a
Dzongkhags Administration	739.17	1,206.53	1,172.64	1,209.20	2,871.40
<b>Total development expenses</b>	<b>6,684.42</b>	<b>7,510.45</b>	<b>9,967.31</b>	<b>9,829.15</b>	<b>11,957.86</b>

Source : Department of Budget & Accounts, MoF, Thimphu.

TABLE 12.3: ACTUAL BUDGETARY RECEIPTS OF THE GOVERNMENT BY SOURCE, BHUTAN, 2005/06 TO 2009/10

Nu. in million

Source of revenue	2005/06	2006/07	2007/08	2008/09	2009/10
Tax revenue	4,124.68	4,266.91	5,238.36	6,482.41	9,655.78
Direct tax	2,395.53	2,795.98	3,386.78	4,328.73	6,989.91
Corporate Income Tax	1,363.30	1,566.94	1,817.27	2,340.94	4,710.10
Business Income Tax	356.54	367.65	464.94	553.43	707.30
Personal Income Tax	113.35	174.46	264.66	387.48	566.98
Royalties	407.40	498.61	572.95	757.05	680.61
Other Direct Tax Revenue	154.94	188.32	266.97	289.84	324.93
Motor Vehicle Tax	85.25	93.27	107.95	117.49	135.72
Business & Prof. Licences	25.63	45.63	52.90	65.47	57.58
Foreign Travel Tax	-	-	22.56	25.90	28.97
Municipal Tax	-	-	25.37	9.70	9.85
Health Contribution	44.06	49.42	58.19	71.28	92.80
Indirect tax	1,704.59	1,437.88	1,851.57	2,153.68	2,665.87
Bhutan Sales Tax	662.79	765.54	830.99	918.24	1,191.77
Excise Duty	879.54	519.39	877.72	1,040.69	1,262.76
Import duty	157.18	144.69	129.48	177.96	195.68
Export Tax	0.34	0.01	0.10	0.003	0.00
Other Indirect Tax	4.75	8.24	13.29	16.79	15.67
Non tax revenue	2,778.23	5,815.25	7,107.63	7,566.63	5,982.65
Fees, Dividends & Profits	2,610.40	5,639.99	7,023.27	7,470.21	5,889.16
Administrative Fees & Charges	197.13	214.73	238.57	236.77	284.12
Dividends	1,542.43	2,123.16	2,479.82	1,915.09	3,018.84
Revenue from Govt. Departments	102.06	225.70	256.91	194.76	203.63
Transfer of Profits	503.27	2,678.75	2,366.13	3,394.54	656.73
Other Non-Tax revenue	265.51	397.65	22.50	33.77	31.61
Interest on loan from corporations	..	..	1,659.35	1,695.28	1,694.24
Capital Revenue	167.83	175.26	84.36	96.42	93.49
<b>Total revenue</b>	<b>6,902.91</b>	<b>10,082.16</b>	<b>12,345.98</b>	<b>14,049.04</b>	<b>15,638.43</b>

Source : Department of Revenue & Customs, MoF, Thimphu.

TABLE 12.4: SUMMARY OF ACTUAL BUDGETARY OPERATIONS, BHUTAN, 2005/06 TO 2009/10

(Nu. in Million)

Item	2005/06	2006/07	2007/08	2008/09	2009/10
Revenue and Grants	13,327.50	10,267.84	18,281.41	20,624.11	26,757.31
Revenue	6,902.91	12,782.16	12,345.98	14,049.04	15,638.43
Tax revenue	4,124.68	4,266.91	5,238.36	6,482.41	9,655.78
Non-tax revenue	2,778.23	8,515.25	7,107.63	7,566.63	5,982.65
Grants	6,424.59	6,000.93	5,935.42	6,575.07	11,118.88
India	3,417.22	4,024.28	4,671.11	4,394.88	7,306.39
Other	3,007.37	1,976.65	1,264.31	2,180.19	3,812.49
Total Expenditure	13,314.63	15,166.11	19,693.03	20,890.58	25,831.83
Current	6,630.20	7,636.23	9,725.72	11,061.43	12,902.68
Capital	6,684.43	7,529.88	9,967.31	9,829.14	12,929.14
On Lending	590.20	463.52	39.89	92.82	1,471.83
Net Advance/Suspense	124.99	486.69	25.72	196.36	334.73
Net lending	289.09	87.32	(1,805.39)	(1,580.30)	(400.37)
Repayment	2,651.45	668.62	2,076.78	2,051.63	2,735.53
Fisical deficit/surplus	(318.70)	287.77	403.55	1,092.46	1,101.69

Note: Figure in the brackets are negative

Source : Department of Budget & Accounts, MoF, Thimphu.



## CHAPTER 13

### PLAN OUTLAYS

Development planning in Bhutan can be tracked back to the year 1961 when the first Five Year Plan (1961/62 to 1965/66) was drawn up. Initially, self-contained development secretariat was established to implement the plan. At the time of preparation of the third plan in 1971, the Planning Commission (now, Gross National Happiness Commission) was established headed by the His Majesty the King. In the absence of basic economic information and skilled manpower, the formulation of the third plan, like earlier ones was relatively simple. Major developments in regard to the consolidation of the planning process took place in the fourth plan period, when the Dzongkhags were involved in the development process.

The Ninth Five Year Plan (2002-2007) focused on five major goals; 1. Improve the quality of life and income, 2. Ensure good governance, 3. Promote private sector growth and employment generation, 4. Preserve and promote cultural heritage and conservation of environment, 5. Achieve rapid economic growth and transformation. The plan, as a whole, emphasized on perusing maximization of Gross National Happiness as a development goal and an objective.

The Tenth Five Year Plan began in July 2007 will peruse towards poverty reduction as a primary goal, achieving country's long term development vision GNH and Bhutan's commitment towards global compacts, including MDGs.

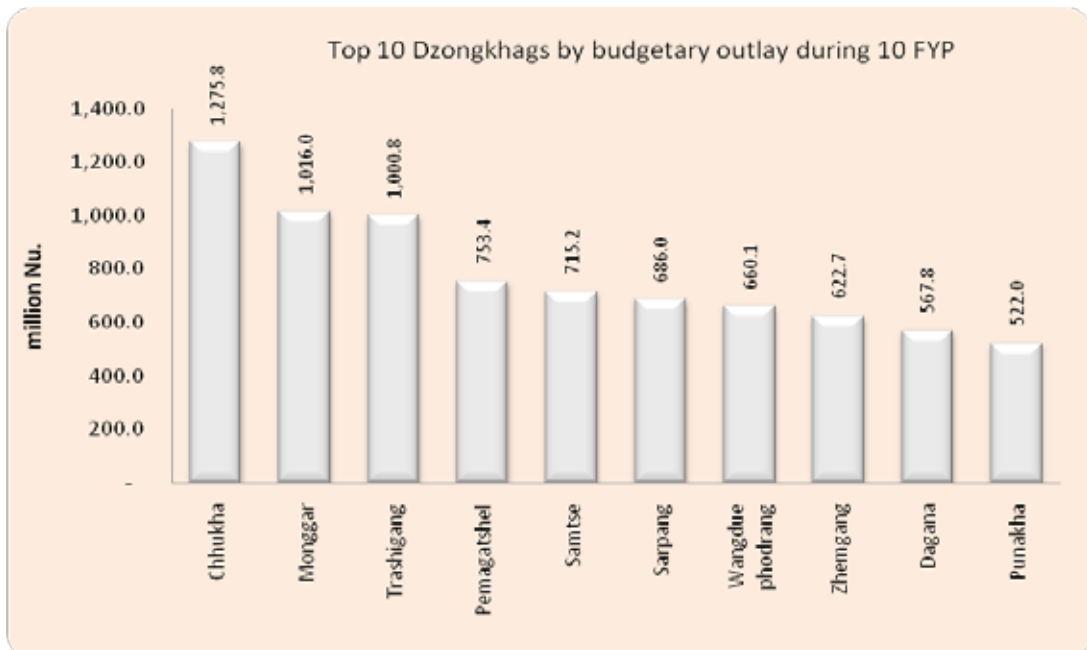


TABLE 13.1: TENTH PLAN BUDGETARY OUTLAY AND ALLOCATION, BHUTAN, 2008/2013

(Nu. in Million)

Organization	Recurrent	Capital	Total	Percent
Constitutional Bodies	1,577.88	5,199.11	6,776.98	4.62
Judiciary	611.89	724.51	1,336.40	0.91
Royal Audit Authority	289.02	53.56	342.57	0.23
Election Commission Of Bhutan	523.50	79.91	603.41	0.41
Anti Corruption Commission	64.66	125.37	190.03	0.13
Royal Civil Service Commission	88.81	4,215.76	4,304.57	2.94
Autonomous Agencies	5,783.46	6,503.98	12,287.44	8.40
His Majesty's Secretariat	147.22	100.00	247.22	0.17
Secretariat of His Majesty the Fourth King	89.33	50.00	139.33	0.10
National Assembly Secretariat	252.86	42.91	295.77	0.20
Royal Advisory Council (National Council)	149.59	56.99	206.58	0.14
Cabinet Secretariat	141.18	15.58	156.76	0.11
Office of the Attorney General	64.84	56.15	120.99	0.08
GNH Commission	170.08	1,050.00	1,220.08	0.83
National Land Commission	454.81	385.86	840.67	0.57
National Environment Commission	78.02	109.30	187.32	0.13
Dzongkha Development Commission	77.10	30.60	107.70	0.07
Council for Ecclesiastical Affairs	1,864.27	633.55	2,497.82	1.71
National Statistics Bureau	129.20	45.29	174.49	0.12
Royal University of Bhutan	1,532.97	2,427.10	3,960.07	2.71
Royal Institute of Management	129.19	275.05	404.24	0.28
Centre for Bhutan Studies	45.50	50.00	95.50	0.07
Bhutan Narcotic Control Agency	23.00	21.40	44.41	0.03
Bhutan Olympic Committee	158.26	100.00	258.26	0.18
Bhutan Broadcasting service Corporation	-	406.78	406.78	0.28
National commission for Women and Children	70.82	64.21	135.02	0.09
Bhutan Information Communication Media Authority	38.32	10.50	48.82	0.03

Table 13.1 contd...

Drug Regulatory Authority	16.15	-	16.15	0.01
Tourism Council of Bhutan	150.75	572.71	723.45	0.49
Ministries	48,897.65	49,908.69	98,806.32	67.56
Ministry of Agriculture	4,497.09	3,626.51	8,123.60	5.55
Ministry of Education	875.12	9,489.13	10,364.25	7.09
Ministry of Finance	29,632.49	699.92	30,332.41	20.74
Ministry of Foreign Affairs	1,319.63	447.51	1,767.14	1.21
Ministry of Health	4,175.97	4,394.34	8,570.30	5.86
Ministry of Home and Cultural Affairs	4,301.61	3,000.64	7,302.24	4.99
Ministry of Information and Communication	561.99	3,776.47	4,338.46	2.97
Ministry of labour and Human Resources	742.67	1,446.07	2,188.74	1.50
Ministry of Economic Affairs	1,057.54	5,763.18	6,820.72	4.66
Ministry of Works and Human Settlements	1,733.54	17,264.92	18,998.46	12.99
Others	963.97	-	963.97	0.66
Thimphu Thromdey Schools	963.97	-	963.97	0.66
Total (Constitutional Bodies, Autonomous Bodies and Ministries)	57,222.95	61,611.76	118,834.70	81.25
Dzongkhags and Gewogs	15,417.52	12,000.00	27,417.52	18.75
Dzongkhags		7,200.00	7,200.00	4.92
Gewogs		4,800.00	4,800.00	3.28
<b>Total Outlay</b>	<b>72,640.47</b>	<b>73,611.76</b>	<b>146,252.22</b>	<b>100.00</b>

Source: "Tenth Plan Document 2008-2013", GNH Commission, Thimphu.

TABLE 13.2: OUTLAYS OF DEVELOPMENT PLANS, PERCENTAGE BY CATEGORY, 9th PLAN TO 10th PLAN .

Organization	Ninth Plan (%)	Tenth Plan (%)
Constitutional Bodies	5.40	4.62
Judiciary	0.70	0.91
Royal Audit Authority	0.30	0.23
Election Commission Of Bhutan	na	0.41
Anti Corruption Commission	na	0.13
Royal Civil Service Commission	4.40	2.94
Autonomous Agencies	3.40	8.40
His Majesty's Secretariat	0.10	0.17
Secretariat of His Majesty the Fourth King	..	0.10
National Assembly Secretariat	0.10	0.20
Royal Advisory council (National Council)	0.10	0.14
Cabinet Secretariat	0.00	0.11
Office of the Attorney General	0.10	0.08
GNH Commission	0.20	0.83
National Land Commission	na	0.57
National Environment Commission	0.10	0.13
Dzongkha Development Commission	0.10	0.07
Council for Ecclesiastical Affairs	1.10	1.71
National Statistics Bureau	na	0.12
Royal University of Bhutan	na	2.71
Royal Institute of Management	0.40	0.28
Centre for Bhutan Studies	0.00	0.07
Bhutan Narcotic Control Agency	na	0.03
Bhutan Olympic Committee	0.30	0.18
Bhutan Broadcasting service Corporation	0.50	0.28
National commission for Women and Children	na	0.09
Bhutan Information Communication Media Authority	..	0.03

Table 13.2 contd...

Drug Regulatory Authority	..	0.01
Tourism Council of Bhutan	0.30	0.49
Ministries		67.56
Ministry of Agriculture	6.5	5.55
Ministry of Education	3.7	7.09
Ministry of Finance	2.3	20.74
Ministry of Foreign Affairs	2.1	1.21
Ministry of Health	6.4	5.86
Ministry of Home and Cultural Affairs	0.9 & 0.6	4.99
Ministry of Information and Communication	14.8	2.97
Ministry of Labour and Human Resources	0.4	1.50
Ministry of Economic Affairs	12.2	4.66
Ministry of Works and Human Settlements	..	12.99
Others		0.66
Thimphu Thromdey Schools	..	0.66
Total (Constitutional Bodies, Autonomous Bodies and Ministries)		68.22
Dzongkhags and Gewogs	..	18.75
Dzongkhags	..	4.92
Gewogs	..	3.28
<b>Total Outlay</b>		<b>87.0</b>

Source: "Tenth Plan Main Document 2008-2013", Gross National Happiness Commission Thimphu.

TABLE 13.3: DZONGKHAG WISE NINTH FIVE YEAR PLAN OUTLAY, BHUTAN, 2002 TO 2007

(Nu.in Million)

Dzongkhags	Current	Capital	Total
Bumthang	274.96	198.8	473.8
Chhukha	647.6	797.9	1,445.5
Dagana	197.2	315.1	512.3
Gasa	98.9	145.8	244.7
Ha	252.7	290.1	542.8
Lhuentse	269.1	617.3	886.3
Monggar	496.6	651.5	1,148.1
Paro	487.7	602.5	1,090.1
Pemagatshel	309.3	444.5	753.8
Punakha	355.9	303.0	658.9
Samdrup Jongkhar	523.5	645.2	1,168.7
Samtse	327.7	592.9	920.6
Sarpang	503.9	490.4	994.2
Thimphu	740.4	677.8	1,418.2
Trashi Yangtse	298.5	357.1	655.6
Trashigang	671.5	781.3	1,452.8
Trongsa	255.9	309.4	565.3
Tsirang	210.1	316.6	526.7
Wangdue Phodrang	414.9	355.8	770.7
Zhemgang	466.2	425.4	891.6
<b>Total</b>	<b>7,802.5</b>	<b>9,318.3</b>	<b>17,120.8</b>

Source: "Ninth Plan Main Document 2002-2007", Planning Commission, Thimphu.

TABLE 13.4: DZONGKHAG WISE TENTH FIVE YEAR PLAN OUTLAY, 2008 TO 2013

(Nu.in Million)

Dzongkhags	Current	Capital	Total
Bumthang	-	139.0	139.0
Chhukha	792.7	483.1	1,275.8
Dagana	294.2	273.6	567.8
Gasa	-	58.9	58.9
Ha	-	123.6	-
Lhuentse	226.9	292.6	519.5
Monggar	486.9	529.0	1,016.0
Paro	-	259.1	259.1
Pemagatshel	474.5	278.9	753.4
Punakha	277.3	244.6	522.0
Samdrup Jongkhar	-	358.0	358.0
Samtse	-	715.2	715.2
Sarpang	369.3	316.7	686.0
Thimphu	-	177.8	177.8
Trashhi Yangtse	135.5	225.4	360.9
Trashigang	314.3	686.6	1,000.8
Trongsa	205.8	126.7	332.5
Tsirang	-	200.3	200.3
Wangdue Phodrang	426.9	233.3	660.1
Zhemgang	375.4	247.3	622.7
<b>Total</b>	<b>4,379.7</b>	<b>5,969.7</b>	<b>10,349.4</b>

Note: Capital budget does not include the gewogs capital budget

Source: Gross National Happiness Commission (GNHC), Thimphu.

## CHAPTER 14

# NATIONAL ACCOUNTS

Human activities can be classified broadly into economic activities and non-economic activities. Economic activities are those, which are devoted to making use of the scarce resources (including time and labor) in the production and distribution of economic goods i.e. goods and services (needed to satisfy human wants), which are scarce in relation to demand and are transferable. Economic goods command a price on the market for their being scarce and transferable. The end result of all the economic activities that has taken place in an economy during an accounting period is reflected in gross domestic product (GDP). GDP represents the money value of all the goods and services that have been produced within the territorial limits of the country and are available for final uses like consumption, gross capital formation and net exports.

GDP can be measured both at current and constant prices. When expressed at current prices it reflects the money value of the goods and services produced in an accounting year measured in the prices of that year. On the other hand GDP expressed at constant prices reflects the money value of such goods and services for all the years measured in one year's (base year) prices. In this case the base year prices are kept constant for evaluation purposes for all the year under review, for measuring the performance of the economy with regard to the production of the goods and services in real terms over a period, constant price estimates of GDP have to be taken into account.

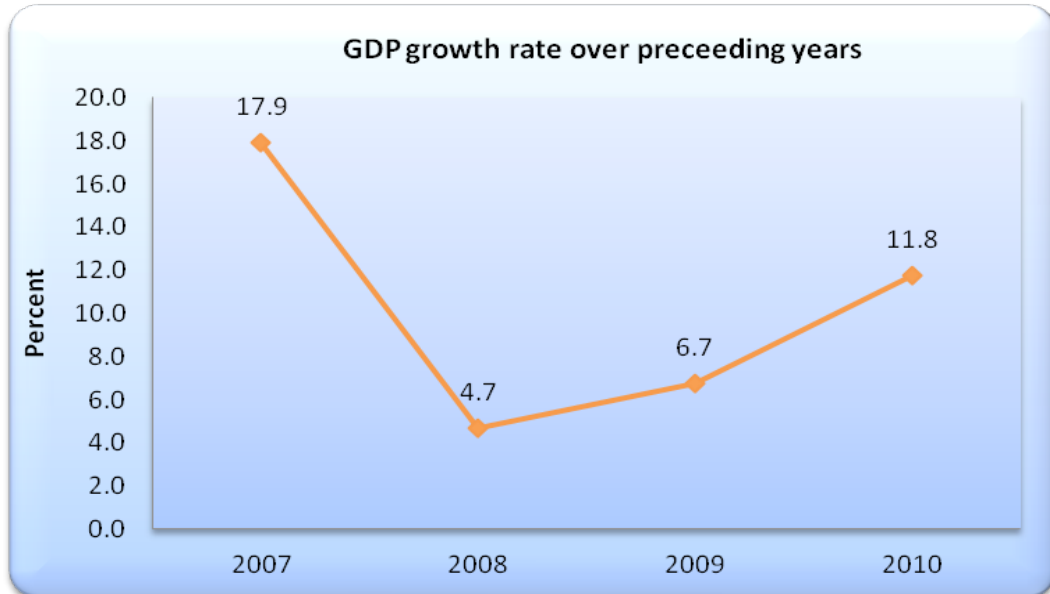




TABLE 14.1: GROSS DOMESTIC PRODUCT BY KIND OF ACTIVITY AT CURRENT PRICES, 2007 - 2010

(million Nu.)

Sectors	2007	2008	2009	2010
Agriculture Livestock & forestry	9,234.1	10,078.3	11,158.6	12,177.8
Crops	4,377.0	5,060.6	5,668.2	6,530.1
Livestock	2,530.9	2,624.5	2,894.9	3,109.7
Forestry & logging	2,326.2	2,393.2	2,595.5	2,538.0
Mining and quarrying	890.5	1,252.0	1,392.0	1,616.9
Manufacturing	4,033.2	4,593.4	5,017.2	6,324.1
Electricity and water	10,082.0	11,520.9	11,816.4	12,763.6
Construction	6,781.0	6,251.0	7,469.7	10,308.9
Wholesale & Retail Trade	2,497.1	2,694.6	2,935.3	3,752.6
Hotels & Restaurants	368.1	569.2	537.6	608.0
Transport, storage & Communication	4,468.8	5,365.8	5,989.9	6,943.3
Financing, insurance & real estate	4,105.4	4,576.5	4,962.1	5,545.9
Finance and Insurance	2,801.5	3,174.3	3,466.2	3,987.7
Real Estate & dwellings	1,297.4	1,374.0	1,460.3	1,507.7
Business services	6.5	28.2	35.6	50.5
Community, Social services	5,311.8	5,930.4	7,963.4	9,262.5
Public administration	3,370.2	3,762.7	4,728.4	5,517.3
Education and Health	1,941.6	2,167.7	3,235.0	3,745.2
Private social, personal & recreational Services	241.9	267.7	276.4	298.0
Plus: taxes net of subsidies	1,442.5	1,613.1	1,704.9	2,876.0
Gross domestic product	49,456.5	54,712.9	61,223.5	72,477.6

Source: National Accounts Division, NSB

Table 14.2: Share of Economic Sectors to Gross Domestic Product by sectors, 2007 - 2010

(in percent)

Sectors	2007	2008	2009	2010
Agriculture, livestock & forestry	18.7	18.4	18.2	16.8
Crops	8.9	9.2	9.3	9.0
Livestock	5.1	4.8	4.7	4.3
Forestry & logging	4.7	4.4	4.2	3.5
Mining & quarrying	1.8	2.3	2.3	2.2
Manufacturing	8.2	8.4	8.2	8.7
Electricity & water	20.4	21.1	19.3	17.6
Construction	13.7	11.4	12.2	14.2
Wholesale & Retail trade	5.0	4.9	4.8	5.2
Hotel & restaurants	0.7	1.0	0.9	0.8
Transport, storage & Communication	9.0	9.8	9.8	9.6
Financing, insurance & real estate and business services	8.3	8.4	8.1	7.7
Finance and Insurance	5.7	5.8	5.7	5.5
Real estate and dwellings	2.6	2.5	2.4	2.1
Business services	0.0	0.1	0.1	0.1
Community, social & personal services	10.7	10.8	13.0	12.8
Public administration	6.8	6.9	7.7	7.6
Education and health	3.9	4.0	5.3	5.2
Private Social & recreational services	0.5	0.5	0.5	0.4
Plus: Indirect taxes less subsidies	2.9	2.9	2.8	4.0
Gross Domestic Product	100.0	100.0	100.0	100.0

Source: National Accounts Division, NSB

Table 14.3: GDP growth rates over preceeding years by sectors, 2007 - 2010

(in percent)

Sectors	2007	2008	2009	2010
Agriculture, livestock & forestry	0.8	0.7	2.7	0.3
Crops	1.5	1.9	2.2	1.2
Livestock	2.6	0.5	2.4	1.0
Forestry & logging	-2.6	-1.4	3.9	-2.3
Mining & quarrying	22.3	20.1	-6.9	8.5
Manufacturing	25.0	8.5	6.9	20.2
Electricity and water	86.9	13.0	-2.4	5.6
Construction	5.1	-10.2	16.5	20.6
Wholesale & Retail Trade	3.9	0.9	6.2	20.0
Hotels & restaurants	7.4	45.4	-12.9	3.9
Transport, storage & Communication	7.9	5.3	9.2	11.1
Financing insurance & real estate and business services	9.2	5.0	6.2	8.5
Finance & Insurance	9.6	5.6	6.8	10.1
Real estate & dwellings	7.3	1.4	3.9	2.3
Business services		302.5	21.0	32.6
Community, Social services	3.2	3.1	28.6	13.0
Public administration	-0.5	3.1	20.4	13.3
Education & health	10.3	3.1	42.8	12.6
Private social, personal & recreational services	6.9	5.2	1.9	2.1
Plus: taxes net of subsidies	4.4	6.5	-0.6	60.3
Gross Domestic Product	17.9	4.7	6.7	11.8

Source: National Accounts Division, NSB

TABLE 14.4: GROSS DOMESTIC PRODUCT BY MAJOR SECTORS IN CURRENT PRICES, 2007 - 2010

(Million Nu.)

Sector	2007	2008	2009	2010
Primary	10,124.6	11,330.2	12,550.7	13,794.7
Secondary	20,896.3	22,365.3	24,303.3	29,396.6
Tertiary	18,435.8	21,017.4	24,369.5	29,286.3
Gross Domestic Product	49,456.6	54,713.0	61,223.5	72,477.6

TABLE 14.5: SHARES OF THE GDP BY MAJOR SECTOR IN CURRENT PRICES, 2007 - 2010

(in percent)

Sector	2007	2008	2009	2010
Primary	20.5	20.7	20.5	19.0
Secondary	42.3	40.9	39.7	40.6
Tertiary	37.3	38.4	39.8	40.4
Total GDP	100.0	100.0	100.0	100.0

TABLE 14.6: GDP GROWTH RATES OVER PRECEDING YEARS, 2007 - 2010

(in percent)

Sector	2007	2008	2009	2010
Primary	2.5	2.5	1.6	1.1
Secondary	41.6	5.5	4.1	12.7
Tertiary	5.9	4.8	12.2	15.4
Total GDP	17.9	4.7	6.7	11.8

Source: National Accounts Division, NSB

TABLE 14.7: GROSS DOMESTIC CAPITAL FORMATION IN CURRENT PRICES, 2007-2010

(Million Nu.)

In current prices	2007	2008	2009	2010
Machinery and Equipment	4,512.8	7,824.4	8,128.5	12,459.7
Govt.	868.6	1,131.5	1,578.2	2,164.0
Private	3,644.3	6,693.0	6,550.4	10,295.7
Construction	15,025.0	13,340.0	17,172.7	24,912.9
Govt.	5,433.9	5,597.7	5,460.1	8,209.3
Private	9,591.1	7,742.3	11,712.6	16,703.6
Gross fixed capital formation	19,537.8	21,164.5	25,301.2	37,372.6
Change in stock	-1,289.0	623.2	-73.2	500.7
Gross Domestic capital formation	18,248.8	21,787.7	25,228.0	37,873.3

TABLE 14.8: SHARE OF GROSS DOMESTIC CAPITAL FORMATION, 2007-2010

(in percent)

Gross Domestic Capital Formation	2007	2008	2009	2010
Machinery and Equipment	24.7	35.9	32.2	32.9
Govt.	4.8	5.2	6.3	5.7
Private	20.0	30.7	26.0	27.2
Construction	82.3	61.2	68.1	65.8
Govt.	29.8	25.7	21.6	21.7
Private	52.6	35.5	46.4	44.1
Gross fixed capital formation	107.1	97.1	100.3	98.7
Change in stock	-7.1	2.9	-0.3	1.3
Gross Domestic capital formation	100.0	100.0	100.0	100.0

Source: National Accounts Division, NSB

TABLE 14.9: GROSS DOMESTIC PRODUCT IN CURRENT PRICES BY EXPENDITURE, 2007 - 2010

(Million Nu.)

Expenditures	2007	2008	2009	2010
Final consumption expenditure	28,318.8	32,134.2	36,284.3	44,682.3
Household and NPISH	18,864.1	21,761.6	23,202.2	30,194.5
General Government	9,454.8	10,372.6	13,082.1	14,487.8
Gross domestic capital formation	18,248.8	21,787.7	25,228.0	37,873.3
Construction	15,025.0	13,340.0	17,172.7	24,912.9
Machinery and equipment	4,512.8	7,824.4	8,128.5	12,459.7
Change in inventory	-1,289.0	623.2	-73.2	500.7
Net export of goods & services	-1,142.6	-6,086.2	-10,089.7	-13,460.5
Export of goods & services	27,186.5	25,488.5	27,982.3	28,877.1
Imports of goods & services	-28,329.1	-31,574.7	-38,072.0	-42,337.7
<b>Total Expenditure on GDP</b>	<b>45,425.1</b>	<b>47,835.7</b>	<b>51,422.7</b>	<b>69,095.1</b>

Source: National Accounts Division, NSB

TABLE 14.10: GROSS DOMESTIC PRODUCT SHARE OF EXPENDITURE, 2007 - 2010

(in percent)

Expenditure	2007	2008	2009	2010
Final consumption expenditure	62.3	67.2	70.6	64.7
Household and NPISH	41.5	45.5	45.1	43.7
General government	20.8	21.7	25.4	21.0
Gross domestic capital formation	40.2	45.5	49.1	54.8
Construction	33.1	27.9	33.4	36.1
Machinery and equipment	9.9	16.4	15.8	18.0
Change in inventory	-2.8	1.3	-0.1	0.7
Net export of goods and services	-2.5	-12.7	-19.6	-19.5
Export of goods and services	59.8	53.3	54.4	41.8
Imports of goods and services	-62.4	-66.0	-74.0	-61.3
<b>Total Expenditure on GDP</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: National Accounts Division, NSB

## CHAPTER 15

### PRICES

The only price statistics currently compiled in Bhutan relate to Consumer Price Indices, often referred to as the CPI. Since 1979, the CPI had been produced by the NSB twice a year till 2003. From 3<sup>rd</sup> quarter 2003, it has been producing quarterly. In addition, a food price index for Thimphu has been produced each quarter since September 1987.

The purpose of the CPI is to provide a general indicator of the rate of price change for consumer goods and services. The CPI is important monitoring overall price development and assessing changes in the living standard of the population. The CPI is formed by measuring the change in the cost of purchasing a basket of consumer goods and services where items in the basket are weighted according to their relative importance in the total spending of consumers. The baskets include food items (i.e. rice, other cereals, vegetables, oils and fats, and spices) together with non-food items such as clothing, fuel, furniture and other personal items. Items such as cereals are weighted more heavily than say furniture, because they represent a larger proportion of consumer expenditure. A price change in cereals will therefore have greater effect on the CPI than a price change for furniture.

Bhutan's CPI had 1979 as base year. Undoubtedly, substantial changes had taken place since then – economically, socially and technologically. A number of new products had likewise emerged. These factors contributed to the change in households' tastes and preferences thereby causing the fixed market basket of goods and services to become outmoded. To capture such changes for a more meaningful price comparison, it was necessary to re - base the CPI. This entailed the revision of or updating the base year, the weights, the fixed market basket and the sample outlets.

The year 2003 is chosen as the new base year since it was the year when the Bhutan Living Standard Survey was conducted. The Household Income Expenditure Survey or Living Standard Survey is the usual source of weights and the basis for drawing up the market basket. The CPI is presented as Index Numbers, where the indices are measured in relative to the base of 3<sup>rd</sup> quarter 2003 = 100.00; price change is estimated by measuring change in the Index numbers.

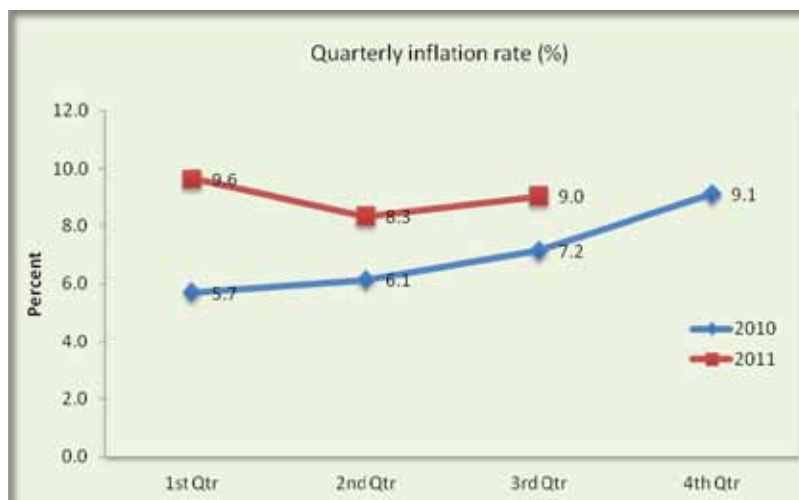


TABLE 15.1 CONSUMER PRICE INDEXES FOR FOOD AND NON-FOOD COMPONENTS, BHUTAN 1ST QTR. 2009 TO 3RD QTR. 2011

(3rd Qtr. 2003=100)

Classification	Weight (%)	2009				2010				2011		
		1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr
Index												
Food	31.67	140.51	150.38	154.21	155.06	157.83	160.75	164.44	169.84	174.45	177.73	182.06
Non-Food	68.33	130.71	131.83	131.46	131.92	133.84	139.39	141.23	143.61	146.08	149.32	152.68
Total	100	133.81	137.7	138.67	139.25	141.44	146.15	148.58	151.92	155.07	158.32	161.98
<b>PERCENTAGE CHANGE YEAR ON YEAR</b>												
Food	31.67	8.84	6.67	9.88	10.74	12.33	6.90	6.63	9.53	10.53	10.56	10.72
Non-Food	68.33	6.42	1.11	0.21	0.73	2.39	5.73	7.43	8.86	9.15	7.12	8.11
Total	100	7.21	2.96	3.42	4.05	5.70	6.14	7.15	9.10	9.64	8.33	9.02
<b>PERCENTAGE CHANGE QUARTER TO QUARTER</b>												
Food	31.67	0.35	7.02	2.55	0.55	1.79	1.85	2.30	3.28	2.71	1.88	2.44
Non-Food	68.33	(0.19)	0.86	-0.28	0.35	1.46	4.15	1.32	1.69	1.72	2.22	2.25
Total	100	(0.01)	2.91	0.70	0.42	1.57	3.33	1.66	2.25	2.07	2.10	2.31
<b>PURCHASING POWER OF NGULTRUM (PPN)</b>												
PPN	1.00	0.75	0.73	0.72	0.72	0.71	0.68	0.67	0.66	0.64	0.63	0.62

Source: National Statistics Bureau, Thimphu



TABLE 15.2 CONSUMER PRICE INDEXES FOR MAJOR COMPONENTS, BHUTAN 1ST QTR. 2009 TO 3RD QTR. 2011

(3rd Qtr. 2003=100)

Classification	Weight (%)	2009				2010				2011		
		1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr
Food and Non-Alcoholic Beverages	29.44	139.36	149.99	154.09	155.12	158.14	161.18	164.91	170.60	175.53	178.62	181.94
Alcoholic Beverages, Tobacco & Narcotics	2.23	155.59	155.58	155.77	154.27	153.79	155.11	158.21	159.85	160.24	165.96	183.65
Clothing And Footwear	10.49	144.23	145.53	143.97	147.49	147.27	149.47	151.04	155.39	162.31	167.77	175.79
Housing, water, electricity, gas & other fuels	25.68	134.80	134.94	134.92	134.35	139.74	150.78	152.08	153.24	153.41	155.27	157.23
Furnishing, household equipment & routine household maintenance	5.68	127.77	128.00	132.73	132.59	131.13	136.50	139.15	141.13	143.13	141.91	151.47
Health	2.94	127.08	129.11	122.39	122.97	122.97	125.77	129.34	129.38	132.51	132.99	134.15
Transport	7.06	141.58	144.30	144.25	144.82	145.45	148.15	150.74	151.66	156.96	167.86	169.35
Communication	4.10	96.90	96.55	96.93	95.45	95.31	92.96	97.38	94.54	93.76	92.99	93.14
Recreation and Culture	2.62	130.13	131.04	128.58	131.05	130.91	131.09	132.27	150.35	172.78	181.43	183.18
Education	4.04	100.00	100.00	100	100.00	100	100.00	100.00	100.00	100.00	100.00	100.00
Restaurants and Hotels	3.01	124.63	128.46	127.94	128.14	128.26	134.48	135.97	146.20	142.95	148.70	151.70
Miscellaneous Goods & Services	2.72	125.64	133.18	129.96	131.07	131.06	132.96	135.29	136.45	131.99	134.95	139.62
<b>Total</b>	<b>100.00</b>	<b>133.81</b>	<b>137.70</b>	<b>138.67</b>	<b>139.25</b>	<b>141.44</b>	<b>146.15</b>	<b>148.58</b>	<b>151.92</b>	<b>155.07</b>	<b>158.32</b>	<b>161.98</b>

Note: From June, 2008 and backwards, the health component is inclusive of transport, communication, recreation and culture, education, restaurants and hotels. Therefore, the weight may be aggregated at 23.77 if indexes needs to be backtracked

Source: National Statistics Bureau, Thimphu

TABLE 15.3 CONSUMER PRICE INDEXES - MAJOR COMPONENTS, BHUTAN 1ST QTR. 2009 TO 2ND QTR. 2011 YEAR ON YEAR INFLATION RATE (%)

(3rd Qtr. 2003=100)

Classification	Weight (%)	2009				2010				2011	
		1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr
Food and Non-Alcoholic Beverages	29.44	8.53	6.65	10.18	11.49	13.48	7.46	7.02	9.98	11.00	10.82
Alcoholic Beverages, Tobacco & Narcotics	2.23	12.63	6.99	5.980	1.708	-1.157	-0.3	1.57	3.62	4.19	7.00
Clothing And Footwear	10.5	8.13	0.42	-0.61	1.33	2.11	2.71	4.91	5.36	10.21	12.24
Housing, water, electricity, gas & other fuels	25.7	7.49	1.47	0.14	0.49	3.66	11.74	12.72	14.06	9.78	2.98
Furnishing, household equipment & routine household maintenance	5.7	4.41	-1.17	3.67	4.07	2.63	6.64	4.84	6.44	9.15	3.96
Health	2.9	7.90	3.86	-0.62	-0.52	-3.23	-2.59	5.68	5.21	7.76	5.74
Transport	7.1	11.31	3.01	0.33	0.72	2.73	2.67	4.50	4.72	7.91	13.30
Communication	4.1	-0.63	-1.15	-0.02	-1.66	-1.64	-3.72	0.46	-0.95	-1.63	0.03
Recreation and Culture	2.6	3.26	1.71	-0.62	0.58	0.60	0.04	2.87	14.73	31.98	38.40
Education	4.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Restaurants and Hotels	3.0	5.39	0.63	0.46	0.19	2.91	4.69	6.28	14.09	11.45	10.57
Miscellaneous Goods & Services	2.7	-0.75	1.10	-1.321	-0.71	4.314	-0.17	4.10	4.10	0.71	1.50
<b>Total</b>	<b>100.00</b>	<b>7.21</b>	<b>2.96</b>	<b>3.42</b>	<b>4.05</b>	<b>5.70</b>	<b>6.14</b>	<b>7.15</b>	<b>9.10</b>	<b>9.64</b>	<b>8.33</b>

Source: National Statistics Bureau, Thimphu

TABLE 15.4 CONSUMER PRICE INDEXES - MAJOR COMPONENTS, BHUTAN, 1ST QTR. 2009 TO 3RD QTR. 2011  
 QUARTER TO QUARTER INFLATION RATE (%)

(3rd Qtr. 2003=100)

Classification	Weight (%)	2009				2010				2011		
		1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr
Food and Non-Alcoholic Beverages	29.44	0.17	7.63	2.73	0.67	1.95	1.92	2.31	3.45	2.89	1.76	1.86
Alcoholic Beverages, Tobacco & Narcotics	2.23	2.58	-0.01	0.122	-0.963	-0.311	0.86	2.00	1.04	0.24	3.57	10.66
Clothing And Footwear	10.5	-0.91	0.90	-1.07	2.44	-0.15	1.49	1.05	2.88	4.45	3.36	4.78
Housing, water, electricity, gas & other fuels	25.7	0.82	0.10	-0.01	-0.42	4.01	7.90	0.86	0.76	0.11	1.21	1.26
Furnishing, household equipment & routine household maintenance	5.7	0.29	0.18	3.70	-0.11	-1.10	4.10	1.94	1.42	1.42	-0.85	6.74
Health	2.9	2.81	1.60	-5.20	0.47	0.00	2.28	2.84	0.03	2.42	0.36	0.87
Transport	7.1	-1.54	1.92	-0.03	0.40	0.44	1.86	1.75	0.61	3.49	6.94	0.89
Communication	4.1	-0.16	-0.36	0.39	-1.53	-0.15	-2.47	4.75	-2.92	-0.83	-0.82	0.16
Recreation and Culture	2.6	-0.12	0.70	-1.88	1.92	-0.11	0.14	0.90	13.67	14.92	5.01	0.96
Education	4.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Restaurants and Hotels	3.0	-2.56	3.07	-0.40	0.16	0.09	4.85	1.11	7.52	-2.22	4.02	2.02
Miscellaneous Goods & Services	2.7	-4.83	6.00	-2.42	0.85	-0.008	1.45	1.75	0.86	-3.27	2.24	3.46
<b>Total</b>	<b>100.00</b>	<b>(0.01)</b>	<b>2.91</b>	<b>0.70</b>	<b>0.42</b>	<b>1.57</b>	<b>3.33</b>	<b>1.66</b>	<b>2.25</b>	<b>2.07</b>	<b>2.10</b>	<b>2.31</b>

Source: National Statistics Bureau, Thimphu

TABLE 15.5 CONSUMER PRICE INDEXES FOR FOOD ITEMS, SUB - COMPONENTS, BHUTAN 1ST QTR. 2009 TO 3RD QTR. 2011  
2011

(3rd Qtr. 2003=100)

Classification	Weight (%)	2009				2010				2011		
		1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr
Food	27.69	140.46	151.74	156.05	157.02	160.20	163.61	167.48	173.07	178.36	181.35	184.76
Bread and Cereals (ND)	7.93	143.32	147.87	150.08	152.81	159.05	159.28	162.17	164.72	174.58	180.35	180.88
Meat	3.27	139.12	172.21	167.28	165.83	167.92	172.23	175.18	175.75	177.58	178.73	179.87
Fish	1.03	130.96	137.08	141.91	152.58	151.68	160.26	161.24	165.30	167.75	169.32	170.22
Milk,cheese & Eggs	5.16	153.25	161.56	160.94	158.90	160.50	166.82	169.83	176.07	178.00	181.43	182.01
Oils and Fats	3.41	123.19	123.71	123.32	131.70	132.57	133.10	135.35	139.59	144.19	147.32	149.27
Fruits	1.35	161.57	194.44	191.97	187.16	221.86	222.10	194.33	203.78	247.78	236.57	232.16
Vegetables	4.12	131.09	147.76	174.64	168.00	162.40	167.28	187.51	191.46	185.79	185.42	203.96
Sugar, Jam & Etc	0.56	118.75	123.97	133.77	174.01	168.33	168.33	189.17	190.90	199.05	197.50	201.01
Food Products n.e.c (ND)	0.87	147.93	149.29	154.61	145.70	146.59	151.23	155.74	215.50	207.80	232.06	236.17
Non - Alcoholic Beverages	1.74	121.95	122.20	122.91	124.84	125.37	122.52	124.04	131.27	130.60	135.16	137.14
Alcoholic Beverages	1.22	129.52	130.82	130.87	127.46	128.26	131.43	133.47	134.53	134.81	135.19	150.36
Tobacco	0.33	211.16	211.82	212.62	213.35	208.59	208.59	216.35	216.41	219.01	219.01	219.01
Narcotics (ND)	0.69	175.58	172.91	173.05	173.89	173.17	171.83	174.61	178.03	177.57	195.48	226.02
Clothing	7.87	137.91	141.95	145.99	150.29	150.08	152.27	152.83	154.60	158.51	161.33	161.45
Actual Rentals for Housing	18.77	135.05	134.99	135.06	134.70	141.82	155.42	156.16	156.76	156.77	157.27	159.62
Electricity,gas&other fuels	6.04	134.51	135.16	134.72	133.93	134.66	138.55	140.70	144.45	144.83	151.26	152.17
Fules & Lubricants	3.20	141.08	142.22	144.93	147.90	149.28	150.45	153.64	155.56	161.64	177.33	180.63
Education	4.04	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Personal Care	2.72	125.64	133.18	129.96	131.07	131.06	132.96	135.29	136.45	131.99	134.95	139.62
<b>Total</b>	<b>100.00</b>	<b>133.81</b>	<b>137.70</b>	<b>138.67</b>	<b>139.25</b>	<b>141.44</b>	<b>146.15</b>	<b>148.58</b>	<b>151.92</b>	<b>155.07</b>	<b>158.32</b>	<b>161.98</b>

Source: National Statistics Bureau, Thimphu

TABLE 15.6 CONSUMER PRICE INDEXES, SUB-COMPONENTS, BHUTAN, 1ST QTR. 2009 TO 3RD QTR. 2011  
YEAR ON YEAR INFLATION RATE (%)

(3rd Qtr. 2003=100)

Classification	Weight (%)	2009				2010				2011		
		1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr
Food	27.69	8.71	6.72	10.45	11.75	14.05	7.82	7.32	10.22	11.34	10.84	10.32
Bread and Cereals (ND)	7.39	12.70	7.04	7.89	10.37	10.98	7.72	8.06	7.79	9.76	13.23	11.54
Meat	3.27	8.59	24.60	23.11	21.15	20.70	0.01	4.72	5.98	5.75	3.77	2.68
Fish	1.03	12.31	8.04	10.96	18.19	15.82	16.91	13.62	8.34	10.59	5.65	5.57
Milk,cheese & Eggs	5.16	11.06	8.47	6.12	4.20	4.73	3.26	5.52	10.81	10.90	8.76	7.17
Oils and Fats	3.41	7.00	0.23	(1.00)	6.93	7.61	7.59	9.76	5.99	8.77	10.68	10.28
Fruits	1.35	10.80	2.25	11.58	9.83	37.32	14.23	1.23	8.88	11.68	6.52	19.47
Vegetables	4.12	(0.77)	(1.58)	20.42	20.09	23.88	13.21	7.37	13.96	14.40	10.84	8.77
Sugar, Jam & Etc	0.56	(6.96)	(3.68)	3.89	34.41	41.75	35.78	41.41	9.71	18.25	5.07	6.26
Food Products n.e.c (ND)	0.87	12.60	5.02	7.42	(0.76)	(0.91)	1.30	0.73	47.91	41.76	53.45	51.64
Non - Alcoholic Beverages	1.74	5.42	5.32	5.06	6.46	2.80	0.26	0.92	5.15	4.17	10.32	10.56
Alcoholic Beverages	1.22	4.90	1.02	(0.23)	(5.38)	(0.97)	0.47	1.99	5.55	5.11	2.86	12.65
Tobacco	0.33	17.04	12.52	11.73	7.97	(1.22)	-1.52	1.75	1.43	5.00	5.00	1.23
Narcotics (ND)	0.69	21.80	12.71	11.98	8.64	(1.37)	-0.62	0.90	2.38	2.54	13.76	29.44
Clothing	7.87	4.36	(1.22)	3.58	6.23	8.82	7.27	4.69	2.87	5.62	5.95	5.64
Actual Rentals for Housing	18.77	6.90	0.23	0.78	0.64	5.01	15.13	15.62	16.38	10.54	1.19	2.22
Electricity,gas&other fuels	6.04	8.65	5.37	(1.90)	(0.33)	0.11	2.51	4.44	7.85	7.55	9.17	8.15
Fules & Lubricants	3.20	16.91	(1.37)	0.26	2.62	5.81	5.79	6.01	5.18	8.28	17.87	17.57
Education	4.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Personal Care	2.72	(0.75)	1.10	(1.32)	(0.71)	4.31	-0.17	4.10	4.10	0.71	1.50	3.20
<b>Total</b>	<b>100.00</b>	<b>7.21</b>	<b>2.96</b>	<b>3.42</b>	<b>4.05</b>	<b>5.70</b>	<b>6.14</b>	<b>7.15</b>	<b>9.10</b>	<b>9.64</b>	<b>8.33</b>	<b>9.02</b>

Source: National Statistics Bureau, Thimphu

TABLE 15.7 CONSUMER PRICE INDEXES FOR FOOD ITEMS, SUB - COMPONENTS, BHUTAN 1ST QTR. 2009 TO 3RD QTR. 2011

Classification	Weight (%)	QUARTER TO QUARTER INFLATION RATE (%)											
		2009				2010				2011			
		1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
Food	27.69	(0.04)	8.03	2.84	0.62	2.03	2.13	2.37	3.34	3.06	1.68	1.88	
Bread and Cereals (ND)	7.93	3.52	3.17	1.49	1.82	4.08	0.14	1.81	1.57	5.99	3.31	0.29	
Meat	3.27	1.64	23.79	(2.86)	(0.87)	1.26	2.57	1.71	0.33	1.04	0.65	0.64	
Fish	1.03	1.44	4.67	3.52	7.52	(0.59)	5.66	0.61	2.52	1.48	0.94	0.53	
Milk,cheese & Eggs	5.16	0.50	5.42	(0.38)	(1.27)	1.01	3.94	1.80	3.67	1.10	1.93	0.32	
Oils and Fats	3.41	0.02	0.42	(0.32)	6.80	0.66	0.40	1.69	3.13	3.30	2.17	1.32	
Fruits	1.35	(5.19)	20.34	(1.27)	(2.51)	18.54	0.11	(12.50)	4.86	21.59	-4.52	-1.86	
Vegetables	4.12	(6.29)	12.72	18.19	(3.80)	(3.33)	3.00	12.09	2.11	(2.96)	(0.20)	10.00	
Sugar, Jam & Etc	0.56	(8.27)	4.40	7.91	30.08	(3.26)	0.00	0.64	0.91	4.27	-0.78	1.78	
Food Products n.e.c (ND)	0.87	0.76	0.92	3.56	(5.76)	0.61	3.17	2.98	38.37	(3.57)	11.67	1.77	
Non - Alcoholic Beverages	1.74	4.00	0.21	0.58	1.57	0.42	-2.27	1.24	5.83	(0.51)	3.49	1.46	
Alcoholic Beverages	1.22	(3.85)	1.00	0.04	(2.61)	0.63	2.47	1.55	0.79	0.21	0.28	11.22	
Tobacco	0.33	6.86	0.31	0.38	0.34	(2.23)	0.00	3.72	0.03	1.20	0.00	0.00	
Narcotics (ND)	0.69	9.70	(1.52)	0.08	0.49	(0.41)	-0.77	1.62	1.96	(0.26)	10.09	15.62	
Clothing	7.87	(2.52)	2.93	2.85	2.95	(0.14)	1.46	0.37	1.16	2.53	1.78	0.07	
Actual Rentals for Housing	18.77	0.90	(0.04)	0.05	(0.27)	5.29	9.59	0.48	0.38	0.01	0.32	1.49	
Electricity,gas&other fuels	6.04	0.10	0.48	(0.33)	(0.59)	0.55	2.89	1.55	2.67	0.26	4.44	0.60	
Fules & Lubricants	3.20	(2.11)	0.81	1.91	2.05	0.93	0.78	2.12	1.25	3.91	9.71	1.86	
Education	4.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Personal Care	2.72	(4.83)	6.00	(2.42)	0.85	(0.01)	1.45	1.75	0.86	(3.27)	2.24	3.46	
<b>Total</b>	<b>100.00</b>	<b>(0.01)</b>	<b>2.91</b>	<b>0.70</b>	<b>0.42</b>	<b>1.57</b>	<b>3.33</b>	<b>1.66</b>	<b>2.25</b>	<b>2.07</b>	<b>2.10</b>	<b>2.31</b>	

Source: National Statistics Bureau, Thimphu

## CHAPTER 16

### CRIMES

The data available in this sector are from the number of incidents reported and registered by Royal Bhutan Police and compiled by the Crime and Operations Divisions, Royal Bhutan Police from various Police stations in the country. This sector presents the details of crime statistics by various categories.

The over-all number of crime incidents reported had increased from 2,371 in 2007 to 4,199 in 2010. The figures of the crime cases are sourced from administrative records maintained by Crime and Operations Divisions, Royal Bhutan Police.

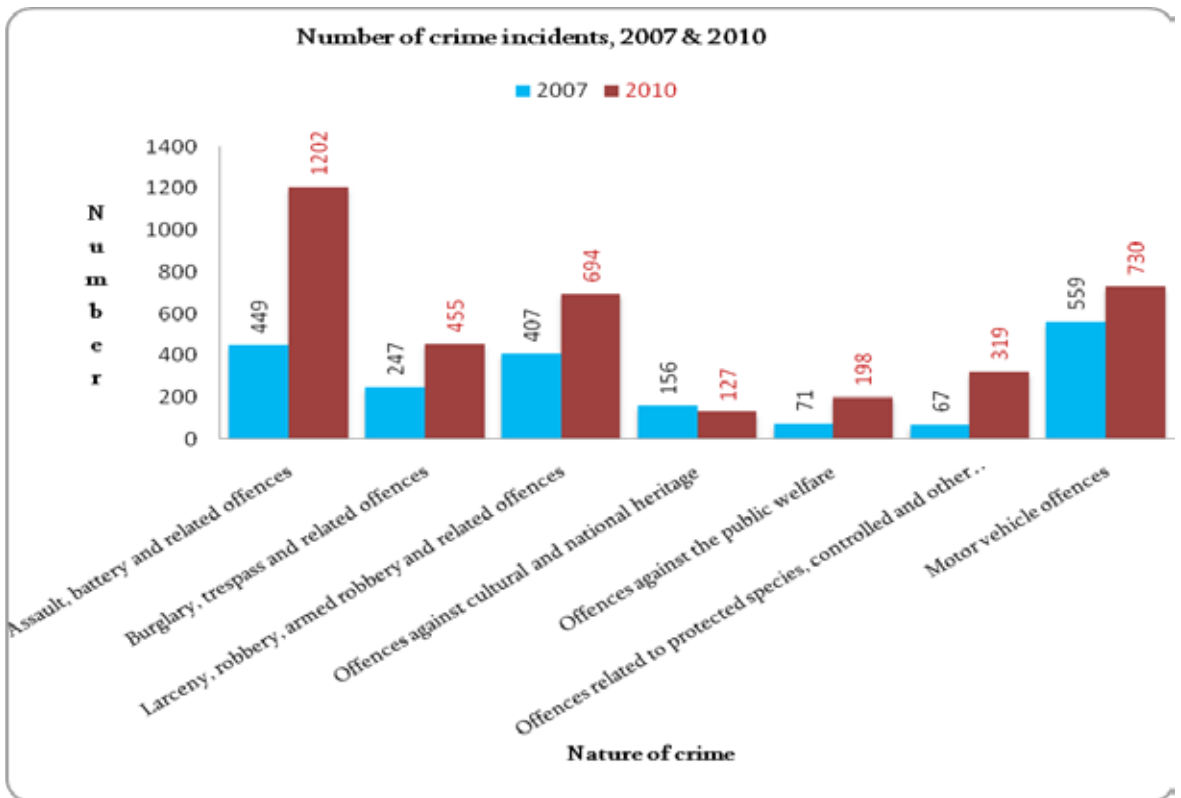


TABLE 16.1: TOTAL NUMBER OF CRIME INCIDENTS BY TYPE OF OFFENCE, BHUTAN, 2007 TO 2010

(Number of Incidents)

Nature of Crime	2007	2008	2009	2010
Attempt, Aiding And Abetting, Solicitation And Criminal Conspiracy	39	33	50	59
Homicide	14	18	16	16
Assault, Battery And Related Offences	449	440	565	1202
Kidnapping And Related Offences	5	6	14	5
Sexual Offence	40	35	50	63
Offence Against Infant, Child, Mentally Disabled And Incompetent Person	5	4	7	11
Arson And Related Offences	41	20	25	29
Burglary, Trespass And Related Offences	247	310	416	455
Larceny, Robbery, Armed Robbery And Related Offences	407	436	457	694
Money Laundering And Smuggling	16	17	7	7
Embezzlement And Bribery	8	3	5	9
Forgery And Related Offences	32	37	51	54
Defamation And Related Offences	4	5	5	6
Treason, Terrorism And Related Offences	6	16	6	2
Offences Against Cultural And National Heritage	156	168	164	127
Offences Against Judicial Authority	0	0	1	0
Prostitution And Related Offences	5	8	4	4
Offences Against The Public Welfare	71	84	86	198
Offences Related To Public And Civic Duties	2	10	21	23
Offences Related To Public Order And Tranquility	11	10	40	77
Offences Against Privacy	0	0	0	0
Computer Offences	0	1	0	1
Offences Related To Firearms And Weapons	13	38	29	28
Offences Related To Protected Species, Controlled And Other Harmful Substances	67	168	320	319
Motor Vehicle Offences	559	357	375	730
Others	174	136	126	80
<b>Total</b>	<b>2371</b>	<b>2360</b>	<b>2840</b>	<b>4199</b>

Source: Crime & Operations, Royal Bhutan Police, Thimphu.



TABLE 16.2: TYPE OF CRIMES BY TYPE OF OFFENCE, BHUTAN, 2007 TO 2010

(Number of Incidents)

Details of Crime	2007	2008	2009	2010
<b>Attempt, Aiding And Abetting, Solicitation And Criminal Conspiracy</b>				
Aiding and Abetting	0	1	3	2
Solicitation	0	0	0	0
Criminal Conspiracy	0	0	0	0
Criminal Attempted Murder	6	7	8	9
Criminal Attempted Rape	7	5	18	8
Criminal Attempted Burglary	3	7	6	10
Criminal Attempted Larceny	8	7	12	9
Criminal Attempted Suicide	15	6	3	21
<b>Total</b>	<b>39</b>	<b>33</b>	<b>50</b>	<b>59</b>
<b>Homicide</b>				
Murder	3	4	2	6
Voluntary Manslaughter	5	3	6	6
Involuntary Manslaughter	2	7	2	2
Negligent Homicide	3	3	4	0
Illegal Abortion	0	0	1	2
Custodial Death	0	0	0	0
Complicity in Suicide	0	0	0	0
Illegal Selling or Buying of Human Organs	1	1	0	0
Trafficking a Person	0	0	1	0
<b>Total</b>	<b>14</b>	<b>18</b>	<b>16</b>	<b>16</b>
<b>Assault, Battery And Related Offences</b>				
Assault	41	34	37	67
Battery	401	403	526	1,131
Reckless Endangerment	7	3	2	4
<b>Total</b>	<b>449</b>	<b>440</b>	<b>565</b>	<b>1,202</b>
<b>Kidnapping And Related Offences</b>				
Kidnapping	0	0	2	1
Abduction	0	2	0	1
Criminal Elopement	4	4	12	2
Escape from Lawful Custody	1	0	0	0
Felonious Restraint	0	0	0	0

Table 16.2 contd...

Infringement of Movement	0	0	0	1
<b>Total</b>	<b>5</b>	<b>6</b>	<b>14</b>	<b>5</b>
<b>Sexual Offence</b>				
Rape	22	11	8	10
Rape of a Married Person	1	3	4	2
Statutory Rape	4	5	5	4
Rape of a Child above twelve years of age	3	3	14	18
Rape of a Pregnant Woman	0	0	0	0
Gang Rape	2	1	2	1
Gang Rape of a Married Person	0	0	0	0
Gang Rape of a Child below 12 years of age	0	0	0	0
Gang Rape of a Child above 12 years of age	1	0	0	2
Gang Rape of a Pregnant Woman	0	0	0	0
Custodial Rape	0	0	0	0
Marital Rape	0	0	0	0
Child Molestation	4	4	6	3
Sexual Harassment	2	4	8	18
Incest	1	1	0	1
Indecent Exposure	0	1	2	1
Bestiality	0	0	0	0
Un-Natural Sex	0	2	1	3
<b>Total</b>	<b>40</b>	<b>35</b>	<b>50</b>	<b>63</b>
<b>Offence Against Infant, Child, Mentally Disabled And Incompetent Person</b>				
Abandonment of an Infant or a Child	3	1	2	3
Abandonment of Dead Infant	1	2	2	4
Child Abuse	0	0	1	1
Endangerment of a Child	0	1	2	1
Pedophilia	0	0	0	0
Trafficking of a Child	1	0	0	2
Endangerment of a Mentally Disabled or an Incompetent Person	0	0	0	0
<b>Total</b>	<b>5</b>	<b>4</b>	<b>7</b>	<b>11</b>
<b>Arson And Related Offences</b>				
Arson	5	3	2	3
Negligent Burning or Exploding	36	17	23	26

Table 16.2 contd...

<b>Total</b>	<b>41</b>	<b>20</b>	<b>25</b>	<b>29</b>
<b>Burglary, Trespass And Related Offences</b>				
Burglary	237	303	395	438
Trespass	3	5	14	14
Impersonation	7	2	7	3
<b>Total</b>	<b>247</b>	<b>310</b>	<b>416</b>	<b>455</b>
<b>Larceny, Robbery, Armed Robbery And Related Offences</b>				
Larceny	348	339	348	489
Larceny by Deception	1	2	5	1
Robbery	6	17	13	38
Armed Robbery	4	12	11	9
Extortion	0	0	1	2
Illegal Transfer of Immovable Property	0	0	0	0
Larceny of Property, Lost, Mislaid or Delivered by Mistake	3	1	2	0
Possession of Stolen Property	0	0	2	3
Theft of Service	0	0	2	3
Un-Authorized use of Property	0	0	0	1
Breach of Trust	14	16	12	15
Criminal Misappropriation of Property	2	1	0	5
Reckless Endangerment of Property	1	1	1	1
Un-Lawful Posting of Advertisements	0	0	0	0
Auto Striping	25	44	58	114
Pick Pocketing	3	3	2	13
<b>Total</b>	<b>407</b>	<b>436</b>	<b>457</b>	<b>694</b>
<b>Money Laundering And Smuggling</b>				
Money Laundering	0	0	1	0
Smuggling	12	15	4	4
Receiving of Smuggled Goods or Substances	0	0	0	0
Tax Evasion	0	0	0	0
Breach of Contract	4	2	2	3
<b>Total</b>	<b>16</b>	<b>17</b>	<b>7</b>	<b>7</b>
<b>Embezzlement And Bribery</b>				
Embezzlement	7	3	5	8
Bribery	0	0	0	1

Table 16.2 contd...

Commercial Bribery	0	0	0	0
Official Misconduct	1	0	0	0
<b>Total</b>	<b>8</b>	<b>3</b>	<b>5</b>	<b>9</b>
<b>Forgery And Related Offences</b>				
Forgery	13	10	17	8
Tampering with Public Records	0	0	0	0
Tampering with Document	0	1	0	0
Execution of a Document by Deception	0	0	0	0
Fraudulent Cheque Writing	2	2	2	2
Counterfeiting	0	1	2	1
Deceptive Practice	17	23	30	43
Fraudulent Obtaining of Insurance	0	0	0	0
Fraudulent Insolvency	0	0	0	0
Fraud Involving a Security Interest	0	0	0	0
<b>Total</b>	<b>32</b>	<b>37</b>	<b>51</b>	<b>54</b>
<b>Defamation And Related Offences</b>				
Defamation	3	4	5	6
Libel	1	0	0	0
Black Mail	0	1	0	0
False Advertising	0	0	0	0
<b>Total</b>	<b>4</b>	<b>5</b>	<b>5</b>	<b>6</b>
<b>Treason, Terrorism And Related Offences</b>				
Treason	1	2	1	0
Terrorism	1	11	0	0
Sedition	2	0	3	2
Espionage	0	0	0	0
Hijacking	0	0	0	0
Abettor of Mutiny	0	0	0	0
Harboring of Deserter	0	0	0	0
Impersonation of Uniformed Personal	0	0	0	0
Impersonation of an Official	2	3	2	0
<b>Total</b>	<b>6</b>	<b>16</b>	<b>6</b>	<b>2</b>
<b>Offences Against Cultural And National Heritage</b>				
Illegal sale of Cultural and National Heritage Property	0	1	0	0

Table 16.2 contd...

Damage to Cultural or National Heritage Property and National Monuments	0	0	0	0
Damage to Religious Objects	144	131	155	4
Offence against the Ku, Sung, Thuk-Ten or Zungs	10	16	1	116
Illegal Purchase or sale of Ku, Sung, Thuk-Ten or Zungs	0	0	0	1
Illegal Gift of Ku, Sung, Thuk-Ten or Zungs	0	0	0	2
Caretaker's Negligence causing loss or Larceny of Ku, Sung, Thuk-Ten or Zungs	0	15	1	0
Larceny of Antique	1	4	3	1
Illegal Purchase or sale of Antique	1	1	4	2
Illegal Gift of Antique	0	0	0	1
<b>Total</b>	<b>156</b>	<b>168</b>	<b>164</b>	<b>127</b>
<b>Offences Against Judicial Authority</b>				
Un-Authorized Hearing	0	0	0	0
Contempt of Court	0	0	1	0
Perjury	0	0	0	0
Cantankerous Litigation	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>
<b>Prostitution And Related Offences</b>				
Prostitution	5	2	2	1
Promotion of Prostitution	0	4	1	0
Patronizing a Prostitute	0	2	0	3
Trafficking a Person for Prostitution	0	0	0	0
Lewed and Lascivious Conduct	0	0	1	0
<b>Total</b>	<b>5</b>	<b>8</b>	<b>4</b>	<b>4</b>
<b>Offences Against The Public Welfare</b>				
Public Intoxication	0	4	4	9
Use of Tobacco or Health Hazard Substances	23	22	0	0
Illegal Sale of Tobacco or other Health Hazard Substances	4	6	6	2
Illegal Sale of Alcohol	2	0	0	1
Gambling	0	0	0	3
Malicious Mischief	39	52	75	181
Usury	0	0	0	0
Tampering with a Consumer Product	0	0	1	0
Black-Marketing	2	0	0	0

Table 16.2 contd...

Anti-Trust	0	0	0	0
Endangerment of a Public Water Source	0	0	0	0
Environment Pollution	1	0	0	0
Criminal Nuisance	0	0	0	2
<b>Total</b>	<b>71</b>	<b>84</b>	<b>86</b>	<b>198</b>
<b>Offences Related To Public And Civic Duties</b>				
Entrapment	0	0	0	0
Torture	0	0	0	2
Illegal Arrest	0	0	0	0
Hindering Prosecution	0	0	1	0
Obstruction of Lawful Authority	2	8	12	10
Obstruction of Public Service	0	0	1	2
Reporting of False Information	0	1	5	7
Failure to Assist Lawful Authority	0	0	0	0
Failure to Report a Crime	0	0	1	0
Tampering with a Dead Body	0	0	0	0
Abandonment of a Person in Danger	0	0	0	0
Malpractice	0	0	0	0
Crime Against Public Election	0	0	0	0
Illegal Immigration	0	1	1	2
Illegal Issue of Immigration Documents	0	0	0	0
Illegal Transportation of Immigrant	0	0	0	0
Drawing of illegal Document	0	0	0	0
<b>Total</b>	<b>2</b>	<b>10</b>	<b>21</b>	<b>23</b>
<b>Offences Related To Public Order And Tranquility</b>				
Breach of Public Order and Tranquility	0	0	0	0
Unlawful Assembly	0	0	0	0
Disruption of a Lawful meeting or Gathering	0	0	0	0
Failure to Disperse	0	0	0	0
Rioting	0	0	0	0
Promotion of Civil Unrest	0	0	0	1
Disorderly Conduct	3	3	6	8
Harassment	3	5	33	66
Prowling	4	1	1	2

Table 16.2 contd...

Obstruction of Through Fare	1	1	0	0
<b>Total</b>	<b>11</b>	<b>10</b>	<b>40</b>	<b>77</b>
<b>Miscellaneous Offences</b>				
Offences Against Privacy				
Eavesdropping	0	0	0	0
Unauthorized opening of Mail or Parcel	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Computer Offences				
Tampering with Computer Material	0	1	0	0
Unlawful Possession of Computer Materials	0	0	0	1
Computer Pornography	0	0	0	0
<b>Total</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>
<b>Offences Related To Firearms And Weapons</b>				
Illegal Manufacturing of a Firearms, Ammunition, Explosive or other Lethal Weapons	0	1	0	0
Illegal Possession of Firearm, Ammunition, Explosive or other Lethal Weapons	5	14	7	4
Illegal Sale or Purchase of a Firearm, Ammunition, Explosive or other Lethal Weapons	1	0	0	0
Illegal Pointing of a Firearm	0	0	0	0
Display of Weapon	7	23	22	24
False Alarm	0	0	0	0
<b>Total</b>	<b>13</b>	<b>38</b>	<b>29</b>	<b>28</b>
<b>Offences Related To Protected Species, Controlled And Other Harmful Substances</b>				
Risking the Protected Species	4	2	2	1
Illegal Hunting or Fishing	3	2	2	0
Genetic Interference	0	0	0	0
Illegal Cultivation, Production or Manufacturing	0	0	0	0
Illegal Transaction of Controlled Substances	11	79	40	23
Possession of a Controlled Substances	44	71	272	295
Adulteration of Drugs	0	0	0	0
Sale of a Prescription for a controlled Substances	0	1	0	0
Illegal Sale and use of Harmful Chemical Substance	5	13	4	0
<b>Total</b>	<b>67</b>	<b>168</b>	<b>320</b>	<b>319</b>
<b>Motor Vehicle Offences</b>				
M.V Accident	469	282	284	586

Table 16.2 contd...

M.V Accident (Fatal)	18	27	31	20
Hit and Run	60	27	35	120
Cycle Accident	0	0	0	0
Pedestrian Accident	12	19	25	4
Traffic Violation	0	2	0	0
<b>Total</b>	<b>559</b>	<b>357</b>	<b>375</b>	<b>730</b>
<b>Others</b>				
Accidental Death	42	28	28	10
Accidental Injury	1	0	1	1
Absconding	0	0	0	0
Black Magic	1	0	0	0
Copy Right Infringement	n.a	n.a	3	0
Acquiring Citizenship ID Card of Foreign Country	n.a	n.a	2	0
Drowning	32	19	12	11
Natural Calamities	1	0	0	0
Missing of Person	19	2	9	3
Un-Natural Death	28	34	22	21
Suicide	50	53	49	34
<b>Total</b>	<b>174</b>	<b>136</b>	<b>126</b>	<b>80</b>
<b>Total Crimes</b>	<b>2,371</b>	<b>2,360</b>	<b>2,840</b>	<b>4,199</b>

Source: Crime & Operations, Royal Bhutan Police, Thimphu.

TABLE 16.3: MONTHLY MOTOR VEHICLE ACCIDENTS BY TRAFFIC DIVISION, BHUTAN, 2010  
(Number of Incidents)

Traffic Divisions	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Div-I Paro	3	4	1	n.a	1	2	3	n.a	3	6	2	2	27
Div-II Punakha	n.a	n.a	1	2	1	1	1	n.a	3	n.a	n.a	1	10
Div-III Phuentsholing	12	4	2	2	2	3	5	7	14	14	7	10	82
Div-IV Samtse	1	2	n.a	n.a	n.a	1	n.a	1	1	n.a	n.a	n.a	6
Div-V Gelephu	1	n.a	1	n.a	n.a	1	1	n.a	2	1	1	n.a	8
Div-VI Tsirang	n.a	n.a	1	n.a	n.a	n.a	1	n.a	n.a	n.a	n.a	1	3
Div-VII Trongsa	n.a	n.a	2	n.a	n.a	n.a	1	n.a	1	n.a	n.a	n.a	4
Div-VIII Samdrup Jongkhar	2	n.a	n.a	1	n.a	n.a	1	n.a	n.a	n.a	n.a	n.a	4
Div-IX Trashigang	1	1	n.a	5	n.a	1	n.a	1	n.a	n.a	1	5	15
Div-X Monggar	1	3	n.a	n.a	n.a	1	2	n.a	1	n.a	3	n.a	11
Div-XI Thimphu	5	7	11	8	6	12	9	97	133	92	78	89	547
Div-XII Wangdue Phodrang	2	1	1	n.a	1	n.a	1	1	2	1	2	1	13
<b>Total</b>	<b>28</b>	<b>22</b>	<b>20</b>	<b>18</b>	<b>11</b>	<b>22</b>	<b>25</b>	<b>107</b>	<b>160</b>	<b>114</b>	<b>94</b>	<b>109</b>	<b>730</b>

Source: Crime & Operations, Royal Bhutan Police, Thimphu.



TABLE 16.4: CAUSES OF MOTOR VEHICLE ACCIDENTS BY TRAFFIC DIVISION, BHUTAN, 2010

(Number of Incidents)

Traffic division	Type of Vehicle	Mechanical fault	Drunk driving	Bad weather	Without license	Unknown causes	Other causes	All causes
Thimphu	Truck	3	8	6	2	0	44	63
	Buses	0	1	2	1	0	8	12
	Light Vehicle	5	55	6	37	0	262	365
	Two wheeler	0	0	1	2	0	9	12
	Total	8	64	15	42	0	323	452
Paro	Truck	1	3	2	0	0	0	6
	Buses	0	0	0	0	0	0	0
	Light Vehicle	0	6	1	7	0	0	14
	Two wheeler	0	1	0	2	0	0	3
	Total	1	10	3	9	0	0	23
Punakha	Truck	0	1	0	0	0	1	2
	Buses	1	0	0	0	0	0	1
	Light Vehicle	1	4	0	0	0	1	6
	Two wheeler	0	0	0	0	0	0	0
	Total	2	5	0	0	0	2	9
Phuentsholing	Truck	3	3	1	2	0	24	33
	Buses	1	0	0	0	0	2	3
	Light Vehicle	6	4	6	4	0	23	43
	Two wheeler	0	0	1	0	0	1	2
	Total	10	7	8	6	0	50	81
Samtse	Truck	2	0	0	0	0	3	5
	Buses	0	0	0	0	0	0	0
	Light Vehicle	0	0	0	1	0	1	2
	Two wheeler	0	0	0	0	0	0	0
	Total	2	0	0	1	0	4	7
Gelephu	Truck	0	0	0	0	0	0	0
	Buses	0	0	0	0	0	0	0
	Light Vehicle	0	1	0	2	0	0	3
	Two wheeler	0	0	0	0	0	0	0
	Total	0	1	0	2	0	0	3

Table 16.4 contd...

Tsirang	Truck	1	0	0	0	0	2	3
	Buses	0	0	0	0	0	0	0
	Light Vehicle	4	1	1	2	0	3	11
	Two wheeler	0	0	0	0	0	0	0
	Total	5	1	1	2	0	5	14
Trongsa	Truck	0	0	0	0	0	0	0
	Buses	0	0	1	0	0	0	1
	Light Vehicle	0	0	0	0	0	0	0
	Two wheeler	0	0	0	0	0	0	0
	Total	0	0	1	0	0	0	1
Samdrup Jong-khar	Truck	0	0	0	0	0	1	1
	Buses	0	0	0	0	0	0	0
	Light Vehicle	0	0	0	0	0	0	0
	Two wheeler	0	0	0	0	0	0	0
	Total	0	0	0	0	0	1	1
Trashigang	Truck	1	0	0	0	0	0	1
	Buses	0	0	0	0	0	0	0
	Light Vehicle	0	0	0	5	0	5	10
	Two wheeler	0	0	0	0	0	0	0
	Total	1	0	0	5	0	5	11
Monggar	Truck	0	0	0	0	0	0	0
	Buses	0	0	0	0	0	0	0
	Light Vehicle	2	1	1	3	0	8	15
	Two wheeler	0	0	0	0	0	0	0
	Total	2	1	1	3	0	8	15
Wangdue Pho-drang	Truck	1	1	1	0	0	1	4
	Buses	0	0	0	0	0	0	0
	Light Vehicle	0	0	0	0	0	4	4
	Two wheeler	0	0	0	0	0	1	1
	Total	1	1	1	0	0	6	9
<b>Total</b>		<b>32</b>	<b>90</b>	<b>30</b>	<b>70</b>	<b>0</b>	<b>404</b>	<b>626</b>

Source: Crime &amp; Operations, Royal Bhutan Police, Thimphu.



