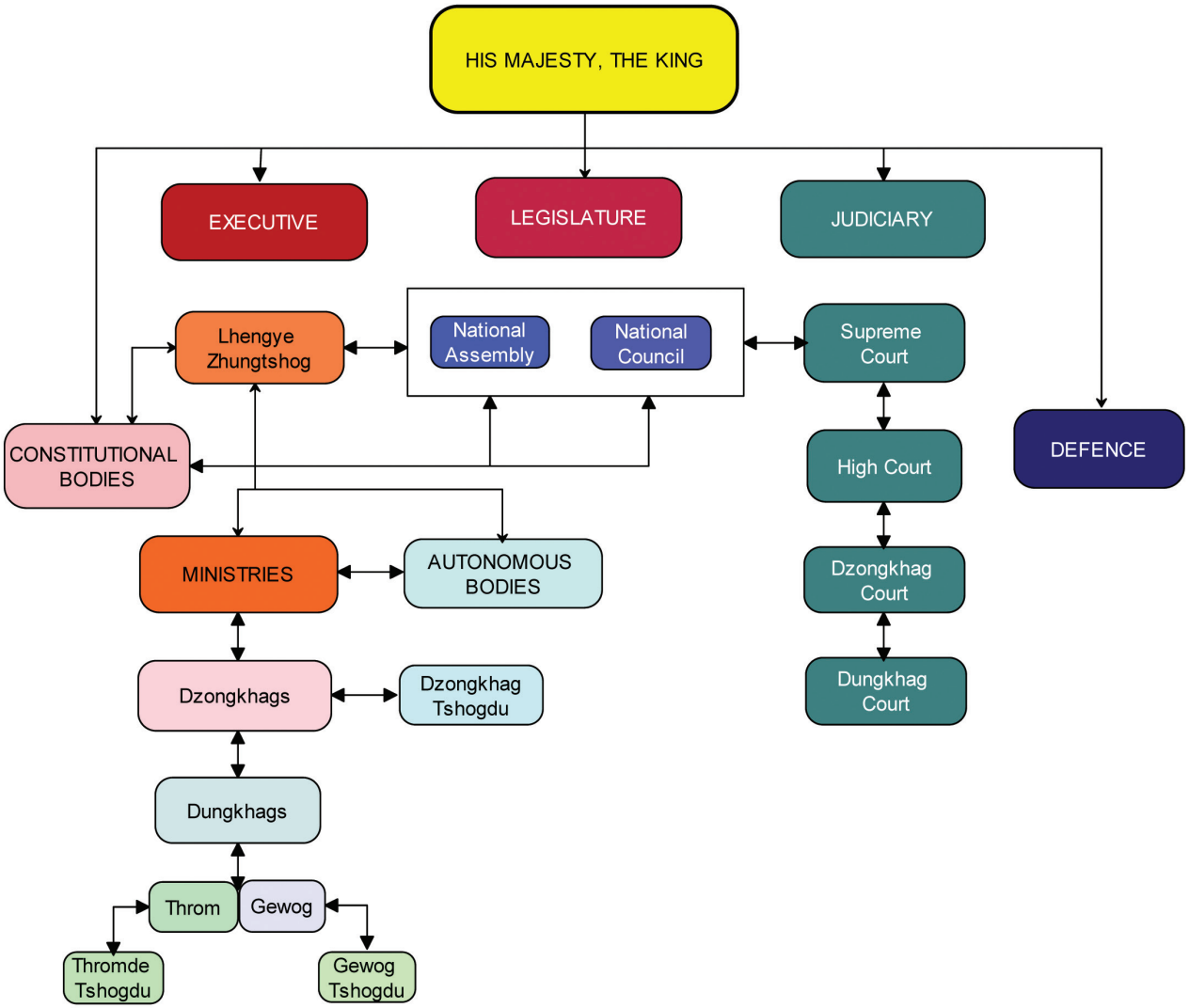
Statistical Yearbook of Bhutan 2013

National Statistics Bureau
Royal Government of Bhutan

ORGANOGRAM OF THE ROYAL GOVERNMENT OF BHUTAN
POST CONSTITUTIONAL ENACTMENT 2009



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FOREWORD

This Statistical Yearbook (SYB) Publication is the 31st edition. It is a comprehensive and systematic compendium of basic statistical information on the country's socio-economic conditions. Beginning from 2013 onwards the Statistical Yearbook of Bhutan will have separate chapter on Environmental Statistics.

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 updating 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 users.

National Statistics Bureau (NSB) would like to acknowledge the contribution of different ministries and agencies that provided data and information for SYB 2013. In order to improve the quality of the forthcoming issues, we solicit comments and suggestions from the users of this yearbook.

Director General
National Statistics Bureau

NOTES FOR USERS

1. Unless otherwise indicated, the present issue of the Yearbook contains statistics available as of December 2012.

2. For some tables, there are footnotes indicating information specific to each figure in the table.

3. The following notations are used in the tables:

   … not available/not applicable
   () negative figures
   CY calendar year (from January to December)
   FY fiscal year (from July to June, example: 2011/12)

4. Detail figures in the tables may not add up to the totals because of rounding.

5. 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: Statistical Yearbook of Bhutan 2013, National Statistics Bureau.***

6. For additional information on data or for any other queries, please refer to the original source or National Statistics Bureau.

UNITS OF MEASUREMENT

Numbering and Scientific notations

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

A. Length Measurement

I. 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
dkm	= dekameter
hm	= hectometer

II. 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

III. Conversion from British to Metric Units (lengths)

1 inch	= 2.539998 cm	1 m	= 39.3370113 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

I. 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

II. 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

III. 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

I. British Units

16 dram	= 1 ounce
16 ounces	= 1 pound
112 pounds	= 1 cwt (hundredweight)
20 cwt	= 1 ton
14 pounds	= 1 stone

II. 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

III. 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

I. Degree Celsius to degree Fahrenheit.
(9 x T)/5 + 32, where ***"T"*** is temperature in degree Celsius.

II. Fahrenheit to degree Celsius.
5 x (T - 32)/9, where ***"T"*** is temperature in Fahrenheit.

KEY FACTS ABOUT BHUTAN

Land Area	38,394 (Sq. Km)
Forest Cover	70.5%
Projected Population (in nos.), 2013	733,004
Population Growth Rate (PHCB 2005)	1.3%
Average Household Size, (BMIS, 2010)	4.6
National Language	Dzongkha
National Currency	Ngultrum (Nu.)
Number of Hospitals, 2012	32
Number of Doctors, 2012	194
Number of Civil Servants, (as of 30th June 2013)	24,856
Number of Schools, Institutes, Daycare & NFE Centers, 2012	953
Number of Teachers (Including Institutes & NFE), 2012	10,296
Number of Students (Including Institutes & NFE), 2012	218,059
Labour Force Participation Rate, (LFS 2012)	64.4
Unemployment Rate, (LFS 2012)	2.1
Telephone Sets in Use, 2012	27,005
B-Mobile Subscriber (Nos.), 2012	421,715
Tashicell Subscriber (Nos.), 2012	136,077
Postal Infrastructure (Nos.), 2012	128
Total Road Length, June 2013	10,578.3 Km
Number of Registered Vehicles, 2012	67,519
Electricity Generation, 2012	6,823.7 MU
Electricity Exports, 2012	4,924.0 MU
Tourist Arrivals (dollar paying tourist), 2012	43,943
Revenue Earned from Tourism, 2012	62.80 Mn. US $
Total Industrial Establishments, 2012	56,705
Balance of Trade, 2011/12	(24,557.37) Mn. Nu.
Exchange Rate (Calendar Year), Nu. Per US $, 2012	53.43
Gross International Money Reserves, 2011/12	769.98 Mn US $
Total Tenth Plan Budgetary Outlay (2008-2013)	146,252.2 Mn Nu.
GDP (Current Price), 2012	98,556.5 Mn. Nu
Average Inflation Rate *(Year on Year, 2nd Qtr.)*, 2013	5.5 %
Purchasing Power of Nu., 2011 (Base Year =2003)	0.55 Nu.

BHUTAN

Location and Extent

Bhutan is a small and landlocked country, situated between China *(Tibet)* and India. It has an area of 38,394 square kilometers. It has east-west dimension (longest) 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 shares 470 kilometers long border with Tibet *(China's Xizang Autonomous Region)* in the north and northwest, 605 kilometers with the Indian state of Sikkim in the west, West Bengal in the southwest, Assam in the south and southeast, and Arunachal Pradesh in the east.

About 70 percent of the Kingdom is covered with forests; 7 percent with year-round snow and glaciers; nearly 3 percent is cultivated or Agriculture areas; and 4 percent as meadows and pastures, while rest of the land is either barren, rocky or scrubland.

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.

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. 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 Himayalan 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.

Climate and Vegetation

The country is divided into three distinct climatic zones: alpine, temperate and subtropical zone. Bhutan's climate is as varied as its altitudes and, like most of Asia, it is affected by the monsoons. The climate is humid and subtropical in the southern plains and foothills, temperate in the inner Himalayan valleys of the central regions, and cold in the north, with year-round snow on the main Himalayan range.

Temperatures vary according to elevation. 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 alpines 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.

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.

Government

On 17th December 1907, the civil and monastic representatives unanimously crowned Ugyen Wangchuck as the first hereditary monarch of Bhutan. It was the strength and the farsightedness of Ugyen Wangchuck that for the first time Bhutan was united under a central authority providing the country with stability and opportunity for development. In 1926 his son Jigme Wangchuck 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 established 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 then. His Majesty's philosophy of Gross National Happiness guided Bhutan into the 21st 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 was eventually enacted in 2008. The King abdicated the throne in favour of the 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. The head of government is the Prime Minister, who is elected from the ruling political party.

Administrative System

The administrative system in the country consists of Central Government and Local Government. The Central Government comprises of Ministries, Departments and Autonomous bodies. The Local Government comprises of Dzongkhag Tshogdu, Gewog Tshogde and the Dzongkhag Thromde Tshongde.

In order to plan and review the development activities most efficiently in the Dzongkhag, the Dzongkhag Tshogdu was established in 1981. The Dzongkhag Tshogdu compromises of elected representatives of the people with its chairman elected among the Gups. Similarly, the Gewog Tshogde was established in 1991 to further decentralize the decision making process. The Gewog Tshogde comprises of Gup, Mangmi and Tshogpas. The main role of the Gewog Tshogde is to plan, prioritize and implement the developmental activities in their respective Gewogs.

The National Assembly

The National Assembly (Gyelyong Tshogdu) consists of 47 members who are elected representatives from the 47 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 Dzongkhag. It also deliberates on issues that affect the security and well-being of the country and promotes 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 session 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 and is assisted by a Deputy Speaker. The day to day administration of the National Assembly rests with the secretariat which is headed by a secretary.

The National Council

The National Council was established in 2008 under Article 11 of the Constitution of Bhutan. There are 25 members of which 20 are elected by the people from 20 Dzongkhags and the remaining 5 are nominated by His Majesty, the Druk Gyalpo. Their tenure is for five years which commences from the date of the first sitting. 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 polices 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. The National Council has seven working committees; namely the *House Committee, the Legislative Committee, the Economic Affairs Committee, the Social & Cultural Affairs Committee, the Natural Resources and Environment Committee, the Good Governance Committee and the Foreign Relation 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.

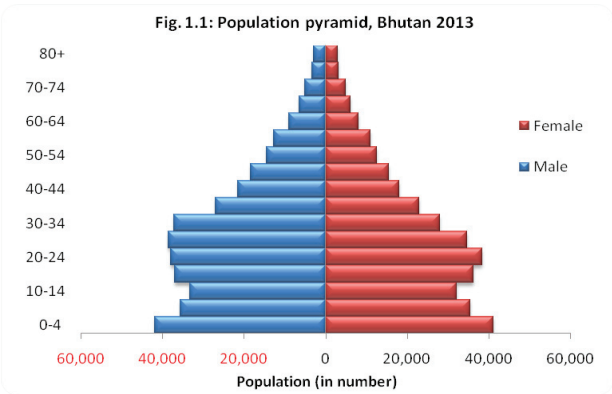
The Monastic Body

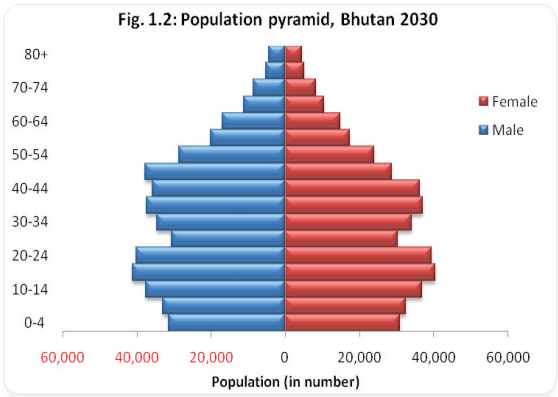
The Monastic Body comprises of the Central Monastic Body and the Rabdeys (Dzongkhag Monastic Body). The Central Monastic Body receives annual subsidy from the Government to manage and run its day to day affairs. The Monastic Body is the sole arbiter on religious matters. The Je-Khenpo (Chief Abbots) is the head of the monastic body and is responsible for the nation's religious affairs. He is chosen from among high ranking monks. Apart from being thoroughly versed in all branches of religious scholarship and practice the candidate must also have undergone prolonged mediation. The present Je-Khenpo Trulku Jigme Chhoeda is the 70th in succession. He was appointed in 1996.

The Je-Khenpo is assisted by five high-ranking Lopens (masters) viz. Dorji Lopen *acts as Deputy Je-Khenpo and the chief of all Lopens (masters)*, Yangbi Lopen *heads the liturgical division inclusive of Sacred Dances, Rituals Arts, and Metrical Ryhme*, Drabi Lopen *heads Lexicographical division that includes literature, grammar, lexicon, metrics and prosody*, Tshenyi Lopen *heads the division of Metaphysics and Logic* and Tsugla Lopen *is responsible for the higher studies of the monastic Body*. There are also monastic bodies in the Dzongkhags headed by Lam Neeten. He is assisted by Umzey, Kudrung and the lopens (teachers) of different areas.

CHAPTER 1
POPULATION

This chapter contains 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 conducted every ten years. The Population and Housing Census in Bhutan was first conducted in May 2005 as per the UN standards and had been enumerated using both de facto and de jure method. The census provides a complete 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 also used as a benchmark for making population estimates in non-census years and for population projections.





The other aspects 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).

The Statistics presented in this chapter are from the Population and Housing Census of Bhutan 2005. The actual resident population enumerated as of 30th and 31st 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 exponential growth rate of 1.8% derived from population projections (2005-2030), the population for 2012 and 2013 were projected at 720,679 and 733,004 respectively.

The Interpretations of Demographic Indicators are:

Crude Birth Rate:	Number of live births in a year per thousand population.
General Fertility Rate:	Number of live births in a year per thousand women in the childbearing age (15 to 49).
General Marital Fertility Rate:	A ratio of number of births to 1000 married women in the reproductive ages.
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 population.
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 persons 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		
	Male	Female	Total	Male	Female	Total
2010	363,383	332,439	695,822	52.2	47.8	100
2011	369,476	338,789	708,265	52.2	47.8	100
2012	375,554	345,125	720,679	52.1	47.9	100
2013	381,582	351,422	733,004	52.1	47.9	100
2014	387,520	357,633	745,153	52.0	48.0	100
2015	393,324	363,718	757,042	52.0	48.0	100
2016	398,948	369,629	768,577	51.9	48.1	100
2017	404,347	375,319	779,666	51.9	48.1	100
2018	409,474	380,741	790,215	51.8	48.2	100
2019	414,293	385,861	800,154	51.8	48.2	100
2020	418,760	390,637	809,397	51.7	48.3	100
2021	423,085	395,285	818,370	51.7	48.3	100
2022	427,250	399,788	827,038	51.7	48.3	100
2023	431,247	404,132	835,379	51.6	48.4	100
2024	435,058	408,305	843,363	51.6	48.4	100
2025	438,679	412,297	850,976	51.6	48.4	100
2026	442,200	416,210	858,410	51.5	48.5	100
2027	445,626	420,036	865,662	51.5	48.5	100
2028	448,965	423,794	872,759	51.4	48.6	100
2029	452,224	427,483	879,707	51.4	48.6	100
2030	455,409	431,114	886,523	51.4	48.6	100

Source: Population Projections of Bhutan, 2005-2030, NSB

Table 1.2: Projected Population by Age Group and Sex, Bhutan (2012 - 2013)

(in numbers)

Age group	2012			2013		
	Male	Female	Total	Male	Female	Total
0-4	41,610	40,949	82,559	41,801	41,135	82,936
5-9	33,872	33,595	67,467	35,670	35,441	71,111
10-14	33,974	32,972	66,946	33,224	32,141	65,365
15-19	37,645	36,962	74,607	36,868	36,222	73,090
20-24	37,422	38,477	75,899	37,879	38,475	76,354
25-29	39,398	33,028	72,426	38,429	34,676	73,105
30-34	35,205	27,328	62,533	37,169	27,978	65,147
35-39	25,337	21,536	46,873	26,978	22,918	49,896
40-44	21,354	17,883	39,237	21,490	18,071	39,561
45-49	17,280	14,792	32,072	18,396	15,591	33,987
50-54	14,384	12,547	26,931	14,379	12,608	26,987
55-59	12,068	10,637	22,705	12,590	11,061	23,651
60-64	8,535	7,632	16,167	8,974	8,070	17,044
65-69	6,460	6,100	12,560	6,485	6,049	12,534
70-74	4,894	4,676	9,570	4,986	4,850	9,836
75-79	3,259	3,138	6,397	3,289	3,141	6,430
80+	2,857	2,873	5,730	2,975	2,995	5,970
Total	**375,554**	**345,125**	**720,679**	**381,582**	**351,422**	**733,004**

Source: Population Projections of Bhutan, 2005-2030, NSB

Table 1.3: Crude Birth Rate by Area and Dzongkhag, 2005

Dzongkhag	Urban	Rural	Both
Bumthang	21.2	16.5	17.7
Chhukha	16.6	16.9	16.8
Dagana	18.6	24.5	23.8
Gasa	24.9	22.8	23.1
Ha	16.4	17.9	17.6
Lhuentse	13.6	21.6	20.9
Monggar	19.6	23.1	22.4
Paro	20.5	16.5	16.8
Pema Gatshel	23.9	17.3	18.3
Punakha	12.7	20.5	19.8
Samdrup Jongkhar	28.5	18.4	21.4
Samtse	21.2	19.4	19.7
Sarpang	20.9	17.2	19.5
Thimphu	19.1	17.2	19.8
Trashi Yangtse	21.5	24.5	24.0
Trashigang	21.5	21.8	21.3
Trongsa	19.3	24.5	21.8
Tsirang	32.4	19.4	20.6
Wangdue Phodrang	23.3	20.1	20.9
Zhemgang	14.8	21.5	20.3
Bhutan	**19.6**	**19.8**	**19.7**

Source: Socio-Economic and Demographic Indicators 2005, NSB

Table 1.4: General Fertility Rate (GFR), General Marital Fertility Rate (GMFR) and Total Fertility Rate (TFR) by Area and Dzongkhag, 2005

Dzongkhag	GFR (per 1000 women)			GMFR (per 1000 women)			TFR (per women)		
	Urban	Rural	Both	Urban	Rural	Both	Urban	Rural	Both
Bumthang	89.9	73.0	77.5	142.9	133.9	136.6	2.6	2.4	2.5
Chhukha	58.7	81.2	69.5	95.7	118.0	107.1	1.7	2.5	2.1
Dagana	68.1	100.9	96.5	144.5	140.5	140.8	3.0	3.2	3.1
Gasa	116.3	100.3	102.3	172.4	148.7	151.6	2.7	3.1	3.1
Ha	56.2	78.6	72.8	125.4	117.6	119.1	2.5	2.5	2.5
Lhuentse	52.9	94.0	89.7	103.6	146.7	143.0	2.1	3.2	3.1
Monggar	69.5	95.5	89.9	139.6	145.0	144.0	2.5	3.1	3.0
Paro	82.9	64.2	65.6	134.2	117.3	118.7	2.2	2.1	2.1
Pema Gatshel	95.9	74.3	77.7	173.6	121.0	128.6	3.4	2.7	2.8
Punakha	39.8	84.0	78.5	127.2	139.6	138.8	1.8	2.8	2.7
Samdrup Jongkhar	112.1	77.5	88.1	150.0	112.6	124.7	2.9	2.6	2.8
Samtse	72.2	78.1	77.0	111.2	115.2	114.4	2.0	2.4	2.3
Sarpang	78.0	76.5	77.0	117.1	107.4	110.5	2.2	2.3	2.3
Thimphu	68.9	79.6	70.2	119.8	126.3	120.7	2.0	2.4	2.0
Trashigang	64.3	91.1	86.8	146.3	138.8	139.7	2.4	3.1	3.0
Trashi Yangtse	78.9	107.1	101.5	171.5	164.2	165.3	3.1	3.7	3.5
Trongsa	77.6	96.5	92.5	123.8	162.7	154.1	2.3	3.1	3.0
Tsirang	114.6	78.0	81.7	166.2	118.0	123.0	3.2	2.6	2.7
Wangdue Phodrang	97.2	83.4	86.7	146.3	137.2	139.6	2.9	2.8	2.8
Zhemgang	54.6	95.3	86.8	112.1	140.2	135.7	2.0	3.2	3.0
Bhutan	**71.5**	**83.5**	**79.4**	**121.7**	**19.8**	**19.7**	**2.1**	**2.7**	**2.5**

Source: Socio-Economic and Demographic Indicators 2005, NSB

Table 1.5: Age Specific Fertility Rate (Per 1000 Women) by Age Group and Dzongkhag, 2005

Dzongkhag	15-19	20-24	25-29	30-34	35-39	40-44	45.49
Bumthang	26.7	134.3	138.0	103.3	63.1	27.4	9.4
Chhukha	32.8	121.0	114.0	69.6	39.3	28.8	6.2
Dagana	58.7	193.5	138.3	114.4	64.0	45.8	11.8
Gasa	37.3	240.3	138.5	106.8	54.1	49.2	0
Ha	28.1	144.4	147.7	74.9	40.9	47.8	8.4
Lhuentse	37.9	193.8	137.4	103.4	89.4	37.0	14.7
Monggar	44.4	153.4	172.4	108.7	70.2	35.5	11.2
Paro	22.0	107.2	129.3	86.7	45.8	19.5	7.0
Pema Gatshel	28.2	169.2	139.3	88.5	75.2	48.2	10.1
Punakha	29.0	149.2	145.1	115.6	65.9	35.6	7.3
Samdrup Jongkhar	45.1	161.8	146.6	99.4	52.5	40.2	15.4
Samtse	50.5	138.1	131.7	73.0	40.2	23.7	9.2
Sarpang	45.6	147.9	135.0	74.8	34.6	10.9	7.7
Thimphu	22.4	101.3	139.9	74.9	41.3	19.6	6.0
Trashigang	35.9	151.6	168.2	100.4	73.0	46.5	14.8
Trashi Yangtse	38.7	182.8	190.9	138.8	92.5	50.1	9.6
Trongsa	55.5	168.5	147.2	97.7	72.8	33.9	21.9
Tsirang	48.3	148.2	145.4	89.2	59.4	27.0	13.7
Wangdue Phodrang	35.3	168.1	151.7	107.3	65.5	24.6	4.6
Zhemgang	39.2	170.2	153.1	103.0	64.7	51.8	16.6
URBAN	22.1	115.3	138.8	78.1	39.5	18.8	7.1
RURAL	44.9	154.4	143.2	95.3	61.3	35.3	10.7
Bhutan	**36.5**	**138.9**	**141.6**	**89.4**	**54.5**	**31.3**	**9.9**

Source: Socio-Economic and Demographic Indicators 2005, NSB

Table 1.6: Crude Death Rate (CDR) by Area and Dzongkhag, 2005

Dzongkhag	Urban	Rural	Both
Bumthang	5.5	7.3	6.8
Chhukha	5.6	7.5	6.6
Dagana	4.8	7.9	7.5
Gasa	12.4	11.4	11.6
Ha	4.4	8.1	7.3
Lhuentse	2.7	8.9	8.3
Monggar	4.1	8.6	7.7
Paro	10.9	6.5	6.9
Pema Gatshel	3.9	8.6	7.9
Punakha	4.8	8.0	7.7
Samdrup Jongkhar	5.9	6.5	6.3
Samtse	8.2	7.7	7.8
Sarpang	4.1	5.9	5.3
Thimphu	5.3	8.3	5.7
Trashigang	3.7	9.4	8.6
Trashi Yangtse	8.6	9.4	9.2
Trongsa	1.9	9.1	7.7
Tsirang	4.8	6.9	6.7
Wangdue Phodrang	5.6	8.3	7.7
Zhemgang	3.0	7.2	6.4
Bhutan	**5.3**	**7.9**	**7.1**

Source: Socio-Economic and Demographic Indicators 2005, NSB

Table 1.7: Natural Population Growth Rate by Area and Dzongkhag, 2005

Dzongkhag	Urban	Rural	Both
Bumthang	1.6	0.9	1.1
Chhukha	1.1	0.9	1.0
Dagana	1.4	1.7	1.6
Gasa	1.3	1.1	1.2
Ha	1.2	1.0	1.0
Lhuentse	1.1	1.3	1.3
Monggar	1.6	1.5	1.5
Paro	1.0	1.0	1.0
Pema Gatshel	2.0	0.9	1.0
Punakha	0.8	1.3	1.2
Samdrup Jongkhar	2.3	1.2	1.5
Samtse	1.3	1.2	1.2
Sarpang	1.7	1.3	1.4
Thimphu	1.4	0.9	1.3
Trashigang	1.4	1.2	1.3
Trashi Yangtse	1.3	1.5	1.5
Trongsa	1.7	1.3	1.4
Tsirang	2.8	1.3	1.4
Wangdue Phodrang	1.8	1.2	1.3
Zhemgang	1.2	1.4	1.4
Bhutan	**1.4**	**1.2**	**1.3**

Source: Socio-Economic and Demographic Indicators 2005, NSB

Table 1.8: Infant Mortality (IMR), Child Mortality Rate (CMR) and Under 5 Mortality Rate (U5MR) by Dzongkhag, 2005

Dzongkhag	IMR (< 1 yr)	CMR (1-4 yr)	U5MR (< 5 yr)
Bumthang	28.1	10.5	38.6
Chhukha	30.4	58.5	88.9
Dagana	46.3	25.9	72.2
Gasa	0	13.9	13.9
Ha	14.6	39	53.7
Lhuentse	49.8	12.5	62.3
Monggar	50.5	20.4	70.9
Paro	21.2	6.5	27.7
Pema Gatshel	36.8	12.3	49
Punakha	28	6.5	34.5
Samdrup Jongkhar	69.1	18	87
Samtse	33.8	22.8	56.7
Sarpang	51	22.1	73.1
Thimphu	30.8	13.7	44.5
Trashigang	64.5	24.1	88.6
Trashi Yangtse	30.5	11.7	42.3
Trongsa	41.1	3.4	44.5
Tsirang	23.4	13	36.5
Wangdue Phodrang	53.8	18.5	72.3
Zhemgang	34.4	23.8	58.2
Bhutan	**40.1**	**21.5**	**61.6**

Source: Socio-Economic and Demographic Indicators 2005, NSB

CHAPTER 2
HEALTH

Guided by the national development philosophy of Gross national Happiness, the health sector envisions building "a healthy and happy nation through a dynamic professional health system with attainment of highest standard of health for the people within the broader framework of overall national development, in the spirit of social justice and equity."

Since the early years (1960s) of Allopathic, the modern health care development in Bhutan, the health programmes and interventions have focused on the preventive aspects of health care and services including, the prevention of morbidity, the promotion of positive determinants of health, and the control of infectious disease. These measures were further being reinforced after being signatory to the Alma Ata declaration in 1978.

There have been a continuous efforts and remarkable strides in improving the modern health care systems and services since then. The Ministry of Health has now a wide spread network of Health Facilities covering around 95 percent of the total population within the three hours walking distance of the health facility. Institutional health facilities were earlier concentrated in the urban agglomerated centers, 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 three-tiered system with National Referral Hospital at the apex, regional referral hospitals, district hospitals, and Basic Health Units (BHUs) at the Community Level. BHUs serve remote populace and are staffed by well-trained health personnel who are equipped to treat minor ailments and advice on preventive measures to avoid the spread of communicable diseases. Extended Health Centers such as Out Reach Clinics (ORCs) and Sub-posts support these BHUs.

There are also numbers of special health programs in Bhutan administered by the Ministry of Health. These mainly cover Expanded Program on Immunization (EPI), Reproductive Health (RH), Acute Respiratory Infection (ARI) later upgraded to Integrated Management of Neonatal and Childhood Illness (IMNCI), National HIV/AIDS & STIs Control Program (NACP), National Tuberculosis Control Program (NTCP), National Leprosy Program, Rural Water Supply & Sanitation Program (RWSS), Village Health Workers Program (VHW), Vector Borne Disease Control Program (VDCP), Mental Health Program, among others.

As of 2012, there were 32 hospitals, 192 BHUs and over 550 ORCs spread across 20 dzongkhags and 205 gewogs providing primary health care services. Besides the allopathic system, there exists a well established network of Indigenous medical facilities and services integrated within the main health systems. The Institute of Traditional Medicine Services (ITMS) serves as the institution for the promotion of traditional medicine such as providing training and research of the Indigenous Physicians (Drungtshos) and sMenpas (Sowa 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 deaths 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' routine records maintained in hospitals and BHUs whose data are ultimately presented in the annual publication "Annual Health Bulletin Series", published by Ministry of Health.

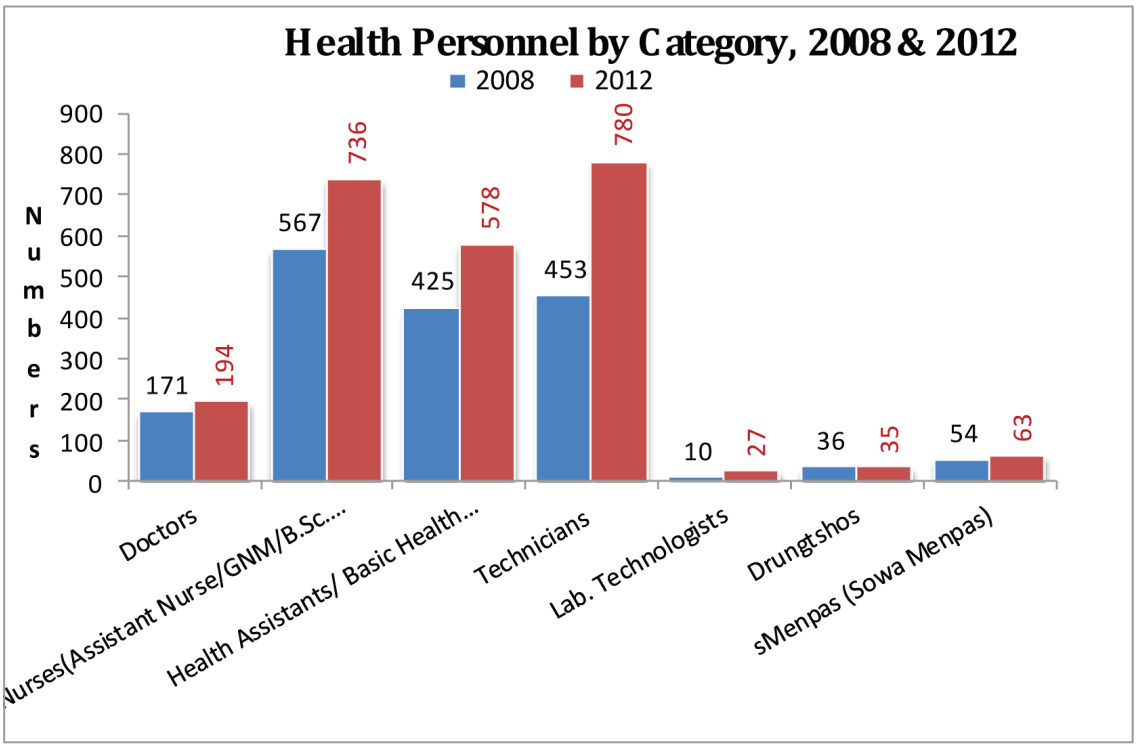

Health Personnel by Category, 2008 & 2012
2008
2012
Numbers
900
800
700
600
500
400
300
200
100
0
171
194
567
736
425
578
453
780
10
27
36
35
54
63
Doctors
Nurses(Assistant Nurse/GNM/B.Sc....
Health Assistants/ Basic Health...
Technicians
Lab. Technologists
Drungtshos
sMenpas (Sowa Menpas)

Table 2.1: Summary of Health Facilities and Personnel, Bhutan (2008-2012)

(Numbers)

Facilities	2008	2009	2010	2011	2012
Number of Hospitals [1]	31	31	31	31	32
Number of Basic Health Units [2]	178	181	181	184	192
Number of Outreach Clinics	519	518	518	517	550 [3]
Number of Indigenous Units	**35**	**37**	**38**	**46**	**48**
Persons per doctor	3,924	3,883	3,844	3,849	3,754
Number of hospital beds available	1,166	1,186	1,186	1,277	1,296
Nurses per (10,000) persons	8.4	8.1	8.0	10.2	10.2
Ratio of beds per nurse	2.1	2.1	2.3	1.8	1.7
Ratio of nurses per doctor	3.3	3.2	3.0	4.0	3.8
Persons per hospital bed	**576**	**576**	**587**	**555**	**556**
Doctors per 10,000 persons	3	3	3	3	3
Hospital bed per 10,000 persons	17	17	17	18	18
proportion of population within 3 hrs walking distance of a health facility (%)	90	>90	>90	>90	>90
Population access to safe drinking water (%)	83	83	88	88	94
Deliveries attended by trained personnel(%)	66	66	70	70	81

[1] Indigenous hospital included under hospital
[2] Satellite Clinics included under BHU
[3] 76 ORCs without shed are also included
Source: Annual Health Bulletin 2013, MoH, Thimphu.

Table 2.2: Type of Health Facilities by Dzongkhag, Bhutan 2012

(Numbers)

District	Facility Type				ORC with shed	ORC without shed
	Hospital	BHU I	BHU	Ind. Unit		
Bumthang	1	0	5	3	12	1
Chhukha	3	1	12	4	37	7
Dagana	1	2	7	3	27	3
Gasa	0	1	3	1	2	7
Haa	1	1	3	1	6	11
Lhuntse	1	0	11	2	32	1
Monggar	1	1	23	4	49	5
Paro	1	0	3	1	20	5
Pema Gatshel	1	1	11	4	29	5
Punakha	1	0	6	1	11	0
Samdrup Jongkhar	2	2	8	4	27	4
Samtse	3	0	9	2	41	0
Sarpang	2	0	11	1	11	2
Thimphu	5[1]	1	9[2]	1	6	12
Trashigang	3	2	17	4	54	0
Trashi Yangtse	1	0	7	2	26	0
Trongsa	1	0	6	3	21	0
Tsirang	1	0	6	1	12	1
Wangdue Phodrang	2	0	9	2	23	5
Zhemgang	1	2	12	4	28	7
Total	**32**	**14**	**178**	**48**	**474**	**76**

Note:[1]Indigenous hospital included under hospital,
[2]Satellite Clinic included under BHU
Source: Annual Health Bulletin 2013, MoH, Thimphu.

Table 2.3: Health Personnel by Category, Bhutan (2008-2012)

(Numbers)

Health personnel	2008	2009	2010	2011	2012
Doctors (MBBS/Specialist)[1]	171	176	187	181	194
Health Assistant	425	505	366	408	416
Basic Health Worker			169	164	162
Physiotherapists	...	…	6	6	10
Nurses (Assistant Nurse/GNM/B.Sc. Nurse)	567	556	556	723	736
Assistant Clinical Officers (ACO)	43	45	44	41	39
Pharmacists	14	12	11	11	11
Technicians	453	549	679	681	780
Medical Lab. Technologists	10	13	14	14	27
Drungtshos (Indigenous Physicians)	36	41	43	38	35
sMenpas (Sowa Menpas)	54	52	63	56	63

Note: [1]Includes all medical doctors registered and certified by the Bhutan Medical and Health Council.
Source: Annual Health Bulletin 2013, MoH, Thimphu.

Table 2.4: Top Ten Morbidity, Bhutan 2012

(Numbers)

Diseases	2012
Common Cold	291,528
Skin Infections	104,141
Other Musculo-skeletal disorders	83,371
Other Disorders of Skin & Subcutaneous-tissues	77,146
Other Diseases of the Digestive System	77,041
Acute Pharyngitis/Tonsilitis	70,326
Peptic Ulcer Syndrome	69,110
Diarrhoea	64,002
Other Nervous including Peripheral Disorders	55,802
Other Respiratory & Nose Diseases	55,266

Source: Annual Health Bulletin 2013, MoH, Thimphu.

Table 2.5: Top Ten Inpatient Hospital Mortality, Bhutan 2012

(Numbers)

Diseases	2012
Alcohol Liver Diseases	133
Other Respiratory & Nose Diseases	88
Other Circulatory Diseases	85
Neonatal Death	81
Other Cancers	77
Pneumonia	72
Other Kidney, UT/ Genital Disorders	63
Other Diseases of the Digestive System	58
Cerebro-vascular Diseases	45
Other Infections (excluding ear, brain, STI)	42

Source: Annual Health Bulletin 2013, MoH, Thimphu.

Table 2.6: Total Morbidity by Sex, Bhutan 2012

(Numbers)

Name of Diseases	Under 1 Yr		1 – 4 Yrs		5 – 14 Yrs		15 – 49 Yrs		50 - 64 Yrs		65 + Yrs		Total
	M	F	M	F	M	F	M	F	M	F	M	F	
Infections													
Diarrhoea	2,957	2,738	7,385	6,473	8,324	7,551	11,721	10,328	2,043	1,999	1,247	1,236	64,002
Dysentery	451	440	1,352	1,223	1,474	1,217	4,094	3,421	956	825	526	473	16,452
Tuberculosis	2	6	5	12	23	37	371	341	74	33	38	45	987
Genital Ulcer/Bubo	0	1	2	0	5	3	93	174	17	10	1	0	306
Urethal/Vaginal Discharges	0	2	3	2	2	15	793	990	62	43	5	4	1,921
Other Sexually Transmitted Disease, excluding HIV/AIDS	5	1	2	0	6	3	388	281	34	18	8	2	748
Rickettsial Disease	0	1	11	9	25	15	59	78	8	8	2	2	218
Viral, Protozoal & Helminthic disease													
Chicken Pox	27	28	168	178	639	586	260	193	9	3	4	3	2,098
Viral Hepatitis	48	51	27	13	60	35	80	61	8	6	8	2	399
Plasmodium falciparum malaria	1	0	2	2	7	4	23	17	2	2	0	1	61
Other Malaria	2	0	3	2	5	5	31	19	2	3	2	1	75
Visceral Leishmaniasis	0	0	0	0	3	2	13	5	2	1	1	0	27
Intestinal Worms	25	32	537	500	1,026	934	1,661	1,846	431	403	202	129	7,726
Scabies	54	40	308	289	1,461	909	1,728	1,176	311	191	289	111	6,867

Table 2.6: contd...

Streptococcus Group A	9	0	10	6	9	16	36	35	6	5	1	0	133
Other Infections (excluding ear, brain, STI)	311	308	741	699	1,674	1,610	3,439	3,615	647	552	301	220	14,117
Neoplasm													
Cervical Cancer	0	0	0	0	0	0	0	44	0	19	0	0	63
Other Cancers	1	1	13	7	13	15	53	102	95	90	106	75	571
Blood diseases													
Neoplasm (benign + CIS)	0	0	2	3	3	13	40	106	17	19	35	11	249
Nutritional Anaemia	49	37	223	202	410	564	1,958	5,455	629	985	470	555	11,537
Blood & Immune Disorders	10	7	16	18	44	64	185	377	57	71	47	51	947
Endocrine, Metabolic & Nutritional													
Diabetes	1	0	0	0	2	6	607	689	957	944	451	440	4,097
Malnutrition (exclude child clinic attendance)	34	21	44	56	28	45	80	104	18	19	10	10	469
Other Nutritional & Metabolic Disorders	48	39	68	72	154	152	512	637	83	62	36	28	1,891
Mental disorders													
Mental and behavioral disorder due to alcohol	0	0	0	0	0	2	296	79	51	21	10	4	463

Table 2.6: contd...

Mental and behavioral disorder due to multiple drug use & other use of psychoactive substances	0	0	0	0	5	1	83	17	3	1	0	0	110
Psychosis	0	0	1	1	1	2	39	38	1	7	4	0	94
Depression	0	0	0	0	14	6	169	275	27	51	6	11	559
Anxiety	0	0	1	2	7	31	221	368	47	33	6	13	729
Other Mental Disorders	1	1	9	10	21	38	320	492	61	83	25	28	1,089
Disease of Nervous system													
Meningitis/ Encephalitis	28	25	15	9	31	22	55	80	17	14	14	6	316
Epilepsy	9	3	33	23	77	59	430	475	51	24	22	9	1,215
Other Nervous inlcuding Peripheral Disorders	95	119	387	449	3,186	3,734	13,283	24,174	3,331	3,870	1,577	1,597	55,802
Eye & Ear Diseases													
Conjunctivitis	750	741	1,452	1,441	3,516	3,400	8,474	11,131	2,047	2,263	1,358	1,565	38,138
Cataract	2	1	8	6	28	14	85	95	99	128	222	197	885
Other Eye Disorders	412	392	884	944	3,326	3,340	9,468	12,484	2,671	3,289	2,297	2,488	41,995
Otitis Media	455	445	1,058	1,051	2,384	2,109	3,168	2,887	401	341	197	136	14,632
Other Ear Disorders	212	213	674	607	1,785	1,840	3,403	3,747	633	604	363	303	14,384
Diseases of Circulatory System													

Table 2.6: contd...

Rheumatic Heart Disease	3	4	7	7	21	34	187	268	37	63	47	40	718
Hypertension	0	0	0	0	106	72	5,170	7,302	3,915	4,777	2,790	2,891	27,023
Ischaemic Heart Diseases	0	0	0	0	8	7	81	85	70	68	65	63	447
Cerebro-vascular Diseases	2	3	3	4	4	2	47	34	49	26	84	76	334
Other Circulatory Diseases	62	101	153	98	528	592	1,372	2,072	460	441	430	522	6,831
Respiratory diseases													
Common Cold	10,934	9,585	21,189	20,751	34,175	36,298	60,165	66,024	11,218	10,691	5,536	4,962	291,528
Acute Pharyngitis / Tonsilitis	747	752	2,573	2,575	8,308	8,980	17,552	21,209	2,855	2,686	1,148	941	70,326
Pneumonia	2,385	1,972	2,899	2,683	854	615	691	604	247	252	214	206	13,622
Other Respiratory & Nose Diseases	1,745	1,570	2,963	2,823	5,416	4,905	11,806	13,485	2,996	3,084	2,296	2,177	55,266
Diseases of the Digestive system													
Diseases of Teeth & Gums	28	37	347	362	2,325	2,160	4,284	5,069	1,144	934	465	356	17,511
Dental Caries	21	37	733	780	4,626	4,505	9,246	11,720	2,179	2,002	872	667	37,388
Peptic Ulcer Syndrome	20	31	250	268	2,285	2,747	21,272	26,363	5,315	5,615	2,371	2,573	69,110
Acute Appendicitis	0	0	0	3	48	42	251	230	39	29	12	8	662

Table 2.6: contd...

Alcohol Liver Diseases	0	0	0	0	0	0	670	510	387	259	150	83	2,059
Gall Bladder Diseases	3	4	2	0	9	6	132	308	51	129	26	52	722
Other Diseases of the Digestive System	823	830	2,858	2,804	6,508	7,099	19,460	23,720	4,324	4,118	2,356	2,141	77,041
Skin Diseases													
Skin Infections	2,102	2,217	6,939	6,719	15,451	13,381	25,588	21,025	4,335	3,192	1,891	1,301	104,141
Other Disorders of Skin & Subcutaneous-tissues	1,697	1,558	4,872	4,133	9,130	9,191	19,075	17,947	3,721	2,791	1,767	1,264	77,146
Diseases of Musculo-skeletal system & Cogenital Deformities													
Arthritis & Arthrosis	6	8	58	58	278	260	2,903	2,903	1,449	1,398	777	635	10,733
Other Musculo-skeletal disorders	42	33	420	466	2,671	2,508	26,996	27,222	8,142	7,495	3,989	3,387	83,371
Genito-Urinary diseases													
Cystitis	1	3	40	42	59	73	589	1,629	96	155	56	58	2,801
Infection of Breasts, including Puerperium	0	0	0	0	0	6	0	667	0	37	0	5	715
Other Disease of the Breast	6	1	0	2	4	29	26	1,360	9	51	6	6	1,500
Pelvic Inflammatory Disease	0	0	0	0	0	34	0	695	0	108	0	7	844
Menstrual Disturbances	0	0	0	0	0	163	0	4,708	0	254	0	43	5,168

Table 2.6: contd...

Other Kidney, UT/ Genital Disorders	74	60	448	439	1,125	1,254	6,189	17,728	1,361	2,086	763	736	32,263
Pregnancy, Childbirth and Puerperium													
Abortions	0	0	0	0	0	2	0	1,336	0	0	0	0	1,338
Pregnancy Induced Hypertension	0	0	0	0	0	6	0	634	0	0	0	0	640
Ante-Partum Haemorrhage & Placenta Previa	0	0	0	0	0	0	0	154	0	0	0	0	154
Malpresentation	0	0	0	0	0	0	0	106	0	0	0	0	106
Prolonged Labour	0	0	0	0	0	1	0	962	0	0	0	0	963
Obstructed Labour	0	0	0	0	0	0	0	252	0	0	0	0	252
Post Partum Haemorrhage	0	0	0	0	0	1	0	162	0	0	0	0	163
Retained Placenta	0	0	0	0	0	0	0	179	0	0	0	0	179
Puerperal Sepsis	0	0	0	0	0	0	0	71	0	0	0	0	71
Other complications of pregnancy	0	0	0	0	0	8	0	7,442	0	0	0	0	7,450
Perinatal Conditions													
Low Birth Weight	122	92	0	0	0	0	0	0	0	0	0	0	214
Foetal Death & Stillbirth	26	16	0	0	0	0	0	0	0	0	0	0	42
Neonatal Death	56	35	0	0	0	0	0	0	0	0	0	0	91

Table 2.6: contd...

Conditions Orginating in the Perinatal Period	725	621	0	0	0	0	0	0	0	0	0	0	1,346
Malformations													
Malformations	114	59	27	20	19	32	19	54	3	2	1	5	355
Injuries & Trauma													
Mushroom Poisoning (Toxic effect of other unspecified susbstances)	0	3	14	15	27	17	86	87	11	19	6	4	289
Transport Accidents	9	8	46	35	141	91	1,194	343	104	72	38	23	2,104
Accidental Falls	26	33	393	281	1,360	598	2,274	1,278	512	363	275	192	7,585
Other Bites & Stings	32	19	207	166	561	376	901	822	180	155	67	59	3,545
Dog Bite	5	9	269	170	959	648	1,478	1,002	321	256	151	85	5,353
Drowning & Submersion	0	0	4	6	10	8	19	12	2	2	1	1	65
Exposure to Electric Current	0	1	0	2	7	1	40	6	4	3	2	0	66
Contact with Heat & Hot substances & exposure to smoke, fire, flames	65	42	360	299	381	265	599	480	117	77	47	39	2,771
Snake Bite	1	0	4	1	12	7	103	48	23	12	13	2	226
Contact with Venomous animals (excluding Snake bite)	1	3	3	3	23	11	25	38	10	7	2	2	128
Intentional Self Harm	1	0	10	7	48	23	210	138	33	11	16	5	502

Table 2.6: contd...

Work Related Injuries	23	14	366	333	3,271	1,690	13,608	5,231	2,220	983	670	296	28,705
Others (injuries other than above & unknown cause of injury)	48	53	752	546	3,425	1,823	7,323	4,168	1,223	668	470	320	20,819
Other Conditions													
Complications of Health Care	5	5	10	12	54	39	171	336	39	41	26	17	755
ANC, Immunisation & Other counseling	977	1,128	1,268	1,427	610	850	23,895	16,835	810	701	277	249	49,027
Total	**28,936**	**26,640**	**65,931**	**62,649**	**134,625**	**129,859**	**353,416**	**403,499**	**75,919**	**73,153**	**40,064**	**36,255**	**1,430,946**
Total Old Cases all causes													**560,012**

Source: Annual Health Bulletin 2013, MoH, Thimphu.

Table 2.7: Inpatient Cases in all Hospitals, Bhutan 2012

(Numbers)

Name of Diseases	Under 1 Yr		1 – 4 Yrs		5 – 14 Yrs		15 – 49 Yrs		50 - 64 Years		65 + Yrs		Total	Death
	M	F	M	F	M	F	M	F	M	F	M	F		
Infections														
Diarrhoea	140	140	232	200	141	117	303	369	62	93	53	84	1,934	2
Dysentery	8	9	41	31	40	21	78	95	14	22	19	17	395	1
Tuberculosis	1	4	3	7	14	20	294	229	52	26	28	36	714	31
Genital Ulcer/Bubo	0	0	0	0	0	0	3	9	3	2	0	0	17	0
Urethal/Vaginal Discharges	0	1	0	0	0	0	4	9	1	0	0	0	15	0
Other Sexually Transmitted Disease, excluding HIV/AIDS	1	1	0	0	1	0	26	20	4	4	3	0	60	0
Rickettsial Disease	0	1	9	9	18	10	36	53	3	4	1	2	146	0
Viral, Protozoal & Helminthic disease														
Chicken Pox	3	1	5	3	16	8	13	9	1	0	0	0	59	0
Viral Hepatitis	28	17	6	4	21	16	32	27	5	4	5	2	167	4
Plasmodium falciparum malaria	1	0	2	1	6	1	17	4	1	1	0	1	35	1
Other Malaria	2	0	0	0	4	1	24	10	1	3	1	1	47	1
Visceral Leishmaniasis	0	0	0	0	0	0	4	0	1	1	0	0	6	0
Intestinal Worms	0	1	1	3	9	5	6	12	4	6	3	0	50	1
Scabies	2	3	3	3	8	5	6	3	2	0	0	1	36	0
Streptococcus Group A	8	0	1	0	1	0	1	0	0	0	0	0	11	0
Other Infections (excluding ear, brain, STI)	100	91	103	97	121	123	339	359	76	51	37	39	1,536	42
Neoplasm														
Cervical Cancer	0	0	0	0	0	0	0	25	0	10	0	0	35	1
Other Cancers	0	0	3	2	4	8	40	80	83	81	86	71	458	77

Table 2.7: contd...

Blood diseases														
Neoplasm (benign + CIS)	0	0	2	3	3	12	16	64	13	10	23	7	153	1
Nutritional Anaemia	24	15	32	31	9	19	56	155	30	32	45	37	485	3
Blood & Immune Disorders	6	5	4	3	14	19	28	47	11	12	10	6	165	14
Endocrine, Metabolic & Nutritional														
Diabetes	0	0	0	0	0	0	79	90	102	87	73	91	522	23
Malnutrition (exclude child clinic attendance)	25	10	21	20	5	10	2	2	1	3	4	3	106	5
Other Nutritional & Metabolic Disorders	26	10	7	5	7	2	25	50	17	7	11	6	173	7
Mental disorders														
Mental and behavioral disorder due to alcohol	0	0	0	0	0	1	220	62	29	12	6	3	333	1
Mental and behavioral disorder due to multiple drug use & other use of psychoactive substances	0	0	0	0	5	0	72	10	2	0	0	0	89	0
Psychosis	0	0	1	1	0	1	22	14	1	5	4	0	49	0
Depression	0	0	0	0	0	2	57	70	4	14	0	5	152	1
Anxiety	0	0	0	0	2	10	55	103	8	4	2	2	186	0
Other Mental Disorders	0	0	1	4	1	4	53	84	5	7	4	5	168	1
Disease of Nervous system														
Meningitis/Encephalitis	24	23	12	7	13	10	18	22	7	7	2	2	147	25
Epilepsy	5	3	16	14	18	8	82	70	7	3	9	2	237	3
Other Nervous inlcuding Peripheral Disorders	7	18	23	16	47	38	367	423	56	60	40	46	1,141	22
Eye & Ear Diseases														
Conjunctivitis	10	9	5	6	3	8	41	44	10	9	9	4	158	0
Cataract	1	0	2	1	7	3	15	15	27	40	110	115	336	0

Table 2.7: contd...

Other Eye Disorders	8	2	26	22	30	41	148	141	55	70	51	46	640	0
Otitis Media	5	11	10	10	10	15	34	29	4	3	3	0	134	0
Other Ear Disorders	7	3	15	8	25	17	67	60	8	10	6	3	229	0
Diseases of Circulatory System														
Rheumatic Heart Disease	2	1	3	1	9	9	35	73	7	12	21	16	189	14
Hypertension	0	0	0	0	6	1	256	254	144	228	217	197	1,303	22
Ischaemic Heart Diseases	0	0	0	0	2	2	16	11	18	10	30	19	108	14
Cerebro-vascular Diseases	2	3	1	2	3	2	41	22	36	24	76	66	278	45
Other Circulatory Diseases	13	36	10	10	19	38	149	132	86	74	143	180	890	85
Respiratory diseases														
Common Cold	202	147	303	255	238	250	516	536	62	56	42	35	2,642	1
Acute Pharyngitis / Tonsilitis	45	14	55	45	124	94	253	331	21	31	13	11	1,037	1
Pneumonia	693	544	583	502	197	123	124	119	60	57	96	80	3,178	72
Other Respiratory & Nose Diseases	502	293	398	259	207	138	471	564	224	285	381	411	4,133	88
Diseases of the Digestive system														
Diseases of Teeth & Gums	0	0	6	8	23	15	56	67	11	17	2	3	208	0
Dental Caries	0	1	10	10	50	46	98	134	26	38	13	7	433	0
Peptic Ulcer Syndrome	1	2	8	5	25	40	407	586	88	100	75	85	1,422	4
Acute Appendicitis	0	0	0	3	39	35	157	114	23	18	4	5	398	2
Alcohol Liver Diseases	0	0	0	0	0	0	411	271	204	140	92	47	1,165	133
Gall Bladder Diseases	1	1	0	0	4	1	70	189	38	111	20	43	478	2
Other Diseases of the Digestive System	95	73	184	140	300	242	954	1,038	230	199	196	190	3,841	58
Skin Diseases														

Table 2.7: contd...

Skin Infections	97	69	67	77	136	82	249	228	72	44	45	32	1,198	4
Other Disorders of Skin & Subcutaneous-tissues	87	59	87	81	171	99	348	281	106	66	74	51	1,510	15
Diseases of Musculo-skeletal system & Cogenital Deformities														
Arthritis & Arthrosis	1	1	2	1	21	7	89	79	36	27	31	23	318	1
Other Musculo-skeletal disorders	2	3	18	16	123	70	559	394	116	108	59	59	1,527	3
Genito-Urinary diseases														
Cystitis	0	1	3	5	6	5	46	134	8	13	5	12	238	0
Infection of Breasts, including Puerperium	0	0	0	0	0	2	0	78	0	1	0	2	83	1
Other Disease of the Breast	1	1	0	1	0	4	1	61	0	9	0	0	78	1
Pelvic Inflammatory Disease	0	0	0	0	0	0	0	80	0	13	0	3	96	1
Menstrual Disturbances	0	0	0	0	0	2	0	239	0	25	0	2	268	1
Other Kidney, UT / Genital Disorders	18	7	50	32	153	119	599	1,355	158	218	172	135	3,016	63
Pregnancy, Childbirth and Puerperium														
Abortions	0	0	0	0	0	2	0	1,066	0	0	0	0	1,068	0
Pregnancy Induced Hypertension	0	0	0	0	0	1	0	437	0	0	0	0	438	0
Ante-Partum Haemorrhage & Placenta Previa	0	0	0	0	0	0	0	125	0	0	0	0	125	0
Malpresentation	0	0	0	0	0	0	0	86	0	0	0	0	86	0
Prolonged Labour	0	0	0	0	0	1	0	890	0	0	0	0	891	0
Obstructed Labour	0	0	0	0	0	0	0	235	0	0	0	0	235	0
Post Partum Haemorrhage	0	0	0	0	0	1	0	113	0	0	0	0	114	0

Table 2.7: contd...

Retained Placenta	0	0	0	0	0	0	0	129	0	0	0	0	129	0
Puerperal Sepsis	0	0	0	0	0	0	0	55	0	0	0	0	55	0
Other complications of pregnancy	0	0	0	0	0	3	0	6,534	0	0	0	0	6,537	1
Perinatal Conditions														
Low Birth Weight	107	78	0	0	0	0	0	0	0	0	0	0	185	12
Foetal Death & Stillbirth	16	14	0	0	0	0	0	0	0	0	0	0	30	30
Neonatal Death	51	30	0	0	0	0	0	0	0	0	0	0	81	81
Conditions Orginating in the Perinatal Period	702	586	0	0	0	0	0	0	0	0	0	0	1,288	22
Malformations														
Malformations	108	53	19	16	11	23	8	15	0	1	0	5	259	8
Injuries & Trauma														
Mushroom Poisoning (Toxic effect of other unspecified susbstances)	0	2	7	5	10	7	43	40	6	9	3	3	135	3
Transport Accidents	0	2	12	6	35	35	457	111	29	20	14	8	729	15
Accidental Falls	9	8	43	24	111	50	325	174	102	65	66	54	1,031	12
Other Bites & Stings	0	1	12	4	13	8	39	34	6	8	6	6	137	0
Dog Bite	1	0	21	17	76	48	109	87	20	26	16	12	433	0
Drowning & Submersion	0	0	0	3	1	0	1	2	0	0	0	0	7	0
Exposure to Electric Current	0	1	0	0	3	0	8	2	1	0	0	0	15	0
Contact with Heat & Hot substances & exposure to smoke, fire, flames	9	7	31	29	21	11	57	42	11	10	3	6	237	2
Snake Bite	0	0	2	0	6	2	57	12	12	3	7	1	102	1
Contact with Venomous animals (excluding Snake bite)	0	1	1	1	3	0	4	4	0	0	0	1	15	1

Table 2.7: contd...

Intentional Self Harm	1	0	1	1	4	1	21	38	3	0	1	2	73	2
Work Related Injuries	1	0	8	4	29	15	406	104	50	29	21	9	676	4
Others (injuries other than above & unknown cause of injury)	14	10	84	61	364	186	1,241	535	202	113	99	92	3,001	37
Other Conditions														
Complications of Health Care	1	0	0	1	1	0	13	72	3	5	1	1	98	0
ANC, Immunisation & Other counseling	27	27	1	2	5	8	98	591	34	14	8	14	829	5
Total	**3,251**	**2,454**	**2,616**	**2,138**	**3,152**	**2,383**	**11,475**	**21,771**	**2,963**	**2,930**	**2,700**	**2,565**	**60,398**	**1,134**
Total Old Cases all causes	**(Includes total Old & repeated visit/episode cases)**													**15,312**

Note: Inpetient = those patients admitted to bed overnight (records deaths related to particular disease) in hospitals & BHU-I
Source: Annual Health Bulletin 2013, MoH, Thimphu

Table 2.8: Outpatient Cases in all Hospitals, Bhutan 2012

(Numbers)

Name of Diseases	Under 1 Yr		1 – 4 Yrs		5 – 14 Yrs		15 – 49 Yrs		50 - 64 Years		65 + Yrs		Total
	M	F	M	F	M	F	M	F	M	F	M	F	
Infections													
Diarrhoea	1,629	1,552	4,201	3,587	3,732	3,190	6,451	5,434	1,016	853	494	437	32,576
Dysentery	255	229	722	643	596	535	1,860	1,402	329	270	148	125	7,114
Tuberculosis	1	2	2	5	9	17	77	112	22	7	10	9	273
Genital Ulcer/Bubo	0	0	0	0	1	3	63	145	8	7	1	0	228
Urethal/Vaginal Discharges	0	0	3	2	2	13	574	712	41	25	1	0	1,373
Other Sexually Transmitted Disease, excluding HIV/AIDS	2	0	2	0	4	1	181	97	18	2	3	0	310
Rickettsial Disease	0	0	2	0	7	5	23	25	5	4	1	0	72
Viral, Protozoal & Helminthic disease													
Chicken Pox	21	19	125	135	395	353	189	139	7	2	3	3	1,391
Viral Hepatitis	20	33	21	7	32	17	40	28	2	2	3	0	205
Plasmodium falciparum malaria	0	0	0	0	0	1	3	8	0	1	0	0	13
Other Malaria	0	0	3	2	0	4	2	4	0	0	0	0	15
Visceral Leishmaniasis	0	0	0	0	0	0	6	0	1	0	1	0	8
Intestinal Worms	18	23	310	281	429	388	718	711	140	133	78	38	3,267
Scabies	38	26	188	200	557	360	918	632	190	89	191	37	3,426
Streptococcus Group A	1	0	9	6	8	16	35	35	6	5	1	0	122

Table 2.8: contd...

Other Infections (excluding ear, brain, STI)	111	124	363	359	718	700	1,872	1,842	284	229	108	58	6,768
Neoplasm													
Cervical Cancer	0	0	0	0	0	0	0	19	0	9	0	0	28
Other Cancers	1	1	10	5	9	7	13	22	12	9	20	4	113
Blood diseases													
Neoplasm (benign + CIS)	0	0	0	0	0	1	24	42	4	9	12	4	96
Nutritional Anaemia	9	8	117	83	205	301	991	2,900	253	363	157	152	5,539
Blood & Immune Disorders	1	1	4	5	7	15	46	62	10	11	6	5	173
Endocrine, Metabolic & Nutritional													
Diabetes	1	0	0	0	2	6	528	599	855	857	378	349	3,575
Malnutrition (exclude child clinic attendance)	1	4	7	8	5	7	19	20	5	4	2	3	85
Other Nutritional & Metabolic Disorders	22	29	61	67	147	150	487	587	66	55	25	22	1,718
Mental disorders													
Mental and behavioral disorder due to alcohol	0	0	0	0	0	0	68	13	14	8	2	1	106

Table 2.8: contd...

Mental and behavioral disorder due to multiple drug use & other use of psychoactive substances	0	0	0	0	0	1	9	5	1	0	0	0	16
Psychosis	0	0	0	0	1	1	17	24	0	2	0	0	45
Depression	0	0	0	0	14	4	112	205	23	37	6	6	407
Anxiety	0	0	1	2	5	21	166	265	39	29	4	11	543
Other Mental Disorders	0	1	4	4	9	23	187	269	32	42	8	14	593
Disease of Nervous system													
Meningitis/ Encephalitis	3	2	3	1	6	2	4	8	3	1	0	0	33
Epilepsy	4	0	17	9	59	51	348	405	44	21	13	7	978
Other Nervous inlcuding Peripheral Disorders	33	38	138	192	686	714	4,063	6,102	737	845	335	315	14,198
Eye & Ear Diseases													
Conjunctivitis	441	438	877	865	1,984	1,858	5,544	6,672	990	927	620	515	21,731
Cataract	1	1	6	5	21	11	70	80	72	88	112	82	549
Other Eye Disorders	197	204	498	567	2,040	1,882	6,047	7,053	1,358	1,508	1,159	1,082	23,595
Otitis Media	190	182	538	531	1,145	1,006	2,148	1,826	260	206	119	75	8,226
Other Ear Disorders	144	152	464	430	1,162	1,174	2,520	2,566	425	394	236	193	9,860
Diseases of Circulatory System													

Table 2.8: contd...

Rheumatic Heart Disease	1	3	4	6	12	25	152	195	29	51	26	24	528
Hypertension	0	0	0	0	89	56	3,788	5,042	3,028	3,457	1,916	1,895	19,271
Ischaemic Heart Diseases	0	0	0	0	6	5	65	74	52	58	35	44	339
Cerebro-vascular Diseases	0	0	2	2	1	0	6	12	13	2	8	10	56
Other Circulatory Diseases	40	51	94	57	324	350	670	929	242	181	189	236	3,363
Respiratory diseases													
Common Cold	7,058	5,934	12,961	12,395	15,624	15,583	32,038	31,338	5,211	4,147	2,237	1,828	146,354
Acute Pharyngitis / Tonsilitis	599	635	2,020	1,982	4,875	5,151	10,726	11,672	1,613	1,359	633	488	41,753
Pneumonia	621	479	896	810	418	305	471	402	160	164	104	94	4,924
Other Respiratory & Nose Diseases	937	994	1,750	1,815	2,429	2,379	6,649	7,024	1,464	1,389	1,013	939	28,782
Diseases of the Digestive system													
Diseases of Teeth & Gums	22	24	232	231	1,445	1,209	2,571	2,975	690	518	263	204	10,384
Dental Caries	20	35	598	648	3,585	3,449	7,278	8,824	1,586	1,355	592	432	28,402
Peptic Ulcer Syndrome	19	29	204	204	1,172	1,481	12,755	15,604	3,032	2,953	1,154	1,260	39,867
Acute Appendicitis	0	0	0	0	9	7	94	116	16	11	8	3	264
Alcohol Liver Diseases	0	0	0	0	0	0	207	181	142	81	41	12	664

Table 2.8: contd...

Gall Bladder Diseases	2	3	2	0	5	5	62	119	13	18	6	9	244
Other Diseases of the Digestive System	485	515	1,636	1,644	2,946	3,077	11,442	13,703	2,377	2,006	1,116	906	41,853
Skin Diseases													
Skin Infections	1,249	1,331	4,093	3,973	6,950	5,924	14,758	11,988	2,406	1,696	919	647	55,934
Other Disorders of Skin & Subcutaneous-tissues	986	902	3,163	2,405	3,848	4,318	10,332	9,334	1,945	1,272	853	525	39,883
Diseases of Musculo-skeletal system & Cogenital Deformities													
Arthritis & Arthrosis	4	7	47	40	152	158	1,663	1,532	714	678	321	264	5,580
Other Musculo-skeletal disorders	20	15	291	332	1,583	1,447	16,278	15,380	4,081	3,604	1,821	1,477	46,329
Genito-Urinary diseases													
Cystitis	1	2	37	37	53	68	543	1,495	88	142	51	46	2,563
Infection of Breasts, including Puerperium	0	0	0	0	0	3	0	399	0	30	0	0	432
Other Disease of the Breast	3	0	0	1	4	14	17	648	7	28	6	2	730
Pelvic Inflammatory Disease	0	0	0	0	0	34	0	615	0	95	0	4	748
Menstrual Disturbances	0	0	0	0	0	118	0	2,650	0	171	0	33	2,972
Other Kidney, UT/ Genital Disorders	40	35	249	238	503	631	3,531	9,528	603	951	294	252	16,855
Pregnancy, Childbirth and Puerperium													

Table 2.8: contd...

Abortions	0	0	0	0	0	0	0	165	0	0	0	0	165
Pregnancy Induced Hypertension	0	0	0	0	0	5	0	168	0	0	0	0	173
Ante-Partum Haemorrhage & Placenta Previa	0	0	0	0	0	0	0	17	0	0	0	0	17
Malpresentation	0	0	0	0	0	0	0	13	0	0	0	0	13
Prolonged Labour	0	0	0	0	0	0	0	37	0	0	0	0	37
Obstructed Labour	0	0	0	0	0	0	0	10	0	0	0	0	10
Post Partum Haemorrhage	0	0	0	0	0	0	0	13	0	0	0	0	13
Retained Placenta	0	0	0	0	0	0	0	10	0	0	0	0	10
Puerperal Sepsis	0	0	0	0	0	0	0	5	0	0	0	0	5
Other complications of pregnancy	0	0	0	0	0	0	0	588	0	0	0	0	588
Perinatal Conditions													
Low Birth Weight	7	5	0	0	0	0	0	0	0	0	0	0	12
Foetal Death & Stillbirth	0	0	0	0	0	0	0	0	0	0	0	0	0
Neonatal Death	1	2	0	0	0	0	0	0	0	0	0	0	3
Conditions Orginating in the Perinatal Period	19	27	0	0	0	0	0	0	0	0	0	0	46
Malformations													
Malformations	5	5	8	4	7	8	11	39	2	1	1	0	91

Table 2.8: contd...

Injuries & Trauma													
Mushroom Poisoning (Toxic effect of other unspecified susbstances)	0	1	1	2	3	0	17	19	1	4	0	0	48
Transport Accidents	9	5	26	22	65	32	466	181	45	41	12	14	918
Accidental Falls	14	19	199	166	532	256	1,114	648	203	161	96	77	3,485
Other Bites & Stings	14	7	96	79	243	142	437	381	75	55	20	24	1,573
Dog Bite	3	3	147	91	437	312	794	504	131	92	68	34	2,616
Drowning & Submersion	0	0	1	3	4	3	8	5	0	0	0	0	24
Exposure to Electric Current	0	0	0	0	2	1	22	3	1	2	1	0	32
Contact with Heat & Hot substances & exposure to smoke, fire, flames	15	11	105	89	116	78	225	175	36	16	7	8	881
Snake Bite	0	0	0	1	4	3	21	20	5	1	1	1	57
Contact with Venomous animals (excluding Snake bite)	0	2	1	2	4	7	10	15	0	0	0	0	41
Intentional Self Harm	0	0	2	1	15	5	25	28	3	0	3	0	82
Work Related Injuries	9	6	184	182	995	621	5,135	2,175	727	347	195	88	10,664
Others (injuries other than above & unknown cause of injury)	16	26	364	304	1,368	787	3,650	2,172	499	275	177	112	9,750

Table 2.8: contd...

Other Conditions													
Complications of Health Care	2	0	6	8	23	17	102	90	23	16	7	3	297
ANC, Immunisation & Other counseling	441	512	673	716	136	186	22,013	6,610	208	119	36	33	31,683
Total	**15,806**	**14,694**	**38,788**	**36,491**	**63,984**	**61,103**	**206,569**	**206,940**	**38,743**	**34,601**	**18,487**	**15,575**	**751,781**
Total Old Cases all causes	**(Includes total Old & repeated visit/episode cases)**												**398,308**

Note: Out patient are those who receives treatment at hospitals and BHU - I withouht staying overnight.
Source: Annual Health Bulletin 2013, MoH, Thimphu.

Table 2.9: Number of Patient Admissions & Average Length of Stay in Dzongkhag Hospitals, Bhutan (2008-2012)

(Numbers)

Dzongkhag	2008		2009		2010		2011		2012	
	Total Admissions	Patient Days	Total Admissions	Patient Days	Total Admissions	Patient Days	Total Admissions	Patient Days	Total Admissions	Patient Days
Bumthang	167	501	767	2,178	697	2,789	591	1,970	858	3,187
Chhukha	6,040	14,276	5,763	10,350	5,223	9,266	4,682	17,025	4,724	18,055
Dagana	389	245	169	449	593	982	763	2,107	1,192	3,492
Gasa	0	0	0	0	0	0	0	0	0	0
Haa	598	1,362	540	1,290	407	1,337	382	1,021	387	1,415
Lhuentse	1,063	3,409	813	4,011	1,137	4,423	612	2,361	966	3,586
Monggar	2,834	18,417	3,392	23,253	3,758	23,518	4,536	26,226	4,727	27,684
Paro	3,916	9,030	2,932	8,098	3,195	8,144	2,962	7,532	2,200	5,550
Pema Gatshel	1,298	3,458	999	3,389	970	3,186	1,325	4,354	1,818	5,596
Punakha	1,969	7,686	2,036	8,034	1,878	8,670	2,346	5,632	2,166	5,244
Samdrup Jongkhar	1,912	9,785	1,915	11,159	1,479	9,081	2,908	13,804	3,079	14,061
Samtse	3,359	15,834	3,213	16,076	3,304	13,434	3,429	15,225	3,054	12,889
Sarpang	3,662	14,131	4,208	17,853	4,135	18,165	4,093	16,955	4,147	17,097
Thimphu	11,772	67,506	12,522	88,269	14,532	113,358	15,538	103,965	15,811	100,466
Trashigang	2,989	13,508	3,524	15,232	3,508	15,257	3,373	14,514	3,138	12,946
Trashi Yangtse	806	4,735	664	3,572	699	3,319	657	2,452	731	3,114
Trongsa	408	762	526	1,728	541	1,768	626	2,070	736	2,295
Tsirang	885	2,781	873	2,434	1,021	2,016	1,177	3,715	1,229	5,739
Wangdue Phodrang	1,428	4,095	1,344	4,640	1,485	4,258	1,760	5,131	2,500	7,455
Zhemgang	1,190	4,885	1,350	5,273	1,269	4,443	1,334	4,072	1,282	3,495
Bhutan	**46,685**	**196,406**	**47,550**	**227,288**	**49,831**	**247,414**	**53,094**	**250,131**	**54,745**	**253,366**

Source: Annual Health Bulletin 2013, MoH, Thimphu.

Table 2.10: Immunization Status by Dzongkhag, Bhutan 2012

(Numbers)

Dzongkhag	Antigen				
	BCG	Measles	OPV3	DPT-Hep B3	OPV 0
Bumthang	215	354	344	344	209
Chhukha	1,234	1,336	1,304	1,303	1,197
Dagana	309	435	469	467	230
Gasa	37	43	44	47	14
Haa	123	213	198	200	113
Lhuentse	208	315	326	323	183
Monggar	1,024	802	856	861	1,034
Paro	482	638	684	687	465
Pema Gatshel	319	401	380	380	296
Punakha	635	477	476	476	643
Samdrup Jongkhar	675	644	658	662	553
Samtse	833	1,007	1,117	1,114	751
Sarpang	797	778	743	742	780
Thimphu	4,079	2,446	2,530	2,531	4,051
Trashigang	805	859	923	923	669
Trashi Yangtse	317	349	338	329	226
Trongsa	190	255	264	265	136
Tsirang	309	370	357	356	286
Wangdue Phodrang	494	862	909	908	439
Zhemgang	234	338	327	328	189
Bhutan	13,319	12,922	13,247	13,246	12,464

Source: Annual Health Bulletin 2013, MoH, Thimphu.

Table 2.11: Nutritional and Vitamin A Status of Children Attending Clinics, Bhutan (2008-2012)

(Numbers)

Details	2008		2009		2010		2011		2012	
Child Attendances (a)	**New**	**Old**	**New**	**Old**	**New**	**Old**	**New**	**Old**	**New**	**Old**
Infants: <1 Year	13,836	94,626	14,298	104,580	13,808	108,871	13,670	112,069	14,356	116,535
Child: 1 to <5 Years	739	78,141	1,257	85,617	1,058	99,387	869	108,667	1,324	119,849
Total	14,575	172,767	15,555	190,197	14,866	208,258	14,539	220,736	15,680	236,384
Weight (b)										
Over Weight		28,905		15,149		12,443		5,584		4,607
Normal Weight		138,003		171,461		196,455		217,904		236,251
Under Weight		17,342		16,156		12,951		10,243		9,259
All malnourished [1]		46,247		31,305		25,394		15,827		13,866
Vitamin A Supplements (c)										
Infants: <1 Year		15,762		18,189		15,676		17,089		18,092
Child: 1 to <5 Years						36,820		41,276		46,014
PP Mother [2]		…		…		12,220		12,655		13,161

[1] *All malnourished included over weight and under weight after 2008*

[2] *Post-partum mother*

Source: Annual Health Bulletin 2013, MoH, Thimphu.

Table 2.12: Details of Maternal & Child Health Care Activities, Bhutan (2008-2012)

(Numbers)

Type of care	2008	2009	2010	2011	2012
Antenatal care attendence (a)	53,352	55,586	61,282	65,528	72,384
1st visit	13,734	13,461	13,123	12,953	13,376
2nd visit	12,363	12,554	12,791	12,589	12,981
3rd visit	11,403	11,556	11,605	11,637	12,212
4th visit	15,852	18,015	9,803	10,056	10,726
5+ visit			13,960	18,293	23,089
Deliveries attended by trained health personnel (b)	8,621	9,011	9,230	8,934	10,792
Home	927	878	710	662	623
Facility	7,694	8,133	8,520	8,272	10,169
Post-natal care attendance (c)	…	…	11,474	14,174	17,924
1st visit	…	…	7,227	7,740	8,966
2+ visit	…	…	4,247	6,434	8,958

Source: Annual Health Bulletin 2013, MoH, Thimphu.

Table 2.13: Details of Maternal & Child Health Care Activities by Dzongkhag, Bhutan (2008-2012)

(Numbers)

Dzongkhag	Details	2008	2009	2010	2011	2012
Bumthang	Antenatal	1,352	1,274	1,420	1,599	1,614
	Reported deliveries	298	298	324	332	338
	Trained deliveries	147	172	165	210	196
Chhukha[1]	Antenatal	7,669	7,048	7,770	9,245	11,419
	Reported deliveries	825	898	707	693	772
	Trained deliveries	1,048	1,089	1,208	1,118	1,073
Dagana	Antenatal	1,452	1,386	1,509	1,689	1,882
	Reported deliveries	537	450	425	378	449
	Trained deliveries	132	254	131	152	175
Gasa	Antenatal	175	192	152	163	144
	Reported deliveries	43	67	62	154	47
	Trained deliveries	35	16	15	9	6
Haa	Antenatal	759	896	860	771	994
	Reported deliveries	182	215	160	213	209
	Trained deliveries	66	136	73	38	110

Table 2.13: contd...

Lhuentse	Antenatal	1,189	968	1,148	1,307	1,463
	Reported deliveries	320	380	282	258	305
	Trained deliveries	171	194	78	100	156
Monggar	Antenatal	3,401	3,307	3,362	3,675	4,030
	Reported deliveries	797	880	879	808	741
	Trained deliveries	763	768	799	950	929
Paro	Antenatal	2,701	3,384	3,961	3,611	3,973
	Reported deliveries	531	588	772	828	782
	Trained deliveries	543	521	491	486	442
Pema Gatshel	Antenatal	1,364	1,597	1,816	1,727	1,829
	Reported deliveries	402	365	419	380	355
	Trained deliveries	144	164	167	167	230
Punakha	Antenatal	1,393	2,442	2,610	2,263	2,261
	Reported deliveries	339	343	370	410	447
	Trained deliveries	299	358	358	476	666
Samdrup Jongkhar	Antenatal	2,532	2,514	2,741	3,088	3,143
	Reported deliveries	710	465	785	785	615
	Trained deliveries	330	428	456	369	450
Samtse	Antenatal	4,950	5,218	5,382	5,964	6,136
	Reported deliveries	1,208	1,154	986	1,048	982
	Trained deliveries	495	438	475	399	491
Sarpang	Antenatal	3,359	3,399	3,621	4,543	4,405
	Reported deliveries	833	658	1,187	634	634
	Trained deliveries	632	714	686	683	951
Thimphu[2]	Antenatal	10,708	11,738	13,168	12,935	14,597
	Reported deliveries	3,324	3,791	307	303	257
	Trained deliveries	2,549	2,659	3,082	2,396	3,418
Trashigang	Antenatal	3,725	3,145	3,428	3,671	3,649
	Reported deliveries	776	869	861	884	911
	Trained deliveries	591	498	430	453	567
Trashi Yangtse	Antenatal	1,240	1,437	1,441	1,480	1,576
	Reported deliveries	404	399	386	425	403
	Trained deliveries	118	107	125	103	109

Table 2.13: contd...

Trongsa	Antenatal	771	886	989	1,250	1,444
	Reported deliveries	226	244	309	265	217
	Trained deliveries	68	87	106	94	113
Tsirang	Antenatal	1,213	1,107	1,338	1,413	1,783
	Reported deliveries	323	268	269	409	319
	Trained deliveries	104	229	94	233	217
Wangdue Phodrang	Antenatal	2,148	2,263	3,323	3,837	4,532
	Reported deliveries	509	653	506	640	640
	Trained deliveries	230	309	395	351	336
Zhemgang	Antenatal	1,251	1,284	1,243	1,297	1,510
	Reported deliveries	409	377	378	344	369
	Trained deliveries	156	145	130	147	156

Trained delivery refers to deliveries attended by trained health personnels in hospitals/BHUs and at home,Reported deliveries refers to total reported deliveries during Annual Household Survey 2010,
[1]Phuntsholing urban areas are not covered by Annual Household Survey
[2]Thimphu urban areas are not covered by the Annual Household Survey.
Source: Annual Health Bulletin 2013, MoH, Thimphu.

Table 2.14: Family Planning Methods by Type, Bhutan (2008-2012)

(Numbers)

Method	2008	2009	2010	2011	2012
Female Sterilisation	2,733	3,219	3,642	3,825	4,292
Male Sterilisation	9,433	9,730	9,436	9,601	9,531
Intra uterine device (IUD) inserted	1,970	2,343	2,631	1,427	1,445
Pills (OCP)	40,274	44,643	52,234	70,929	81,673
Condoms	1,462,467	1,426,426	1,050,891	1,117,983	1,427,260
Injection DMPA	71,738	75,999	89,797	89,250	88,009
All methods	1,588,615	1,562,360	1,208,631	1,293,015	1,612,210

IUD = No. inserted, Pills = No. of cycles, DMPA = No. of Injections and Condoms = No. of pieces distributed
Source: Annual Health Bulletin 2013, MoH, Thimphu.

Table 2.15: Number of Users of Family Planning Methods by Type, by Dzongkhag, Bhutan 2012

(Numbers)

Dzongkhag	Family planning methods					
	New IUD Inserted	Oral pills[2] (No. of Cycles issued)	DMPA[3] (No. Injected)	Vasectomy[1]	Tubectomy[4]	No. of Condom issued (In pieces)
Bumthang	35	3,573	2,407	92	86	67,592
Chhukha	234	10,014	6,857	803	360	86,999
Dagana	19	4,102	4,811	567	142	81,898
Gasa	0	232	600	21	10	7,471
Haa	4	1,214	1,687	200	168	24,711
Lhuentse	16	2,581	1,523	241	85	41,728
Monggar	114	3,446	8,790	514	359	175,434
Paro	40	2,043	4,322	582	674	182,360
Pema Gatshel	21	2,547	3,388	470	80	36,308
Punakha	70	3,550	3,569	305	296	50,759
Samdrup Jongkhar	16	3,700	4,731	390	154	48,415
Samtse	111	12,292	5,600	2,475	575	80,949
Sarpang	74	6,305	5,834	520	286	72,154
Thimphu	437	6,560	11,859	263	238	167,526
Trashigang	84	4,631	7,063	759	188	96,156
Trashi Yangtse	32	989	1,717	187	74	31,030
Trongsa	30	1,767	2,115	140	76	44,831
Tsirang	13	2,817	4,803	361	97	22,224
Wangdue Phodrang	69	7,204	3,123	479	226	61,793
Zhemgang	26	2,106	3,210	162	118	46,922
Bhutan	**1,445**	**81,673**	**88,009**	**9,531**	**4,292**	**1,427,260**

[1]Cumulative figures, collected from Annual Household Survey,
[2] Oral pills = 1 user is equal to 13 cycles or 12 cycles,
[3] DMPA = 1 user is equal to 4 injections,
[4] Cumulative figures, collected from Annual Household Survey
Source: Annual Health Bulletin 2013, MoH, Thimphu.

Table 2.16: Number of Malaria Cases by Type and Deaths, Bhutan (2008-2012)

(Numbers)

Details	2008	2009	2010	2011	2012
Plasmodium vivax	…	394	255	91	47
Plasmodium falciparum	…	473	139	88	33
Mixed infections	…	84	32	15	2
Deaths due to malaria (numbers)	…	4	1	1	1

Source: Annual Health Bulletin 2013, MoH, Thimphu.

Table 2.17: Number of Tuberculosis Cases by Type and Deaths, Bhutan (2008-2012)

(Numbers)

Year	Type of TB cases			Total cases	Total deaths
	Pulmonary Positive	Pulmonary Negative	Extra Pulmonary		
2008	421	146	418	985	20
2009	510	287	357	1,154	31
2010	539	275	518	1,332	38
2011	452	225	573	1,250	17
2012	499	130	527	1,156	32

Source: Annual Health Bulletin 2013, MoH, Thimphu.

Table 2.18: Types of Water and Sanitation Facility by Dzongkhag, Bhutan 2012

Dzongkhag	Percentage Coverage						
	Latrine	Water Supply	Household with Functional Piped water	Drainage & Footpath	Household with Animal Shed	Household with Vegetable Garden	Household with Garbage Pit
Bumthang	99.6	99.3	99.0	74.0	60.3	81.9	89.6
Chhukha	95.1	92.7	88.9	67.3	42.9	57.5	74.5
Dagana	93.2	92.3	85.8	65.8	53.4	79.7	78.7
Gasa	91.9	91.4	91.4	39.1	55.3	76.6	64.6
Haa	92.1	96.5	96.0	93.7	39.7	78.7	93.1
Lhuentse	99.5	98.2	97.7	84.6	79.1	87.6	90.8
Monggar	95.6	94.5	91.1	78.5	61.2	74.0	85.5
Paro	96.2	102.5	100.6	72.5	23.8	61.4	70.4
Pema Gatshel	90.3	92.3	83.3	48.2	45.3	79.3	45.6
Punakha	93.7	90.6	81.4	70.0	83.1	63.0	78.0
Samdrup Jongkhar	94.3	97.5	94.8	71.2	46.7	70.2	77.5
Samtse	96.5	92.2	90.7	45.8	64.1	74.1	82.1
Sarpang	97.4	92.2	90.2	55.6	44.1	66.6	76.2
Thimphu	99.4	96.6	95.7	75.6	30.6	62.6	48.8
Trashigang	93.0	94.9	88.6	55.9	55.2	78.3	62.3
Trashi Yangtse	95.5	93.0	82.3	71.6	65.1	82.1	83.3
Trongsa	92.6	99.7	97.2	61.5	28.4	68.6	51.7
Tsirang	95.2	92.0	89.2	52.3	67.4	81.6	72.3
Wangdue Phodrang	95.9	85.0	79.8	77.4	53.7	67.9	86.3
Zhemgang	97.5	92.4	86.1	63.3	41.2	82.1	66.9
Bhutan	**95.3**	**94.1**	**90.2**	**64.3**	**52.1**	**72.2**	**74.6**

Source: Annual Health Bulletin 2013, MoH, Thimphu.

CHAPTER 3
EDUCATION

The comprehensive modern education system in Bhutan was introduced with the initiation of economic development plans in 1961. The monastic form of education however existed and continues even today. There are now extensive network of schools and other educational institutions spread throughout the country.

The school-based education structure in Bhutan comprises of 11 years of free basic education from classes PP to X, divided into 7 years of primary education (PP-VI), which starts at the age of 6, and 4 years of secondary education (VII-X). Beyond the 10th standard students either continue their general education in classes XI and XII in higher secondary schools or join the vocational training institutes or enter the labour market. After completing class XII, graduates either continue their studies at the tertiary level under one of the institutes under the Royal University of Bhutan (RUB) for diploma or bachelor's degree, or enter the job market [1].

The medium of instructions in the schools are Dzongkha (national language) and English. School curricula also include training in traditional arts, crafts, and agriculture. Besides the modern education system, there are large numbers of traditional institutions offering education to children in Monasteries, Drupdras and Shedras. The Ministry of Education has only recently started collecting information for the Shedras, collection of information on private Monasteries and Drupdras has not yet been undertaken.

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.

Many schools provide boarding facilities for students living in areas far from the school with meals provided through the support of World Food Programme (WFP). The WFP also supports mid-day meals for day scholars who come from distant communities.

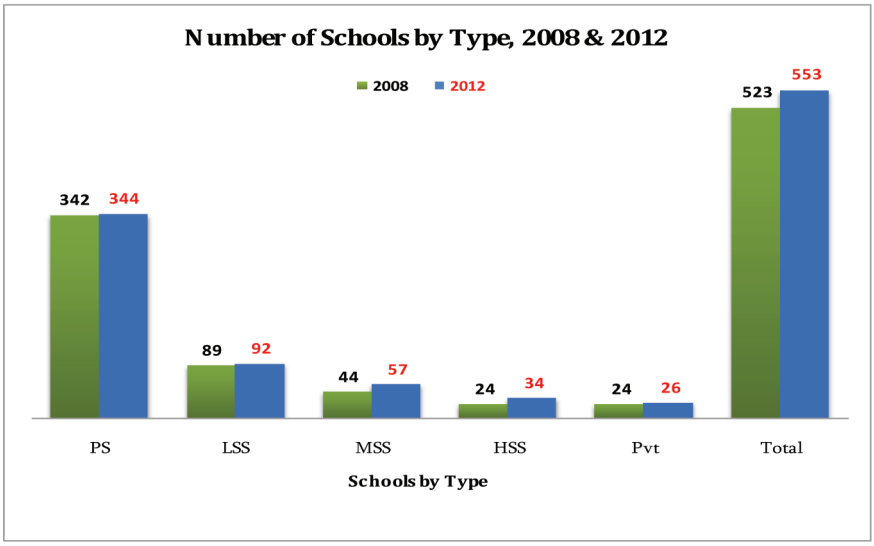


Table 3.1: Number of Schools, Institutes & Centres, Bhutan, 2012

(Numbers)

School/Institutes/Centres	Government	Private	Total
ECCD Centre [1]	61	35	96
Primary School	344	9	353
Lower Secondary School	93	1	94
Middle Secondary School	56	2	58
Higher Secondary School	34	14	48
Extended Classroom	108	…	108
Special Institute [2]	9	…	9
Tertiary Institute under RUB	10	1	11
Vocational Institute	8	…	8
Sanskrit Patshala	1	…	1
Monastic Education (Lobdra, Shedra, etc)	388	…	388
Continuing Education Centres	13	8	21
Non-Formal Centres [3]	953	0	953

[1] Private ECCD inclusive of ECCD under NGO, Private & Work place
[2] Special Institutes (7 of these schools are included in the schools under B above)
[3]Non formal and Continuing Education Division, DAHE
Source: Annual Education Statistics 2012, MoE

Table 3.2: Number of Students, Learners, Trainees and Novitiates, Bhutan, 2012

(Numbers)

Details	Government			Private			Total		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Early Childhood Development									
ECCD Centres	820	723	1,543	521	522	1,043	1,341	1,245	2,586
School Education									
Primary Schools	24,585	24,220	48,805	991	937	1,928	25,576	25,157	50,733
Lower Secondary Schools	24,665	25,110	49,775	107	116	223	24,772	25,226	49,998
Middle Secondary Schools	19,065	19,714	38,779	600	584	1,184	19,665	20,298	39,963
Higher Secondary Schools	13,155	12,954	26,109	3,310	3,283	6,593	16,465	16,237	32,702
Extended Classroom	1,711	1,540	3,251	…	…	…	1,711	1,540	3,251
Sub-Total	83,181	83,538	166,719	5,008	4,920	9,928	88,189	88,458	176,647
Bhutanese students studying in India [1]	…	…	…	222	128	350	222	128	350
Sub-Total	83,181	83,538	166,719	5,230	5,048	10,278	88,411	88,586	176,997
Special Institutes [2]	203	140	343	…	…	…	203	140	343
Continuing Education	308	323	631	414	625	1,039	722	948	1,670
Tertiary Education									
Tertiary Institutes under RUB [3]	3,343	2,041	5,384	388	473	861	3,731	2,514	6,245
Tertiary Students in India	143	69	212	1,770	1,391	3,161	1,913	1,460	3,373
Tertiary Students abroad	182	109	291	24	58	82	206	167	373
Sub-Total	3,996	2,564	6,560	2,596	2,547	5,143	6,592	5,111	11,703
Vocational institutes	694	323	1,017	...	...	...	694	323	1,017
Monastic Education(Lobdra, Shredra,etc)[4]	7,240	…	7,240	5,149	…	5,149	12,389	…	12,389
Non-Formal Centres	3,882	9,478	13,360	...	...	...	3,882	9,478	13,360
Sanskrit Patshala	5	2	7	...	...	...	5	2	7
Total	**99,818**	**96,628**	**196,446**	**13,496**	**8,117**	**21,613**	**113,314**	**104,745**	**218,059**

[1] Bhutanese Student studying in India in class PP-XII, [2] All special needs children enrolled in special institute as well as in formal school, [3] Private Tertiary enrolment in Royal Thimphu College, [4] The monastic enrolment reflected under public is from 2011, the enrolment reflected under private is from 2004

Source: Annual Education Statistics 2012, MoE

Table 3.3: Summary of Teachers, Lecturers, Instructors, Trainers and Caregivers, Bhutan, 2012

(Numbers)

Details	Government			Private			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Early Childhood Development									
ECCD Centres	3	84	87	12	130	142	15	214	229
School Education									
Primary Schools	1,548	787	2,335	44	88	132	1,592	875	2,467
Lower Secondary Schools	1,032	944	1,976	8	13	21	1,040	957	1,997
Middle Secondary Schools	954	731	1,685	35	54	89	989	785	1,774
Higher Secondary Schools	772	421	1,193	257	98	355	1,029	519	1,548
Extended Classroom	125	21	146	…	…	…	125	21	146
Sub-Total	4,431	2,904	7,335	344	253	597	4,775	3,157	7,932
Special Institutes [1]	86	91	177	…	…	…	86	91	177
Tertiary Institutes under RUB	671	232	903	31	14	45	702	246	948
Vocational institutes	175	48	223	…	…	…	175	48	223
Sanskirt Patshala	1		1	…	…	…	1	…	1
Sub-Total	858	283	1,141	31	14	45	889	297	1,186
Non-Formal Centres	314	635	949	…	…	…	314	635	949
Total	**5,606**	**3,906**	**9,512**	**387**	**397**	**784**	**5,993**	**4,303**	**10,296**

[1] *All teachers in the special institutes including teachers who teaches special needs in 6 formal school*

Source: Annual Education Statistics 2012, MoE

Table 3.4: Number of Schools by Type and Dzongkhag, 2012

(Numbers)

Dzongkhag	ECR	Private HSS	Public HSS	Private LSS	Public LSS	Private MSS	Public MSS	Private PS	Public PS	Total
Bumthang	2	1	1	...	2	...	3	...	12	21
Chhukha	6	1	3	1	5	...	6	...	26	48
Dagana	7	...	2	...	7	...	2	...	12	30
Gasa	2	...	...	...	...	...	1	...	3	6
Haa	3	...	1	...	3	...	...	...	5	12
Lhuentse	4	...	1	...	2	...	2	...	22	31
Monggar	6	1	3	...	7	...	2	...	38	57
Paro	3	4	2	...	6	...	4	1	6	26
Pema Gatshel	9	...	2	...	6	...	1	...	20	38
Punakha	8	1	1	...	3	...	5	...	10	28
Samdrup Jongkhar	6	...	1	...	4	...	5	1	17	34
Samtse	26	...	3	...	7	...	3	...	17	56
Sarpang	4	1	2	...	6	...	2	...	11	26
Thimthrom	...	4	2	...	5	2	5	6	6	30
Thimphu	2	...	0	...	2	...	2	1	5	12
Trashigang	9	...	4	...	10	...	5	...	41	69
Trashi Yangtse	...	...	1	...	7	...	1	...	21	30
Trongsa	1	...	1	...	2	...	2	...	19	25
Tsirang	2	...	1	...	2	...	1	...	11	17
Wangdue Phodrang	8	...	2	...	3	...	2	...	19	34
Zhemgang	1	1	1	...	3	...	3	...	23	32
Total	**109**	**14**	**34**	**1**	**92**	**2**	**57**	**9**	**344**	**662**

Source: Annual Education Statistics 2012, MoE

Table 3.5: Number of Teachers in Schools by Sex, Bhutan (2008-2012)

(Numbers)

Details	2008			2009			2010			2011			2012		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Community Primary Schools [1]	775	225	1,000	991	290	1,281	991	386	1,377	1,072	299	1,371	...	...	...
Pvt Community Primary School	...	...	...	5	2	7	4	3	7	6	3	9	...	...	...
Primary Schools	425	374	799	500	431	931	435	461	896	460	437	897	1,548	787	2,335
Pvt Primary Schools	39	84	123	36	86	122	43	82	125	34	68	102	44	88	132
Lower Secondary Schools	836	791	1,627	904	881	1,785	919	938	1,857	1,005	944	1,949	1,032	944	1,976
Pvt Lower Secondary Schools	27	37	64	18	32	50	19	23	42	18	35	53	8	13	21
Middle Secondary Schools	697	480	1,177	734	540	1,274	797	636	1,433	924	696	1,620	954	731	1,685
Pvt Middle Secondary School	...	...	...	12	15	27	...	...	...	14	20	34	35	54	89
Higher Secondary Schools	523	231	754	598	314	912	659	387	1,046	699	374	1,073	772	421	1,193
Pvt Higher Secondary schools	154	47	201	202	77	279	173	111	284	244	85	329	257	98	355
Extended Classroom	...	...	...	...	...	...	...	...	...	101	15	116	125	21	146
Total	3,476	2,269	5,745	4,000	2,668	6,668	4,040	3,027	7,067	4,577	2,976	7,553	4,775	3,157	7,932

[1] *Community Primary Schools merged with Primary School after 2011*

Source: Annual Education Statistics 2012, MoE

Table 3.6: Enrolment in Schools and Institutions (2008-2012)

(Numbers)

Institutions	2008	2009	2010	2011	2012
Schools	157,112	164,262	170,405	173,947	176,647
Community Primary Schools [1]	29,702	31,090	30,232	29,569	...
Primary Schools	22,813	23,565	24,586	22,510	50,733
Lower Secondary Schools	48,706	48,153	49,375	50,102	49,998
Middle Secondary Schools	32,292	33,891	37,871	40,097	39,963
Higher Secondary Schools	16,155	18,880	28,341	28,799	32,702
Extended Classroom	...	...	...	2,870	3,251
Tertiary Education Institutes (Royal University of Bhutan) [2]	3,914	4,715	5,243	6,315	7,400
College of Natural Resources, Lobesa	140	147	151	151	369
College of Science and Technology, Rinchending	247	292	384	477	641
Institute of Language and Culutural Studies, Simtokha	338	339	345	418	550
Jigme Namgyal Polytechnic, Dewathang	307	345	320	413	574
National Institute of Traditional Medicines, Thimphu	35	40	42	51	65
Paro College of Education, Paro	839	1,062	907	849	1,239
Royal Institute of Health Sciences, Thimphu	257	257	314	355	362
Samtse College of Education, Samtse	659	966	664	657	1,190
Sherubtse College, Kanglung	1,092	772	938	1,068	1,229
Gaeddug College of Business Studies	...	495	861	995	1,181
Royal Thimphu College (Pvt)	...	...	317	881	...
Vocational Institutes	1,220	1,222	804	...	1,017
National Institue of Zorig Chusum, Thimphu	380	341	50	...	...
Institute of Automobile Engineering, Thimphu	...	25	45	...	...
Trashiyangtse Institue of Zorigchusum	...	57	23	...	...
Vocational Training Institue of Shershong, Sarpang	97	133	90	...	...

Table 3.6: Contd...

Vocational Training Institue, Samthang	227	105	138	...	...
Vocational Training Institute, Chumey	168	238	79	...	...
Vocational Training Institute, Khuruthang	174	166	184	...	...
Vocational Training Institute, Rangjung	174	157	195	...	...
Special Institutes	68	66	283	...	343
National Institute for the Disabled (NID)	50	48	n.a	...	...
Jigmecholing (Surey) Sanskrit patshala	18	18	n.a	5	...
Others	14,124	13,523	13,171	26,877	28,335
ECCD Centres	294	363	659	1,520	2,586
Non-formal Education Centres	13,830	13,160	12,901	12,968	13,360
Monastic education (Lobdra,Shedra etc.)	...	...	12,512	12,389	12,389

[1] Community Primary Schools merged with Primary School after 2011
[2] RUB has been delinked from MoE in 2011. The figure for 2012 are sourced from: staff and students statistics october 2012,RUB.
Source: Annual Education Statistics 2012, MoE

Table 3.7: Number and Percent Share of Students per Dzongkhag by Type of Schools, Bhutan, 2012

Dzongkhag	ECR		PS		LSS		MSS		HSS		Grand Total	
	Total	%	Total	%	Total	%	Total	%	Total	%	Total	%
Bumthang	43	1	1,220	2	1,145	2	1,228	3	672	2	4,308	2
Chhukha	187	6	3,948	8	4,987	10	4,574	11	3,512	11	17,208	10
Dagana	264	8	2,093	4	2,319	5	1,749	4	1,098	3	7,523	4
Gasa	77	2	297	1	...	...	437	1	...	...	811	...
Haa	98	3	773	2	1,532	3	...	...	591	2	2,994	2
Lhuentse	58	2	2,016	4	638	1	826	2	431	1	3,969	2
Monggar	148	5	3,601	7	3,043	6	1,035	3	2,579	8	10,406	6
Paro	107	3	1,560	3	3,420	7	2,652	7	3,537	11	11,276	6
Pema Gatshel	231	7	1,682	3	2,651	5	769	2	1,074	3	6,407	4
Punakha	169	5	1,718	3	1,546	3	2,865	7	1,715	5	8,013	5
Samdrup Jongkhar	139	4	3,762	7	1,653	3	3,094	8	488	1	9,136	5
Samtse	1,051	32	3,054	6	4,432	9	3,732	9	3,728	11	15,997	9
Sarpang	123	4	1,776	4	5,128	10	2,319	6	2,037	6	11,383	6
Thimthrom	...	...	6,356	13	4,531	9	6,905	17	5,674	17	23,466	13
Thimphu	16	...	819	2	570	1	1,338	3	...	...	2,743	2
Trashigang	190	6	4,486	9	3,444	7	2,363	6	2,132	7	12,615	7
Trashi Yangtse	...	...	1,478	3	2,600	5	702	2	490	1	5,270	3
Trongsa	13	...	1,801	4	727	1	364	1	446	1	3,351	2
Tsirang	92	3	2,490	5	2,082	4	641	2	763	2	6,068	3
Wangdue Phodrang	222	7	3,625	7	2,420	5	973	2	1,151	4	8,391	5
Zhemgang	23	1	2,178	4	1,130	2	1,397	3	584	2	5,312	3
Total	3,251	100	50,733	100	49,998	100	39,963	100	32,702	100	176,647	100

Source: Annual Education Statistics 2012, MoE

Table 3.8: Number of Students by Grade, Bhutan (2008-2012)

(Number)

Grade	2008	2009	2010	2011	2012
Primary grade	106,100	107,700	110,369	111,173	110,575
Pre-primary / PP	16,432	17,108	17,165	15,581	13464
I	16,084	16,316	16,732	16,746	15843
II	16,529	15,921	16,246	17,082	16967
III	14,983	15,900	15,808	16,020	16721
IV	15,506	15,194	16,363	16,569	16750
V	13,808	14,362	14,225	15,369	15773
VI	12,758	12,899	13,830	13,806	15057
Lower Secondary grade	23,247	24,297	24,904	26,568	27,887
VII	12,328	12,850	13,088	14,150	14,359
VIII	10,919	11,447	11,816	12,418	13,528
Middle Secondary grade	17,608	19,308	21,818	22,266	22,941
IX	9,699	10,551	11,525	11,876	12,408
X	7,909	8,757	10,293	10,390	10,533
Higher Secondary school	10,157	11,815	13,314	13,940	15,244
XI	5,426	5,990	6,446	6,687	7,386
XII	4,731	5,825	6,868	7,253	7,858
Total	**157,112**	**164,262**	**170,405**	**173,947**	**176,647**

Source: Annual Education Statistics 2012, MoE

Table 3.9: Comparative Enrolment by Grade and Type of Schools, Bhutan (2011-2012)

Class	Private Schools				Extended Classroom				Primary School				Community Primary Schools			
	2011	2012	+or-	%	2011	2012	+or-	%	2011	2012	+or-	%	2011	2012	+or-	%
PP	853	765	(88)	(0.10)	1,184	856	(328)	(0.28)	7,072	6,014	(1,058)	(0.15)	5,094	4,412	(682)	(0.13)
I	607	656	49	0.08	878	1,028	150	0.17	7,588	7,193	(395)	(0.05)	5,098	4,569	(529)	(0.10)
II	497	503	6	0.01	635	804	169	0.27	7,896	7,481	(415)	(0.05)	4,831	4,855	24	0.00
III	389	393	4	0.01	160	531	371	2.32	7,561	7,631	70	0.01	4,524	4,476	(48)	(0.01)
IV	304	315	11	0.04	13	13	...	...	7,872	7,675	(197)	(0.03)	4,491	4,514	23	0.01
V	258	274	16	0.06	...	19	19	...	6,775	6,852	77	0.01	3,189	3,794	605	0.19
VI	217	255	38	0.18	...	...	...	...	5,508	5,959	451	0.08	2,904	2,819	(85)	(0.03)
Sub-Total	3,125	3,161	36	0.01	2,870	3,251	381	0.13	50,272	48,805	(1,467)	(0.03)	30,131	29,439	(692)	(0.02)
VII	112	138	26	0.23	...	...	...	...	...	...	...	...	...	...	...	...
VIII	113	111	(2)	(0.02)	...	...	...	...	...	...	...	...	...	...	...	...
Sub-Total	225	249	24	0.11	...	...	...	...	...	...	...	...	...	...	...	...
IX	65	101	36	0.55	...	...	...	...	...	...	...	...	...	...	...	...
X	92	110	14	0.15	...	...	...	...	...	...	...	...	...	...	...	...
Sub-Total	157	211	50	0.32	...	...	...	...	...	...	...	...	...	...	...	...
XI	3,123	2,717	(406)	(0.13)	...	...	...	...	...	...	...	...	...	...	...	...
XII	3,586	3,590	28	0.01	...	...	...	...	...	...	...	...	...	...	...	...
Sub-Total	6,709	6,307	(378)	(0.06)	...	...	...	...	...	...	...	...	...	...	...	...
VII-X	382	460	74	0.19	...	...	...	...	...	...	...	...	...	...	...	...
Total	10,216	9,928	(268)	(0.03)	2,870	3,251	381	0.13	50,272	48,805	(1,467)	(0.03)	30,131	29,439	(692)	(0.02)

Source: Annual Education Statistics 2012, MoE

Primary Schools				Lower & Middle Secondary Schools				Higher Secondary Schools				Total			
2011	2012	+or-	%	2011	2012	+or-	%	2011	2012	+or-	%	2011	2012	+or-	%
3,372	2,660	(712)	(0.21)	6,185	5,491	(694)	(0.11)	287	338	51	0.18	15,581	13,464	(2,117)	(0.14)
3,323	3,019	(304)	(0.09)	7,327	6,465	(862)	(0.12)	346	501	155	0.45	16,746	15,843	(903)	(0.05)
3,324	3,041	(283)	(0.09)	7,772	7,608	(164)	(0.02)	282	571	289	1.02	17,082	16,967	(115)	(0.01)
3,387	3,085	(302)	(0.09)	7,628	7,655	27	0.00	282	511	229	0.81	16,020	16,721	701	0.04
3,492	3,358	(134)	(0.04)	8,038	8,294	256	0.03	342	453	111	0.32	16,569	16,750	181	0.01
3,057	2,981	(76)	(0.02)	8,050	8,110	60	0.01	286	518	232	0.81	15,369	15,773	404	0.03
2,917	2,689	(228)	(0.08)	7,829	8,331	502	0.06	252	512	260	1.03	13,806	15,057	1,251	0.09
22,872	20,833	(2,039)	(0.09)	52,829	51,954	(875)	(0.02)	2,077	3,404	1,327	0.64	111,173	110,575	(598)	(0.01)
...	...	...	...	13,269	13,168	(101)	(0.01)	769	1,053	284	0.37	14,150	14,359	209	0.01
...	...	...	...	11,494	12,246	752	0.07	811	1,171	360	0.44	12,418	13,528	1,110	0.09
...	...	...	...	24,763	25,414	651	0.03	1,580	2,224	644	0.41	26,568	27,887	1,319	0.05
...	...	...	...	6,350	6,269	(81)	(0.01)	5,461	6,038	577	0.11	11,876	12,408	532	0.04
...	...	...	...	4,923	4,917	(6)	(0.00)	5,401	5,506	105	0.02	10,416	10,533	117	0.01
...	...	...	...	11,273	11,186	(87)	(0.01)	10,862	11,544	682	0.06	22,292	22,941	649	0.03
...	...	...	...	...	...	...	...	3,538	4,669	1,131	0.32	6,661	7,386	725	0.11
...	...	...	...	...	...	...	...	3,667	4,268	601	0.16	7,253	7,858	605	0.08
...	...	...	...	...	...	...	...	7,205	8,937	1,732	0.24	13,914	15,244	1,330	0.10
...	...	...	...	36,036	36,600	564	0.02	12,442	13,768	1,326	0.11	48,860	50,828	1,968	0.04
22,872	20,833	(2,039)	(0.09)	88,865	88,554	(311)	(0.003)	21,724	26,109	4,385	0.20	173,947	176,647	2,700	0.02

Table 3.10: Number of Students Enroled, Promoted, Repeaters and Dropouts by Grade and Sex, Bhutan, 2012

(Number)

Class	Enrolement				Repeaters Dropouts imputed		Promoted [1]		Dropouts [1]	
	2011		2012		2012		2012		2012	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
PP	7,898	7,683	6,947	6,517	420	342	7,524	7,458	...	...
I	8,477	8,269	8,006	7,837	482	379	8,022	7,984	...	...
II	8,625	8,457	8,590	8,377	568	393	7,900	8,056	157	8
III	7,957	8,063	8,366	8,355	466	299	7,547	7,927	...	...
IV	8,434	8,135	8,315	8,435	768	508	7,477	7,535	189	92
V	7,741	7,628	7,917	7,856	440	321	7,222	7,335	79	...
VI	6,809	6,997	7,483	7,574	261	239	6,565	6,933	...	...
Sub-Total	55,941	55,232	55,624	54,951	3,405	2,481	52,257	53,228	425	100
VII	6,692	7,458	6,990	7,369	425	436	6,149	6,961	118	61
VIII	5,939	6,479	6,350	7,178	201	217	5,722	6,220	16	42
Sub-Total	12,631	13,937	13,340	14,547	626	653	11,871	13,181	134	103
IX	5,858	6,018	5,946	6,462	224	242	5,217	5,266	417	510
X [2]	5,117	5,273	5,244	5,289	27	23	3,713	3,619	1,377	1,631
Sub-Total	10,975	11,291	11,190	11,751	251	265	8,930	8,885	1,794	2,141
Total	**79,547**	**80,460**	**80,154**	**81,249**	**4,282**	**3,399**	**73,058**	**75,294**	**2,353**	**2,344**

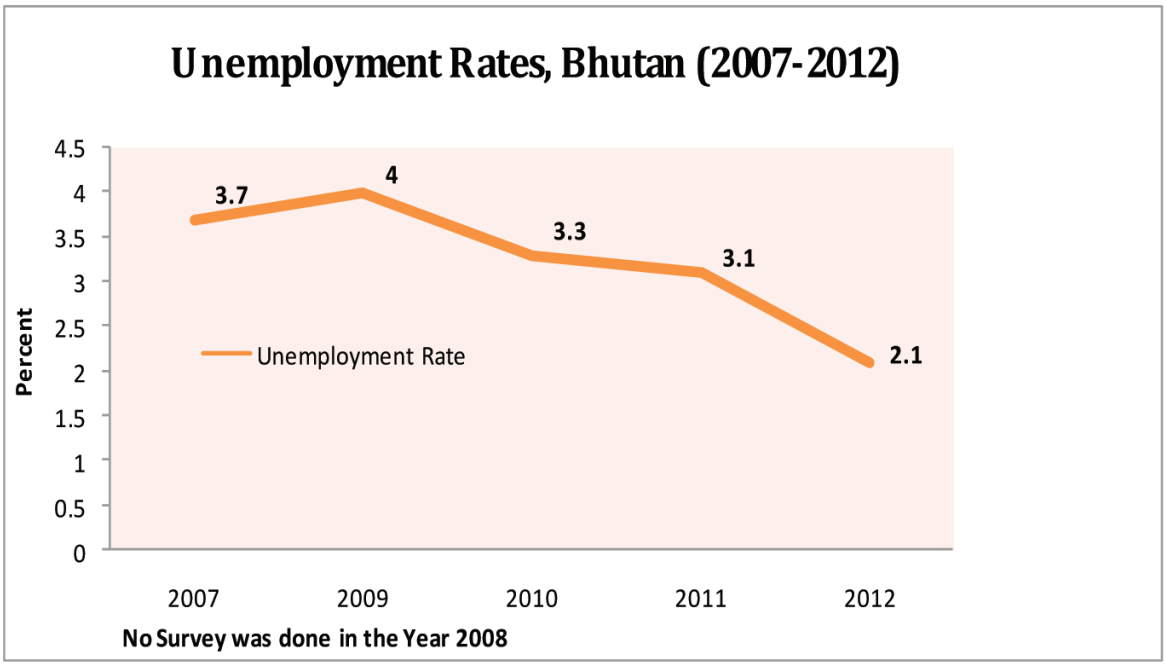
[1] *Imputed*

[2] *The students who leave school after Class X are Graduates and school leavers and not drop-outs*

Source: Annual Education Statistics 2012, MoE

CHAPTER 4
LABOUR AND EMPLOYMENT

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 Statistics Bureau (NSB) conducted two consecutive Labour Force Surveys in 1998 and 2000. At present the Labour Market Information and Research Division (LMIRD) of the Department of Employment (DoE) under the Ministry of Labour and Human Resources (MoLHR) is conducting the Labour Force Surveys. Labour statistics presented in this chapter are from Labour Force Survey (LFS) Report, 2012.

As per the findings from Labour Force Survey 2012, agriculture sector employs over 60 percent of the total employed persons. The employed persons comprise of all those who had performed some work, paid in cash or kind, during the reference period (past one week) for at least one hour or the person has a job or business formally attached but temporally absent from the work.

A total of 329,487 were employed and 6,904 were found to be unemployed out of total projected population of 734,850 in 2012, making unemployment rate at the national level by 2.1 percent as per the Labour Force Survey 2012.

Table 4.1: Employment in Civil Service by Agency, Bhutan (2008-2012)

(Number)

Agency	2008	2009	2010	2011	2012
His Majesty 5th King's Secretariat	11	14	27	37	105
His Majesty 4th King's Secretariat	29	30	26	26	26
Judiciary					
Royal Court of Justice	314	309	309	290	270
Legislative					
National Assembly	25	32	36	33	52
National Council	...	16	24	21	37
Constitutional					
Royal Audit Authority	178	189	199	198	214
Election Commission	93	93	94	69	32
Royal Civil Service Commission	56	57	69	54	68
Anti-Corruption Commission	23	29	29	36	51
Ministry					
Ministry of Agriculture & Forests	3036	3084	3176	3296	2485
Ministry of Economic Affairs	570	510	524	527	600
Ministry of Education	6272	6625	7365	8373	537
Ministry of Finance	1308	1424	1547	1631	884
Ministry of Foreign Affairs	116	136	141	149	204
Ministry of Health	2374	2492	2660	2828	1693
Ministry of Home & Cultural Affairs	1092	1104	1266	1278	505
Ministry of Information & Communications	303	320	332	704	475
Ministry of Labour & Human Resources	253	281	310	339	389
Ministry of Works & Human Settlement	1631	1670	1501	1611	798
Autonomous					
Bhutan Council for School Examination and Assessment	…	…	…	…	21
Bhutan National Legal Institute	…	…	…	…	5
Bhutan Infocomm & Media Authority	16	17	22	24	27
Bhutan Naroctic Control Agency	4	7	11	14	19
Bhutan Olympic Committee	6	7	8	7	8
Bhutan Standards Bureau	…	…	…	…	46
Cabinet Secretariat	12	24	27	27	37
Center for Bhutan Studies	21	23	22	26	26
Dratshang Lhentshog	26	26	34	36	60
Dzongkha Development Commission	22	22	27	26	27
Gross National Happiness Commission	91	204	101	100	77

Table 4.1: contd...

National Commission for Women & Children	6	6	6	11	14
National Environment Commission	55	58	63	61	50
National Land Commission	244	292	310	321	281
National Statistical Bureau	56	56	60	54	44
Drug Regulatory Authority	2	2	1	19	22
Office of Attorney General	21	22	26	96	41
Royal Privy Council		2	8	10	10
Royal Institute of Management	58	60	69	64	71
Tourism Council of Bhutan	…	51	53	48	52
Civil Society Organization Authority	…	…	…	…	2
Dzongkhags					
All 20 Dzongkhags	…	…	…	…	12693
Thromdues					
All 4 Thromdes	…	…	…	…	1165
Other Agencies					
Royal Education Council	...	2	1	7	4
Corporations	...	...	...	...	16
Defence [1]	...	...	...	...	20
Financial Institutions (RMA)	...	...	...	...	1
Non-Government Organizations	...	...	...	...	6
International Organizations	...	...	...	...	5
Grand Total	**18,807**	**19,294**	**21,113**	**22,444**	**24,275**

[1] *Finanace and Accounts staff placed in RBG/RBA/RBP*
Source: Civil Service Statistics, Royal Civil Servic Commission

Table 4.2: Percentage Distribution of Employed Persons by Major Economic Activity and Sex, Bhutan 2012

Major Economic Activity	Male	Female	Total
Agriculture & forestry	23.9	38.4	62.2
Mining & Quarrying	0.1	0.0	0.2
Manufacturing	2.0	3.0	5.0
Electricity, gas & water supply	1.5	0.4	2.0
Construction	1.3	0.2	1.5
Wholesale & retail trade	1.7	2.1	3.8
Hotels & restaurants	0.8	1.1	1.8
Transport, storage & communications	2.2	0.3	2.6
Financial intermediation	0.5	0.3	0.7
Real estate, renting & business activities	0.4	0.2	0.6
Public Administration & defence	6.9	1.4	8.3
Education	2.1	1.3	3.5
Health & social work	0.9	0.5	1.4
Other community, social & personal service activities	3.3	1.3	4.6
Private households with employed persons	1.2	0.6	1.8
Extra-territorial organizations & bodies	0.1	0.0	0.1
Total	**49**	**51**	**100**

Source: Labour Force Survey Report 2012, MoLHR

Table 4.3: Percentage Distribution of Employed Persons by Major Occupation and Sex, Bhutan 2012

Major Occupation	Male	Female	Total
Legislators, senior officials & managers	1.4	0.5	1.9
Professionals	4	1.9	5.9
Technicians & associate professionals	2.6	1.1	3.7
Clerks	1	0.9	1.8
Service workers & shop & market sales workers	4.4	4	8.3
Skilled agricultural & fishery workers	23.7	38.2	61.9
Craft & related workers	2.3	3	5.2
Plant & machine operators & assemblers	4.2	0.3	4.5
Elementary occupations	3.5	1.1	4.6
Armed Forces	2	0.1	2.1
Total	**49**	**51**	**100**

Source: Labour Force Survey Report 2012, MoLHR

Table 4.4: Percentage Distribution of Employed Persons by Nature of Employment and Sex, Bhutan 2012

Nature of Employment	Male	Female	Total
Regular paid employee	17.8	6.1	23.9
Casual paid employee	2.4	1.2	3.6
Contract/Piece paid employee	1.1	0.5	1.6
Family worker (Non-agriculture)	0.5	1.1	1.7
Family worker (Agriculture)	11.9	27.6	39.5
Own account worker (Non agriculture)	5	5.2	10.2
Own account worker (Agriculture)	10.2	9.3	19.5
Employer	0	0	0.1
Total	**49**	**51**	**100**

Source: Labour Force Survey Report 2012, MoLHR

Table 4.5: Percentage Distribution of Labour Force Participation, Employment Status by Age Group and Sex, Bhutan 2012

Age	Labour Force participation rate			Unemployment rate			Employment rate		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
15-19	11.5	14.9	13.3	5.3	9.4	7.7	94.7	90.6	92.3
20-24	49.1	58.4	54.3	7.9	6.6	7.1	92.1	93.4	92.9
25-29	83.6	80.2	81.7	3.9	2.8	3.3	96.1	97.2	96.7
30-34	90.5	82.4	86.4	0.8	1.3	1.0	99.2	98.7	99.0
35-39	90.1	83.2	86.4	0.7	1.1	0.9	99.3	98.9	99.1
40-44	87.7	85.8	86.7	0.4	0.8	0.6	99.6	99.2	99.4
45-49	88.4	83.7	85.9	0.4	0.4	0.4	99.6	99.6	99.6
50-54	83.5	76.9	80.3	1.2	0.8	1.0	98.8	99.2	99.0
55-59	77.5	74.8	76.1	0.6	0.0	0.3	99.4	100.0	99.7
60-64	65.5	55.4	60.8	0.0	0.1	0.0	100.0	99.9	100.0
65-69	57.2	43.8	50.3	0.0	0.0	0.0	100.0	100.0	100.0
70-74	41.6	30.7	36.6	0.0	0.0	0.0	100.0	100.0	100.0
75-79	27.1	24.5	26.0	0.0	0.0	0.0	100.0	100.0	100.0
80-84	27.6	15.6	21.4	0.0	0.0	0.0	100.0	100.0	100.0
85+	19.8	14.1	17.2	0.0	0.0	0.0	100.0	100.0	100.0
Total	65.7	63.2	64.4	1.9	2.2	2.1	98.1	97.8	97.9

Source: Labour Force Survey Report 2012, MoLHR

Table 4.6: Number of Persons Employed by Age Group and Type of Enterprise, Bhutan 2012

(Number)

Age	Government		Public Corporation		Pvt. Corporation		Armed Forces		Pvt. Business		Agri. Farming		NGO/INGO		Total		Grand Total
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
15-19	149	225	77	29	75	12	0	0	782	866	3,005	4,473	0	7	4,088	5,612	9,700
20-24	1,914	1,621	492	304	1,011	572	231	14	3,542	4,588	6,359	13,950	47	111	13,596	21,160	34,756
25-29	7,215	3,951	1,435	848	1,655	744	882	139	6,926	6,032	7,315	18,280	137	144	25,565	30,138	55,703
30-34	7,281	2,802	1,480	465	1,398	306	1,163	33	5,820	4,399	7,971	15,170	111	55	25,224	23,230	48,454
35-39	5,190	1,098	969	355	766	146	879	14	4,479	4,126	7,450	15,021	40	29	19,773	20,789	40,562
40-44	4,201	770	738	181	702	201	709	21	3,155	2,721	6,580	12,410	61	51	16,146	16,355	32,501
45-49	3,430	451	935	283	351	63	473	7	3,082	2,117	7,859	13,674	87	98	16,217	16,693	32,910
50-54	1,982	160	572	69	232	38	171	0	2,484	1,325	7,712	9,675	124	7	13,277	11,274	24,551
55-59	1,368	100	148	7	101	0	27	41	1,834	1,149	7,190	9,390	113	75	10,781	10,762	21,543
60-64	312	50	56	0	56	40	0	0	1,355	477	5,937	5,195	95	0	7,811	5,762	13,573
65-69	90	7	0	4	109	0	0	0	562	352	3,251	2,929	0	0	4,012	3,292	7,304
70-74	31	0	5	0	13	0	0	0	339	112	2,186	1,552	74	0	2,648	1,664	4,312
75-79	7	0	0	0	0	0	0	0	135	12	1,008	736	0	0	1,150	748	1,898
80-84	68	38	0	0	0	0	0	0	9	7	545	358	38	0	660	403	1,063
85+	51	0	0	0	0	0	0	0	112	0	244	241	0	0	407	241	648
Total	33,289	11,273	6,907	2,545	6,469	2,122	4,535	269	34,616	28,283	74,612	123,054	927	577	161,355	168,123	329,478

Source: Labour Force Survey Report 2012, MoLHR

Table 4.7: Total Employed Persons by Age Group and Completed Level of Education, Bhutan 2012

(Numbers)

Age	Level of Education													Total
	Illiterate	Nursery	Primary	Lower Secondary	Middle Secondary	Higher Secondary	Undergraduate	Bachelors Degree	Certificate	Diploma	Masters & Above	NFE	Religious Professionals	
15-19	4,525	36	1,928	809	734	452	0	7	0	0	7	1,041	165	9,704
20-24	14,660	12	5,613	2,500	5,000	3,980	58	1,010	7	44	33	1,157	682	34,756
25-29	22,421	26	6,693	4,235	8,355	6,283	39	5,147	20	127	340	1,471	548	55,705
30-34	25,262	34	5,867	2,877	5,800	3,992	25	2,298	7	67	207	1,381	636	48,453
35-39	26,135	5	4,638	2,076	2,867	1,473	5	1,210	16	105	228	1,062	741	40,561
40-44	23,188	45	3,121	1,528	1,696	757	21	819	26	54	130	614	502	32,501
45-49	25,478	39	2,261	1,134	1,228	464	11	617	14	61	151	735	720	32,913
50-54	20,116	0	1,324	616	543	363	0	331	0	156	93	310	701	24,553
55-59	18,944	0	887	341	405	175	0	212	0	11	34	71	465	21,545
60-64	12,309	0	579	128	147	37	0	64	0	7	12	41	249	13,573
65-69	6,785	0	127	56	51	0	0	0	0	0	7	37	242	7,305
70-74	4,026	0	119	5	56	0	0	23	0	0	6	0	76	4,311
75-79	1,842	0	7	0	0	13	0	0	0	0	0	0	38	1,900
80-84	978	0	44	0	0	0	3	0	0	0	0	0	38	1,063
85+	543	0	6	6	0	0	0	46	0	0	0	0	47	648
Total	207,212	197	33,214	16,311	26,882	17,989	162	11,784	90	632	1,248	7,920	5,850	329,491

Source: Labour Force Survey Report 2012, MoLHR

Table 4.8: Total Employed Persons by Level of Education and Dzongkhag, Bhutan 2012

(Numbers)

Dzongkhag	Level of Education													Total
	Illiterate	Nursery	Primary	Lower Secondary	Middle Secondary	Higher Secondary	Undergraduate	Bachelors Degree	Certificate	Diploma	Masters & Above	NFE	Religious Professionals	
Bumthang	5,063	0	654	326	628	291	5	64	0	0	5	219	224	7,479
Chhukha	24,027	39	5,279	2,321	3,783	2,355	0	1,351	6	158	146	373	185	40,023
Dagana	5,558	34	786	235	464	489	0	141	0	0	10	0	5	7,722
Gasa	2,348	0	542	221	186	163	0	0	0	0	0	209	358	4,027
Haa	4,007	0	830	392	422	102	0	36	0	47	19	503	587	6,945
Lhuntse	4,749	0	398	261	336	591	0	192	0	0	14	454	296	7,291
Monggar	15,930	6	1,833	838	1,214	695	6	309	0	31	12	1,784	778	23,436
Paro	11,002	0	1,497	1,266	1,951	1,411	3	1,043	0	84	5	40	285	18,587
Pema Gatshel	10,448	0	941	395	685	215	10	172	0	10	5	959	427	14,267
Punakha	10,116	36	1,311	719	636	370	0	284	15	22	145	705	725	15,084
Samdrup Jongkhar	14,464	0	1,578	585	1,326	430	37	396	0	11	27	617	670	20,141
Samtse	27,634	38	4,309	1,601	1,811	588	0	397	0	56	41	347	53	36,875
Sarpang	9,732	0	1,763	785	1,313	826	6	419	0	6	12	0	6	14,868
Thimphu	16,750	21	3,970	3,376	7,966	7,094	79	5,962	57	143	530	36	61	46,045
Trashigang	11,101	0	1,285	417	754	551	4	133	4	21	163	613	538	15,584
Trashi Yangtse	6,136	11	537	557	662	237	0	329	0	0	16	347	154	8,986
Trongsa	4,153	0	709	299	346	401	0	74	0	7	7	0	0	5,996
Tsirang	5,359	5	1,680	473	703	185	0	104	9	5	23	162	0	8,708
Wangdue Phodrang	13,335	7	2,749	1,148	1,344	754	14	298	0	34	68	550	498	20,799
Zhemgang	5,303	0	560	97	351	244	0	81	0	0	0	0	0	6,636
Total	**207,215**	**197**	**33,211**	**16,312**	**26,881**	**17,992**	**164**	**11,785**	**91**	**635**	**1,248**	**7,918**	**5,850**	**329,499**

Source: Labour Force Survey Report 2012, MoLHR

Table 4.9: Total Employed Persons by Major Economic Activity and Nature of Employment, Bhutan 2012

(Numbers)

Major Economic Activity	Nature of Employment								Total
	Regular paid employee	Casual paid employee	Family worker (Non-agriculture)	Family worker (Agriculture)	Own-account worker (Non-agriculture)	Own-account worker (Agriculture)	Employer	Piece/ Contract paid worker	
Agriculture & Forestry	2,712	1,778	544	1,583	128,450	8,413	61,419	77	204,978
Mining & Quarrying	407	11	0	0	41	40	0	0	499
Manufacturing	6,740	1,596	1,090	1,222	575	4,587	716	14	16,540
Electricity, gas & water supply	5,808	293	281	20	0	60	7	0	6,469
Construction	1,584	1,014	1,039	194	5	916	230	0	4,982
Wholesale & retail trade	2,251	1,025	245	685	228	7,370	673	28	12,505
Hotels & restaurants	2,278	506	101	288	110	2,627	111	8	6,029
Transport, storage & communications	4,107	992	308	102	97	2,709	76	30	8,421
Fincancial intermediation	2,276	91	13	0	0	13	0	4	2,397
Real estate, renting & business activities	884	187	46	154	33	636	22	0	1,962
Public Administration & defence	25,251	922	273	102	74	592	80	34	27,328
Education	11,089	88	124	0	6	45	16	7	11,375
Health & social work	3,984	110	91	7	39	276	37	4	4,548
Other community, soical & personal service activities	6,942	2,321	850	778	283	3,522	580	21	15,297
Private households with employed persons	1,904	1,019	359	310	94	1,878	187	0	5,751
Extra-territorial organizations & bodies	352	14	7	38	0	0	0	0	411
Total	**78,571**	**11,967**	**5,371**	**5,483**	**130,035**	**33,684**	**64,154**	**227**	**329,492**

Source: Labour Force Survey Report 2012, MoLHR

Table 4.10: Employed Persons by Dzongkhag, Sex and Area of Residence, Bhutan 2012

(Numbers)

Dzongkhag	Urban			Rural			Bhutan		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Bumthang	1,222	1,138	2,360	2,089	3,029	5,118	3,311	4,167	7,478
Chhukha	8,207	5,753	13,960	12,566	13,497	26,063	20,773	19,250	40,023
Dagana	472	526	998	2,321	4,403	6,724	2,793	4,929	7,722
Gasa	64	54	118	1,910	1,999	3,909	1,974	2,053	4,027
Haa	465	404	869	3,084	2,990	6,074	3,549	3,394	6,943
Lhuntse	431	383	814	3,011	3,465	6,476	3,442	3,848	7,290
Monggar	1,848	1,609	3,457	9,002	10,978	19,980	10,850	12,587	23,437
Paro	689	676	1,365	7,462	9,761	17,223	8,151	10,437	18,588
Pema Gatshel	867	685	1,552	5,883	6,832	12,715	6,750	7,517	14,267
Punakha	609	689	1,298	6,354	7,430	13,784	6,963	8,119	15,082
Samdrup Jongkhar	2,434	1,975	4,409	7,230	8,503	15,733	9,664	10,478	20,142
Samtse	2,766	1,842	4,608	16,323	15,944	32,267	19,089	17,786	36,875
Sarpang	2,093	1,131	3,224	4,487	7,155	11,642	6,580	8,286	14,866
Thimphu	22,328	16,486	38,814	3,596	3,636	7,232	25,924	20,122	46,046
Trashigang	1,039	800	1,839	6,587	7,158	13,745	7,626	7,958	15,584
Trashi Yangtse	1,043	838	1,881	3,183	3,919	7,102	4,226	4,757	8,983
Trongsa	618	322	940	1,800	3,256	5,056	2,418	3,578	5,996
Tsirang	631	455	1,086	3,890	3,728	7,618	4,521	4,183	8,704
Wangdue Phodrang	2,435	1,248	3,683	7,509	9,606	17,115	9,944	10,854	20,798
Zhemgang	658	255	913	2,157	3,565	5,722	2,815	3,820	6,635
Total	50,919	37,269	88,188	110,444	130,854	241,298	161,363	168,123	329,486

Source: Labour Force Survey Report 2012, MoLHR

Table 4.11: Employed Persons who Worked During the past one Week Prior to the Survey Period by Major Economic Activity and Hours of Work, Bhutan 2012

(Numbers)

Economic Activity	Hours of Worked							Total
	<30 hrs	30-39 hrs	40-49 hrs	50-59 hrs	60-69 hrs	70-79 hrs	80+hrs	
Agriculture & Forestry	22,286	11,507	24,841	54,693	28,431	21,065	42,155	204,978
Mining & Quarrying	0	11	209	104	137	31	5	497
Manufacturing	3,381	1,319	4,830	2,676	2,108	1,328	897	16,539
Electricity, gas & water supply	28	181	3,268	1,665	621	328	378	6,469
Construction	50	353	978	1,369	1,202	568	461	4,981
Wholesale & retail trade	274	269	1,844	1,830	1,863	2,659	3,764	12,503
Hotels & restaurants	80	164	1,111	1,195	432	1,204	1,843	6,029
Transport, storage & communications	325	308	2,148	1,789	1,017	1,441	1,391	8,419
Fincancial intermediation	12	111	1,486	516	127	64	80	2,396
Real estate, renting & business activities	62	76	508	517	242	184	373	1,962
Public Administration & defence	937	1,800	13,657	5,206	2,083	1,692	1,954	27,329
Education	814	735	6,843	2,023	409	246	304	11,374
Health & social work	64	705	2,265	889	169	119	334	4,545
Other community, soical & personal service activities	790	936	4,564	3,099	1,732	2,297	1,878	15,296
Private households with employed persons	301	160	1,081	1,011	1,040	1,176	981	5,750
Extra-territorial organizations & bodies	7	7	258	86	7	32	13	410
Total	**29,411**	**18,642**	**69,891**	**78,668**	**41,620**	**34,434**	**56,811**	**329,477**

Source: Labour Force Survey Report 2012, MoLHR

Table 4.12: Employed Persons who Worked During the Past One Week Prior to the Survey Period by Nature of Employment and Hours of Work, Bhutan 2012

(Numbers)

Nature of Employment	Total Hours Worked							Total
	<30	30-39	40-49	50-59	60-69	70-79	80+	
Regular paid employee	1,939	3,929	37,918	17,561	6,916	5,264	5,040	78,567
Casual paid employee	1,040	1,100	2,473	2,645	1,886	1,611	1,210	11,965
Contract/Piece paid employee	445	277	1,113	938	937	929	732	5,371
Unpaid family worker (Non-agriculture)	1,125	481	1,231	829	509	532	777	5,484
Unpaid family worker (Agriculture)	17,817	5,784	10,736	37,972	12,114	9,326	36,284	130,033
Own account worker (Non agriculture)	3,361	2,707	5,376	5,712	4,359	5,466	6,702	33,683
Own account worker (Agriculture)	3,671	4,297	10,940	12,992	14,901	11,296	6,058	64,155
Employer	13	69	106	19	0	14	8	229
Total	**29,411**	**18,644**	**69,893**	**78,668**	**41,622**	**34,438**	**56,811**	**329,487**

Source: Labour Force Survey Report 2012, MoLHR

Table 4.13: Employed Persons by Major Economic Activity and Level of Education, Bhutan 2012

(Numbers)

Major Economic Activity	Completed Level of Education													Total
	Illiterate	Nursery	Primary	Lower Secon-dary	Middle Secon-dary	Higher Secon-dary	Under-graduate	Bachelors Degree	Certi-ficate	Diplo-ma	Masters & Above	NFE	Religious Profes-sionals	
Agriculture & Forestry	162,238	74	17,535	6,794	6,359	2,023	50	364	0	80	29	6,414	3,016	204,976
Mining & Quarrying	215	0	48	103	71	32	0	23	0	0	5	0	0	497
Manufacturing	10,514	7	1,708	1,144	1,529	534	0	280	7	47	40	719	10	16,539
Electricity, gas & water supply	1,187	39	862	613	1,704	957	27	864	14	153	34	0	14	6,468
Construction	2,319	0	868	178	603	340	0	214	0	29	19	212	201	4,983
Wholesale & retail trade	5,469	0	1,596	1,235	2,265	1,234	10	516	0	6	29	56	89	12,505
Hotels & restaurants	2,428	14	858	497	1,287	625	7	280	0	0	0	12	21	6,029
Transport, storage & communications	3,155	0	1,020	848	1,190	1,201	7	706	6	14	17	0	255	8,419
Fincancial intermediation	194	0	140	101	378	743	0	801	0	21	19	0	0	2,397
Real estate, renting & business activities	609	5	334	251	373	214	0	157	0	6	13	0	0	1,962
Public Administration & defence	8,548	11	5,117	2,554	4,723	2,942	11	2,338	31	135	307	159	451	27,327
Education	937	40	316	269	1,832	4,009	7	3,182	26	72	565	4	116	11,375
Health & social work	571	0	468	418	1,104	1,182	0	444	0	41	60	45	214	4,547
Other community, soical & personal service activities	5,692	0	1,425	904	2,672	1,568	43	1,369	7	30	77	239	1,269	15,295
Private households with employed persons	3,099	0	887	389	674	284	0	158	0	0	11	55	193	5,750
Extra-territorial organizations & bodies	38	7	31	12	115	102	0	86	0	0	20	0	0	411
Total	**207,213**	**197**	**33,213**	**16,310**	**26,879**	**17,990**	**162**	**11,782**	**91**	**634**	**1,245**	**7,915**	**5,849**	**329,480**

Source: Labour Force Survey Report 2012, MoLHR

Table 4.14: Unemployed Persons by Age Group, Sex and Area of Residence, Bhutan 2012

(Numbers)

Age	Rural			Urban			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
15-19	114	349	463	117	230	347	231	579	810
20-24	670	611	1,281	491	893	1,384	1,161	1,504	2,665
25-29	746	197	943	294	676	970	1,040	873	1,913
30-34	149	71	220	47	235	282	196	306	502
35-39	114	152	266	31	70	101	145	222	367
40-44	41	78	119	26	56	82	67	134	201
45-49	45	34	79	13	31	44	58	65	123
50-54	146	81	227	12	13	25	158	94	252
55-59	66	0	66	0	0	0	66	0	66
60-64	0	0	0	0	0	0	0	0	0
65-69	0	0	0	0	5	5	0	5	5
70-74	0	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0	0
85+	0	0	0	0	0	0	0	0	0
Total	**2,091**	**1,573**	**3,664**	**1,031**	**2,209**	**3,240**	**3,122**	**3,782**	**6,904**

Source: Labour Force Survey Report 2012, MoLHR

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.

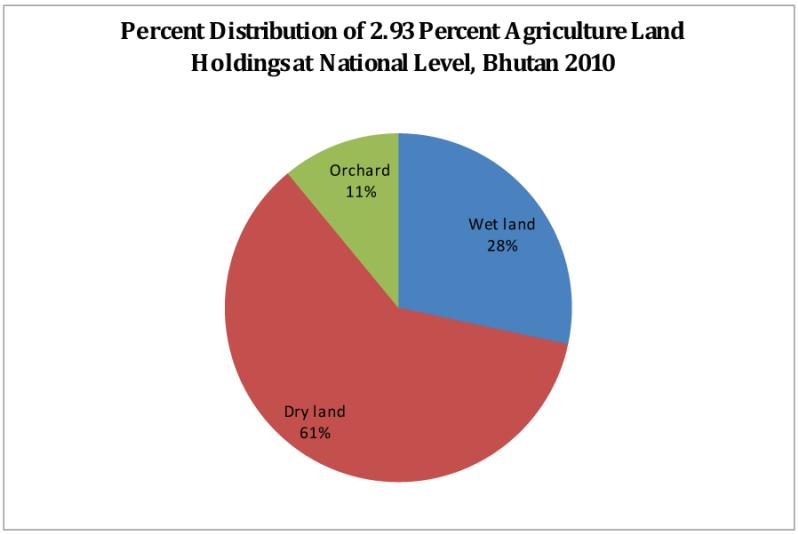
The Ministry of Agriculture and Forests with the accumulated experiences having accomplished one five year plan to the other, maintains the three basic objectives that are to i) conserve the environment, ii) enhance the rural income and iii) attain self reliance in cereals and essential oil crops. In 2011, Agriculture contributed 15.73 Percent to the total economy i.e. as measured by the Gross Domestic Product. It was also the single largest sector that provides livelihood over 60 percent of the population as per Labour Force Survey 2012.

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 is 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 and also to monitor the progress. To do this, a good statistical database, giving the trends or time series is required.



Back in 1988/89, the National Agronomic Survey was carried out in collaboration with the then Department of Agriculture. Though the Ministry of Agriculture and Forests conducted nation-wide sample surveys called RNR Census in 2009, but the major source of data presented in this chapter are from the Bhutan RNR Statistics 2012.

Table 5.1: Number of Agriculture Research and Extension Facilities, Bhutan (2010-2012)

(Numbers)

Infrastructure	2010	2011	2012
RNR (Common services)			
RNR Extension Centers	138	139	139
RNR Research Centers	4	4	4
RNR Research sub-stations	6	7	7
Soil and Plant Analytical Laboratory	1	1	1
Agriculture			
Agriculture Extension Centers	40	40	40
Agriculture Seed Production Farms	11	11	11
Farm Mechanization Centers	3	3	3
Farm Mechanization Training Centers	1	1	1
National Mashroom Center	1	1	1
National Post Harvest Center	1	1	1
National Plant Protection Center	1	1	1
National Soil Service Center			
Livestock			
Regional Hospitals	20	20	20
Livestock Extension Centers	42	51	51
Regional Livestock Development Centers	4	4	4
Regional Veterinary Laboratories	3	3	3
Livestock Farms	11	12	12
Fodder Seed Production Center	1	1	1
Vaccine Production Centre	1	1	1
National Artificial Insemination Center	1	1	1
National Cold Water Fishery Center	1	1	1
National Warm Water Fish Culture Center	1	1	1
National Center for Animal Health	1	1	1
Forestry			
Territorial Division HQs	12	12	12
National Parks	5	5	5
Range Offices	55	55	55
Beat Offices	80	80	80
Nature Conservation Study Center	1	1	1
Wildlife Sanctuaries	3	3	3
Forest Management Units	17	17	17
Nature Study Center	1	1	1
Percent of Forest cover	72	70.46	70.46
Percent of Protected Area	51.25	51.4	51.4

Source: Policy & Planning Division, MoAF, Thimphu.

Table 5.2: Area Proportion by Altitude Zones as Percentage of Total Dzongkhag Area, Bhutan, 2010

Dzongkhag	Altitude Zones (metres)										
	Area	< 600	1200-1800	1800-2400	2400-3000	3000-3600	3600-4200	4200-4800	4800-5400	> 5400	Total
Bumthang	0.00	0.00	0.00	0.31	7.23	25.05	26.58	19.52	19.29	2.03	100
Chhukha	4.80	16.69	21.22	20.19	19.70	13.16	4.08	0.16	0.00	0.00	100
Dagana	12.37	18.86	18.98	18.97	17.82	8.17	3.86	0.98	0.00	0.00	100
Gasa	0.00	0.00	0.03	1.01	3.06	5.90	13.41	28.64	37.50	10.44	100
Haa	0.00	1.72	6.19	10.31	16.74	21.50	23.90	16.48	3.11	0.03	100
Lhuentse	0.00	0.57	5.57	13.81	19.23	17.85	15.35	16.16	10.54	0.93	100
Monggar	1.65	15.29	26.44	25.13	16.88	12.26	2.35	0.00	0.00	0.00	100
Paro	0.00	0.00	0.00	4.15	23.30	25.88	18.73	21.96	5.88	0.09	100
Pema Gatshel	11.20	39.34	35.61	12.82	1.03	0.00	0.00	0.00	0.00	0.00	100
Punakha	0.00	0.00	13.17	27.52	25.04	16.08	11.59	6.41	0.19	0.00	100
Samdrup Jongkhar	18.23	24.13	25.38	18.60	9.52	3.57	0.56	0.02	0.00	0.00	100
Samtse	14.98	28.68	24.26	17.51	10.89	2.78	0.81	0.08	0.00	0.00	100
Sarpang	21.67	26.38	24.18	20.55	5.49	1.29	0.43	0.01	0.00	0.00	100
Thimphu	0.00	0.00	0.00	1.60	15.07	22.92	19.78	25.04	13.86	1.74	100
Trashigang	0.01	4.25	13.90	21.98	21.05	18.35	15.83	4.63	0.00	0.00	100
Trashi Yangtse	0.00	1.75	5.86	15.06	22.90	19.57	15.64	14.35	4.60	0.27	100
Trongsa	0.00	1.74	8.72	17.66	28.24	23.83	12.50	7.14	0.16	0.00	100
Tsirang	4.45	28.18	33.75	20.38	8.85	3.53	0.86	0.00	0.00	0.00	100
Wangdue Phodrang	0.03	2.55	7.92	13.30	17.22	20.18	13.15	11.61	12.89	1.15	100
Zhemgang	8.33	27.53	28.78	17.79	9.41	5.40	2.04	0.71	0.00	0.00	100
Bhutan	**4.08**	**9.70**	**12.94**	**13.92**	**14.78**	**14.29**	**11.23**	**10.16**	**7.64**	**1.27**	**100**

Source: Land Cover Mapping Project 2010, NSSC/PPD MoAF, Thimphu.

Table 5.3: Area Proportion by Altitude Zones as Percentage of Total Country Area, Bhutan, 2010

Dzongkhag	Altitude Zones (metres)										
	Area	< 600	1200-1800	1800-2400	2400-3000	3000-3600	3600-4200	4200-4800	4800-5400	> 5400	Total
Bumthang	0.00	0.00	0.00	0.02	0.51	1.76	1.86	1.37	1.35	0.14	7.01
Chhukha	0.23	0.82	1.04	0.99	0.96	0.64	0.20	0.01	0.00	0.00	4.89
Dagana	0.55	0.84	0.85	0.85	0.80	0.37	0.17	0.04	0.00	0.00	4.48
Gasa	0.00	0.00	0.01	0.08	0.25	0.48	1.08	2.31	3.03	0.84	8.07
Haa	0.00	0.08	0.30	0.50	0.81	1.04	1.16	0.80	0.15	0.00	4.86
Lhuentse	0.00	0.04	0.41	1.01	1.41	1.31	1.13	1.18	0.77	0.07	7.33
Monggar	0.08	0.77	1.33	1.26	0.85	0.62	0.12	0.00	0.00	0.00	5.02
Paro	0.00	0.00	0.00	0.14	0.77	0.85	0.61	0.72	0.19	0.00	3.28
Pema Gatshel	0.29	1.03	0.94	0.34	0.03	0.00	0.00	0.00	0.00	0.00	2.63
Punakha	0.00	0.00	0.38	0.80	0.73	0.47	0.34	0.19	0.01	0.00	2.90
Samdrup Jongkhar	0.88	1.17	1.23	0.90	0.46	0.17	0.03	0.00	0.00	0.00	4.85
Samtse	0.51	0.97	0.82	0.59	0.37	0.09	0.03	0.00	0.00	0.00	3.38
Sarpang	0.93	1.13	1.04	0.88	0.24	0.06	0.02	0.00	0.00	0.00	4.29
Thimphu	0.00	0.00	0.00	0.07	0.69	1.05	0.90	1.14	0.63	0.08	4.57
Trashigang	0.00	0.24	0.80	1.26	1.21	1.05	0.91	0.27	0.00	0.00	5.73
Trashi Yangtse	0.00	0.07	0.22	0.57	0.87	0.74	0.59	0.54	0.17	0.01	3.80
Trongsa	0.00	0.08	0.42	0.84	1.34	1.14	0.60	0.34	0.01	0.00	4.76
Tsirang	0.07	0.47	0.56	0.34	0.15	0.06	0.01	0.00	0.00	0.00	1.65
Wangdue Phodrang	0.00	0.26	0.81	1.36	1.76	2.07	1.35	1.19	1.32	0.12	10.25
Zhemgang	0.52	1.72	1.80	1.11	0.59	0.34	0.13	0.04	0.00	0.00	6.25
Bhutan	**4.08**	**9.70**	**12.94**	**13.92**	**14.78**	**14.29**	**11.23**	**10.16**	**7.64**	**1.27**	**100**

Source: Land Cover Mapping Project 2010, NSSC/PPD MoAF, Thimphu.

Table 5.4: Quantity of Chemical Fertilizers Distribution to Farmers, Bhutan (2004-2011)

(Kg/Ltr)

Period	Insecti cides	Fungi cides	Rodenti cides	Herbi cides	Acari cides	Others (Non-toxic)	Total
2004	13.07	2.87	0.07	0.87	0.01	10.05	26.94
2005	2.55	2.52	0.04	0.81	0.00	0.18	6.10
2006	3.04	2.41	0.04	1.02	0.02	10.73	17.26
2007	4.13	4.10	0.04	1.85	0.01	10.04	20.18
2008	3.91	2.70	0.05	2.70	0.00	0.00	9.36
2009	3.87	0.00	0.05	2.70	0.00	0.00	6.62
2010	4.90	3.40	0.05	3.00	0.00	0.00	11.35
2011	7.30	5.70	0.08	7.56	0.00	0.00	20.64

Source: Bhutan RNR Statistics 2012, MoAF

Table 5.5: Agriculture Land Holdings & Land Types by Dzongkhag, Bhutan 2010

(Hectre)

Dzongkhag	Wet land	Dry land	Orchad	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	0.0	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	0.0	6,422.9
Trashi Yangtse	949.3	2,110.6	0.0	3,059.9
Trongsa	1,082.3	1,204.9	0.0	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
Bhutan	31,910.8	68,254.8	12,384.0	112,549.6

Source: Land Cover Mapping Project 2010, NSSC/PPD, MoAF, Thimphu.

Table 5.6: Cultivated Area, Production and Yield of Major Crops by Dzongkhag, Bhutan 2011

Dzongkhag	Wheat			Barley			Paddy			Maize			Buckwheat			Millet		
	Area	Production	Yield	Area	Production	Yield	Area	Production	Yield	Area	Production	Yield	Area	Production	Yield	Area	Production	Yield
	(Acres)	(MT)	(Kg/ Acre)	(Acres)	(MT)	(Kg/ Acre)	(Acres)	(MT)	(Kg/ Acre)	(Acres)	(MT)	(Kg/ Acre)	(Acres)	(MT)	(Kg/ Acre)	(Acres)	(MT)	(Kg/ Acre)
Bumthang	355	395	1,113	434	340	783	145	180	1,241	2	1	833	899	804	894	…	…	…
Chhukha	281	304	1,082	49	42	857	2,058	2,439	1,185	3,131	3,218	1,028	862	754	875	971	779	802
Dagana	72	86	1,194	87	87	1,000	5,358	6,375	1,190	6,748	6,612	980	515	512	994	1,246	1,023	821
Gasa	29	23	793	284	221	778	168	272	1,619	…	…	…	…	…	…	…	…	…
Haa	880	953	1,083	138	167	1,210	114	127	1,114	408	350	858	924	911	986	197	206	1,046
Lhuentse	6	8	1,333	10	14	1,400	3,388	4,624	1,365	2,805	3,934	1,402	1	1	1,000	99	95	960
Monggar	20	20	1,000	989	596	603	1,703	2,328	1,367	7,413	9,927	1,339	304	186	612	38	32	842
Paro	565	580	1,027	37	36	973	4,563	7,976	1,748	99	105	1,061	125	109	872	…	…	…
Pema Gatshel	59	66	1,119	28	19	679	164	183	1,116	5,665	6,395	1,129	786	781	994	640	600	938
Punakha	610	656	1,075	64	63	984	5,256	9,025	1,717	412	566	1,374	150	144	960	…	…	…
Samdrup Jongkhar	210	192	914	313	162	518	2,403	2,730	1,136	6,518	8,134	1,248	2,232	1,191	534	383	178	465
Samtse	250	261	1,044	95	61	642	8,446	8,867	1,050	7,478	7,056	944	459	294	641	1,921	1,171	610
Sarpang	37	52	1,405	16	14	875	7,206	8,704	1,208	6,896	6,922	1,004	418	423	1,012	1,445	1,207	835
Thimphu	273	325	1,190	94	80	851	1,462	2,456	1,680	128	167	1,305	2	1	500	…	…	…
Trashigang	365	392	1,074	468	401	857	3,809	5,419	1,423	6,932	9,974	1,439	797	678	851	248	216	871
Trashi Yangtse	16	16	1,000	55	72	1,309	2,587	3,391	1,311	2,218	2,899	1,307	25	22	880	387	379	979
Trongsa	277	291	1,051	321	343	1,069	970	1,108	1,142	920	904	983	712	556	781	99	77	778
Tsirang	97	108	1,113	52	54	1,038	3,940	4,469	1,134	6,147	5,800	944	224	171	763	1,123	804	716
Wangdue Phodrang	859	969	1,128	193	220	1,140	2,782	3,862	1,388	434	494	1,138	464	429	925	26	27	1,038
Zhemgang	356	407	1,143	64	34	531	3,085	3,667	1,189	5,817	6,210	1,068	562	370	658	372	270	726
Bhutan	**5,616**	**6,105**	**1,087**	**3,789**	**3,027**	**799**	**59,609**	**78,203**	**1,312**	**70,171**	**79,667**	**1,135**	**9,443**	**7,874**	**834**	**9,037**	**7,007**	**775**

Totals may not add up due to rounding.
Source: Bhutan RNR Statistics 2012, MoAF

Table 5.7: Number of Livestock by Type and Dzongkhag, Bhutan 2012

Dzongkhag	Local Cattle	Brown Swiss Cattle	Jersey Cattle	Yaks	Buffa-loes	Horses	Donkeys	Mules	Pigs	Poultry	Sheep	Goats
Bumthang	7,615	3,649	3,993	4,069	...	2,340	8	133	1	1,367	286	2
Chhukha	23,982	4	4,349	...	14	1,132	10	77	2,755	44,571	920	6,153
Dagana	15,500	32	3,387	...	54	620	7	21	3,034	25,391	440	6,152
Gasa	622	131	253	7,618	...	996	1	1,256	0	1,073	4	0
Haa	9,177	39	3,477	6,425	...	1,164	2	592	782	7,013	98	185
Lhuentse	13,406	311	2,191	339	...	2,880	14	173	234	11,066	101	82
Monggar	22,671	567	7,382	...	...	3,476	8	408	2,883	48,704	13	87
Paro	8,272	59	6,064	1,909	...	1,458	4	396	724	25,756	9	128
Pema Gatshel	4,183	69	4,895	...	...	1,522	3	436	528	12,985	1	26
Punakha	10,673	69	2,951	...	...	992	2	49	959	8,650	8	100
Samdrup Jongkhar	15,175	92	5,071	28	11	1,254	5	183	966	13,772	44	1,607
Samtse	36,331	9	6,083	...	398	642	7	114	4,692	42,931	3,726	13,959
Sarpang	16,579	18	5,654	...	140	812	3	13	2,014	148,356	562	3,792
Thimphu	2,731	5	3,270	13,371	...	1,792	4	318	849	21,369	10	34
Trashigang	32,369	239	7,876	9,120	...	6,068	195	509	2,254	21,207	2,145	170
Trashi Yangtse	9,616	95	2,689	725	...	1,994	4	99	752	11,414	17	108
Trongsa	9,132	335	2,872	88	...	562	1	53	59	8,375	290	32
Tsirang	8,121	8	5,628	...	281	260	1	1	1,756	79,719	286	5,836
Wangdue Phodrang	21,330	1,086	3,344	3,658	...	1,678	132	172	2,789	6,307	1,823	500
Zhemgang	8,416	67	1,911	...	...	1,946	7	385	1,453	9,707	0	66
Bhutan	**275,901**	**6,884**	**83,340**	**47,350**	**898**	**33,588**	**418**	**5,388**	**29,484**	**549,733**	**10,783**	**39,019**

Source: Bhutan RNR Statistics 2012

Table 5.8: Livestock Production, Bhutan (2007-2011)

(Metric Tonnes)

Details	2007	2008	2009	2010	2011
Beef	638	776	645	547	470
Pork	507	500	333	427	312
Yak Meat	117	143	125	202	125
Chicken	515	190	155	256	359
Mutton	239	128	76	78	74
Fish	1	13	32	23	54
Wool	33	10	14	25	12
Eggs (000'Doz)	802	681	1,082	1,845	3,506
Milk	20,059	22,883	25,692	25,720	27,396
Butter	1,394	1,348	1,227	1,262	1,358
Cheese	6,146	1,163	2,613	2,222	2,185

Source: Bhutan RNR Statistics 2012, MoAF

Table 5.9: Fruit Production and Yield, Bhutan (2007-2011)

Fruits	Production (MT)					Yoeld (Kgs/Bearing Tree)				
	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
Apple	7,077	5,034	6,931	17,366	20,752	25	22	20	30	37
Mandarin	72,319	38,775	44,295	52,624	60,993	36	31	28	34	35
Banana	3,980	1,648	2,155	2,208	2,439	15	11	11	14	14
Mango	665	610	321	398	451	23	33	24	30	28
Guava	2,276	792	942	864	950	28	20	24	23	24
Peach	3,130	2,134	1,233	779	1,649	42	39	37	33	39
Pear	2,210	1,205	1,109	758	1,354	45	65	63	47	49
Plum	1,040	405	549	357	565	39	45	45	40	39
Walnut	817	345	244	213	474	29	25	16	22	24
Arecanut	6,569	3,842	6,373	7,280	9,781	13	7	11	10	12

Source: Bhutan RNR Statistics 2012, MoAF

Table 5.10: Vegetables, Oilseeds, Spices and Pulses Production, Bhutan (2007-2011)

(Metric Tonnes)

Details	2007	2008	2009	2010	2011
Potato	61,743	54,600	45,476	44,014	52,116
Chili	8,432	7,640	9,144	6,696	8,121
Tomato	950	514	753	221	559
Cabbage	3,623	1,575	1,782	1,299	2,130
Cauliflower	660	382	355	328	2,130
Broccoli	469	405	175	122	304
Asparagus	201	170	328	74	280
Carrot	669	373	329	205	458
Pumpkin	4,479	2,626	5,319	3,670	5,368
Radish	10,453	6,192	5,617	3,882	4,865
Turnip	12,624	5,003	6,238	2,638	7,823
Beans	6,746	4,964	3,048	2,400	2,690
Rajma Beans	1,988	756	473	471	873
Peas	1,626	824	695	355	770
Other Vegetables	9,460	9,381	8,282	7,168	5,558
Cardamom	2,122	1,055	442	1,163	650
Garlic	620	2,226	629	485	584
Ginger	9,882	3,182	3,766	4,074	4,533
Onion	194	1,816	388	243	285
Mustard	3,392	3,669	1,951	1,332	2,344
Soybean	1,415	817	372	401	826

Source: Bhutan RNR Statistics 2012, MoAF

Table 5.11: Volume and Value of Exports by Major Commodities, Bhutan (2008-2011)

Commodity	Volume (Tonnes)				Value (Nu.Million)			
	2008	2009	2010	2011	2008	2009	2010	2011
Rice	89.5	118.9	376.0	116.2	7.050	8.520	15.190	8.962
Wheat / Barley	128.4	…	…	1,857.1	1.660	…	…	118.181
Other Cereals	30.6	29.6	7.0	46.9	0.210	0.300	0.060	0.657
Apples	14,982.0	7,015.5	7,060.6	5,764.1	60.420	93.850	116.900	102.924
Oranges	20,346.2	28,129.7	22,484.1	18,928.3	246.370	386.980	332.320	327.782
Other Fruits	18.8	123.4	144.6	115.4	0.200	4.420	5.830	4.220
Betel Nuts	801.9	513.7	1,287.6	654.6	13.950	10.710	23.490	21.663
Potatoes	14,950.4	24,583.8	18,747.5	24,454.0	119.780	401.870	197.540	250.259
Chilies	25.7	23.8	7.9	14.3	0.300	0.350	0.180	0.439
Vegetables	1,532.3	1,727.9	1,962.7	2,157.9	26.970	26.110	34.000	30.048
Pulses	211.8	2.3	4.2	1.4	6.870	4.020	6.430	3.122
Mushrooms	211.8	2.3	4.2	1.4	6.870	4.020	6.430	3.122
Cardamom	694.9	547.9	476.2	427.0	93.250	89.530	222.200	384.284
Cordyceps	0.5	0.6	0.3	0.3	117.920	75.050	45.270	86.465
Lemon Grass Oil	128.4	0.0	0.0	1,857.1	7.05	8.520	15.190	8.962
Total	53,819	65,015	53,146	53,291	695	1,102	999	1,351

Source: Bhutan RNR Statistics 2012, MoAF

Table 5.12: Volume and Value of Imports by Major Commodities, Bhutan (2008-2011)

Commodity	Volume (Tonnes)				Value (Nu.Million)			
	2008	2009	2010	2011	2008	2009	2010	2011
Rice	52180	53473	52010	54056	694	722	848	854
Wheat/Barley	9777	13941	8513	16047	125	169	103	188
Other Cereals	4922	5317	4272	4855	40	50	85	72
Apples	39	39	51	24	2	2	2	1
Oranges	19	33	31	50	1	1	1	2
Other Fruits	2291	2148	1707	1699	24	27	21	23
Betel Nuts	0	282	296	132	0	14	19	9
Potatoes	3673	2841	183	5208	18	43	24	40
Chilies	1380	1362	1317	324	18	18	24	26
Vegetables	5837	5632	8182	6739	44	51	65	80
Pulses	200	2162	1585	3530	2	62	21	27
Mushrooms	21	5	11	4	…	1	1	…
Oils & Fats	6625	6860	6478	9772	418	348	374	561
Eggs (000' Doz)	374	920	476	172	12	37	22	7
Milk	1084	2798	3048	3191	267	293	359	391
Butter	267	209	651	0	39	34	50	0
Cheese	546	674	944	877	103	138	171	219
Sugar	7193	8536	7095	8262	186	253	169	210
Pork	1183	1172	1423	1385	107	127	153	155
Beef	2340	2720	2964	2658	141	200	242	252
Chicken	81	321	384	567	8	30	36	54
Fish	1632	1759	1874	2079	94	116	135	160
Mutton	98	28	24	22	5	5	5	5

Source: Bhutan RNR Statistics 2012, MoAF

Table 5.13: Annual Average Price of Agricultural Commodities by Type, Bhutan (2003-2012)

Commodities	Nu./ Kg									
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Wheat	9	8	8	10	9	13	13	17	19	20
Rice (Local)	21	26	25	28	30	35	43	41	52	55
Potatoes	9	10	9	11	11	12	15	18	20	20
Tomatoes	23	23	16	24	24	27	29	40	45	42
Onions	36	29	30	27	27	22	27	37	35	48
Garlic	48	50	51	54	54	60	77	73	77	81
Carrots	54	46	39	41	41	42	40	32	37	40
Cauliflower	15	13	14	15	15	23	32	36	43	41
Cabbages	15	13	14	15	15	16	20	24	23	24
Peas (Green)	26	31	29	27	27	33	35	37	28	34
Beans (Green)	21	22	24	21	21	30	31	40	41	41
Asparagus	23	26	19	40	40	42	33	40	47	48
Eggplants	14	15	15	15	15	16	22	33	37	34
Mushrooms	37	55	42	45	45	47	50	53	56	60
Chilies	27	31	35	37	37	38	47	57	62	70
Spinach	15	15	15	15	15	20	18	17	31	35
Bananas	24	18	12	13	13	15	24	32	55	39
Pineapples	33	35	31	31	31	32	22	29	33	41
Mangoes	52	58	61	48	48	49	53	69	46	53
Oranges	36	30	29	28	25	26	27	46	39	45
Apples	45	49	48	46	47	50	52	55	81	87
Pears	36	34	34	34	34	34	34	35	37	35
Peaches	30	26	20	20	20	22	23	47	47	50
Plums	30	29	30	26	26	26	28	24	38	30
Ginger	27	37	37	30	30	33	41	80	91	92
Beef	65	53	65	65	70	90	95	108	118	120
Pork	80	88	90	100	84	100	120	128	130	137
Mutton	120	120	120	120	140	140	143	158	172	180
Chicken	70	80	80	90	80	100	111	123	127	136
Eggs (Per Doz)	68	72	70	91	81	122	133	138	117	145
Price Index	**37**	**38**	**37**	**39**	**39**	**44**	**48**	**55**	**59**	**63**

Source: Bhutan RNR Statistics 2012, MoAF

Table 5.14: Imports and Sales of Food Items by Food Corporation of Bhutan (2006-2012)

(Metric tonnes)

Commodity	2006	2007	2008	2009	2010	2011	2012
Imports							
Rice	8,293.7	7,414.3	9,416.6	6,718.7	5,812.0	5,708.7	7,565.0
Wheat	…	…	49.0	80.3	79.4	65.0	159.9
Sugar	3,706.4	1,231.8	1,820.4	3,589.0	3,948.9	4,155.9	4,033.8
Salt	215.4	200.0	310.0	351.4	508.4	532.6	462.2
Edible Oil	643.9	671.6	818.9	666.5	939.6	913.3	1,841.9
Pulses	289.6	309.7	331.7	295.6	569.6	4,445.7	520.5
Maida	327.8	249.9	294.5	280.2	193.1	220.2	276.3
Atta	327.8	160.2	183.8	167.0	111.4	143.4	372.3
Sales							
Rice	7,949.0	8,078.8	8,250.8	6,373.0	6,570.7	10,117.7	6,973.8
Wheat	0.0	0.0	20.5	82.5	83.5	159.4	153.2
Sugar	3,028.9	1,829.6	1,914.3	3,646.3	4,074.0	6,089.0	4,049.9
Salt	207.8	204.2	274.4	395.1	504.1	808.8	643.4
Edible Oil	648.9	667.2	785.9	708.2	896.1	1,759.7	245.1
Pulses	261.7	304.6	359.4	278.1	472.5	848.2	511.6
Maida	332.7	263.1	266.1	283.0	220.9	339.9	268.9
Atta	299.0	199.3	177.8	141.9	169.6	269.9	352.6

Source: Food Corporation of Bhutan, Phuentsholing.

Table 5.15: Quantity of Agricultural Produce Handled by Food Corporation of Bhutan (2005-2012)

(Metric tonnes)

Commodity	2005	2006	2007	2008	2009	2010	2011	2012
Potatoes	23,766.1	20,645.2	21,611.9	21,109.1	30,998.6	24,439.4	23,117.1	22,906.9
Vegetables	1,706.5	1,488.0	1,432.6	1,592.7	1,310.4	1,672.0	1,736.2	2,097.0
Apples	226.7	452.5	202.3	121.6	107.8	83.8	43.5	58.7
Oranges	1,916.5	1,863.6	2,876.8	2,340.0	2,767.1	1,923.8	1,433.6	1,141.6
Cardamom	0.2	...	...	...	...	...	...	...
Ginger	208.7	459.9	...	463.0	724.5	484.3	697.0	692.6
Garlic	0.1	...	...	...	...	0.1	3.2	...
Arecanut	146.6	153.9	233.3	545.1	418.4	661.9	456.3	356.3
Supari(dried doma)	...	...	...	...	...	...	...	...
Dry chilli	3.9	6.4	...	0.9	0.6	0.1	...	...
Kidney bean(rajma)	49.6	69.5	...	51.3	48.3	63.5	41.7	11.4
Soya bean	37.2	47.9	...	17.1	56.3	24.6	13.1	1.6
Pulses	...	...	100.4	68.4	0.3	0.4	0.2	12.9
Mustard	...	...	...	...	...	...	...	...
Pipla (wild)	...	...	...	...	...	...	...	...
Leshi	...	...	...	...	...	...	...	...
Lemon	...	...	...	...	0.3	0.3	0.3	0.2
Apricot	...	...	...	...	...	...	...	...
Peach	1.1	0.2	...	1.1	0.7	0.5	0.4	0.5
Plum	0.1	...	...	0.3	0.8	1.4	0.4	1.0
Pear	...	0.1	...	0.4	1.1	0.4	...	...
Dry bean	...	...	...	...	...	...	...	...

Source: Food Corporation of Bhutan, Phuentsholing.

CHAPTER 6
ENVIRONMENTAL STATISTICS

The conservation of environment is one of the four pillars of Bhutan's development philosophy of Gross National Happiness (GNH). Accordingly the Royal Government of Bhutan (RGoB) has been putting constant effort in protecting the environment and the priority has been in the sustainable use of natural resources in all its policies, plans and programs.

This chapter presents statistics which are related to environment. The statistics presented here are not so comprehensive particularly from the point that some of the statistics are already presented under other chapters. However, the statistics collected and presented in this chapter are organized based on the broad Framework for Development of Environmental Statistics (FDES) provided by the United Nations Statistics Division. The six components of FDES, namely, environmental conditions & quality, environmental resources & their use, emissions, residuals & waste, extreme events & disasters, human habitat & environmental health, environmental protection, management & engagement have been used to gather statistics from different sources.

The chapter on Environmental Statistics gives a general statistics on atmosphere, climate & weather, hydrographic characteristics, geological & geographic information, land cover, biodiversity and forest. It also gives statistics on extraction & trade of mineral, production & use of energy, land use, timber resources & their use, crops, livestock, water resources, emissions of green house gases, occurrence & impact of natural extreme events & disasters, urban & rural population, water & sanitation, other urban habitat concerns and government environmental protection & resource management expenditures.

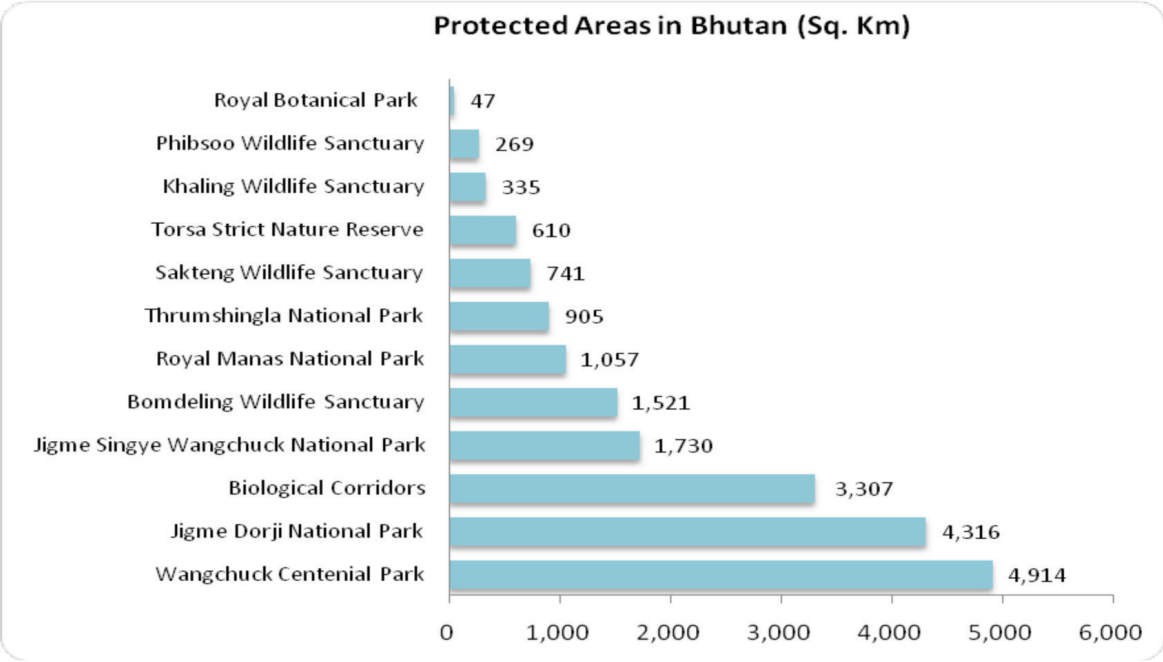


Table 6.1: Area od Land-Use and Vegetation by Types, Bhutan 2010

Land Category/Types of Vegetation and Landuse	Land Type	Total Area (Sq. km)	Area (Percent)
Forest Areas	Forest (Total)	27,052.91	70.46
	Blue Pine Forest	783.47	2.04
	Broadleaf Forest	16,850.24	62.29
	Broadleaf with Conifer Forest	348.38	0.91
	Chir Pine Forest	1,137.22	2.96
	Fir Forest	1,804.40	4.70
	Mixed Conifer Forest	6,129.19	15.96
Agriculture Areas	Agricultural (Total)	1,125.50	2.93
	Wetland	319.11	0.83
	Dryland	682.55	1.78
	Citrus Orchard	54.88	0.14
	Apple Orchard	20.81	0.05
	Arecanut Plantation	11.99	0.03
	Cardamom Plantation	36.00	0.09
	Other Horticulture	0.16	0.00
Bare Areas	Bare Areas (Total)	1,229.53	3.20
	Bare Soils	0.27	0.00
	Rock Outcrops	996.58	2.60
	Scree	232.68	0.61
Degraded Areas	Degraded Areas (Total)	206.45	0.54
	Gullies	0.07	0.00
	Landslides	86.46	0.23
	Moraine Deposits	119.93	0.31
Marshy Areas	Marshy Areas	3.20	0.01
Meadows (Pasture)	Meadows	1,575.46	4.10
Shrubs	Shrubs	4,005.25	10.43
Snow Cover	Snow Cover	2,854.35	7.43
Water Bodies	Water Bodies (Total)	276.55	0.72
	Lakes	45.99	0.12
	Reservoirs	2.91	0.01
	Rivers	227.65	0.59
Built up Areas (Settlements)	Built up Areas	61.56	0.16
Non-Built up Areas (waste dump sites, mines, stone quarries and other extraction sites)	Non-Built up Areas	3.30	0.01
Total		**38,394**	**100**

Source: Land Cover Mapping Project 2010, NSSC/PPD, MoAF, Thimphu.

Table 6.2: Area Proportion as Percentage of Total Dzongkhag Area by type of Land Cover, Bhutan 2010

Dzongkhag	Forest Areas	Agriculture Areas	Meadows	Shrubs	Water Bodies	Snow Cover	Others	Total
Bumthang	52.06	1.09	10.62	12.67	0.65	12.11	10.80	100
Chhukha	85.77	4.92	1.88	4.65	1.01	0.73	1.06	100
Dagana	87.06	4.38	0.43	4.81	1.00	1.46	0.87	100
Gasa	26.25	0.17	8.02	20.15	0.60	25.90	18.91	100
Haa	65.35	1.49	8.34	18.45	0.33	4.72	1.32	100
Lhuentse	61.48	2.10	2.69	11.96	0.43	12.72	8.61	100
Monggar	91.59	2.95	0.32	4.07	0.44	0.00	0.63	100
Paro	60.91	5.07	5.57	22.41	0.40	4.03	1.62	100
Pema Gatshel	87.65	5.14	0.06	4.52	1.22	0.00	1.41	100
Punakha	75.87	4.82	1.53	9.96	0.52	7.16	0.14	100
Samdrup Jongkhar	86.95	4.33	0.22	5.90	1.38	0.00	1.23	100
Samtse	78.03	13.31	0.76	3.94	2.67	0.22	1.07	100
Sarpang	88.00	3.99	0.03	5.02	2.30	0.00	0.65	100
Thimphu	42.86	1.30	10.36	21.39	0.29	15.10	8.70	100
Trashigang	81.65	2.91	3.35	9.92	0.35	1.32	0.51	100
Trashi Yangtse	70.90	2.11	1.43	13.52	0.50	11.36	0.18	100
Trongsa	87.16	1.26	2.87	6.21	0.16	1.78	0.56	100
Tsirang	87.34	7.37	0.18	3.29	0.93	0.00	0.88	100
Wangdue Phodrang	65.29	1.52	7.16	9.39	0.16	15.91	0.57	100
Zhemgang	87.71	1.70	2.25	5.97	0.86	0.17	1.35	100
Bhutan	**70.46**	**2.93**	**4.10**	**10.43**	**0.72**	**7.43**	**3.92**	**100**

Source: Land Cover Mapping Project 2010, NSSC/PPD, MoAF, Thimphu.

Table 6.3: Area Proporation as Percentage of Total country Area by Type of Land Cover, Bhutan 2010

Dzongkhag	Forest Areas	Agriculture Areas	Meadows	Shrubs	Water Bodies	Snow Cover	Others	Total
Bumthang	3.62	0.08	0.74	0.88	0.05	0.84	0.75	6.95
Chhukha	4.20	0.24	0.09	0.23	0.05	0.04	0.05	4.90
Dagana	3.91	0.20	0.02	0.22	0.04	0.07	0.04	4.49
Gasa	2.10	0.01	0.64	1.61	0.05	2.07	1.51	8.01
Haa	3.17	0.07	0.41	0.90	0.02	0.23	0.06	4.86
Lhuentse	4.50	0.15	0.20	0.88	0.03	0.93	0.63	7.32
Monggar	4.64	0.15	0.02	0.21	0.02	0.00	0.03	5.07
Paro	1.98	0.17	0.18	0.73	0.01	0.13	0.05	3.26
Pema Gatshel	2.33	0.14	0.00	0.12	0.03	0.00	0.04	2.66
Punakha	2.19	0.14	0.04	0.29	0.01	0.21	0.00	2.89
Samdrup Jongkhar	4.25	0.21	0.01	0.29	0.07	0.00	0.06	4.89
Samtse	2.65	0.45	0.03	0.13	0.09	0.01	0.04	3.40
Sarpang	3.82	0.17	0.00	0.22	0.10	0.00	0.03	4.34
Thimphu	1.95	0.06	0.47	0.97	0.01	0.69	0.40	4.55
Trashigang	4.69	0.17	0.19	0.57	0.02	0.08	0.03	5.74
Trashi Yangtse	2.68	0.08	0.05	0.51	0.02	0.43	0.01	3.77
Trongsa	4.14	0.06	0.14	0.29	0.01	0.08	0.03	4.75
Tsirang	1.45	0.12	0.00	0.05	0.02	0.00	0.01	1.66
Wangdue Phodrang	6.67	0.15	0.73	0.96	0.02	1.62	0.06	10.21
Zhemgang	5.52	0.11	0.14	0.38	0.05	0.01	0.08	6.29
Bhutan	**70.46**	**2.93**	**4.10**	**10.43**	**0.72**	**7.43**	**3.92**	**100**

Source: Land Cover Mapping Project 2010, NSSC/PPD, MoAF, Thimphu.

Table 6.4: Forests Area Under Tree Cover By Dzongkhag, Bhutan 2010

Dzongkhag	Total area (Sq.km)	Area under tree cover (Sq.km)						Total	
		Blue Pine Forest	Broadleaf Forest	Broadleaf with Conifer Forest	Chir Pine Forest	Fir Forest	Mixed Conifer Forest	Tree Cover Area	Percent
Bumthang	2,668	268	17	6	...	409	688	1,389	52.06
Chhukha	1,879	32	1,382	10	...	2	186	1,612	85.77
Dagana	1,723	...	1,343	...	14	...	143	1,500	87.06
Gasa	3,075	...	111	...	...	406	290	807	26.25
Haa	1,865	56	628	...	...	174	361	1,219	65.35
Lhuentse	2,809	2	847	106	110	367	295	1,727	61.48
Monggar	1,945	4	1,136	6	311	71	254	1,781	91.59
Paro	1,251	221	7	1	...	127	405	762	60.91
Pema Gatshel	1,023	...	799	16	80	...	1	896	87.65
Punakha	1,110	...	574	2	81	6	179	842	75.87
Samdrup Jongkhar	1,878	5	1,598	17	7	1	5	1,633	86.95
Samtse	1,305	...	995	8	...	...	16	1,018	78.03
Sarpang	1,666	...	1,432	0	...	1	33	1,466	88.00
Thimphu	1,749	171	36	17	...	107	418	749	42.86
Trashigang	2,204	...	951	1	228	...	619	1,800	81.65
Trashi Yangtse	1,449	4	557	...	30	...	436	1,027	70.90
Trongsa	1,822	4	869	93	33	36	553	1,588	87.16
Tsirang	639	...	488	...	27	...	43	558	87.34
Wangdue Phodrang	3,920	17	1,243	...	171	30	1,098	2,560	65.29
Zhemgang	2,416	...	1,836	65	44	66	108	2,119	87.71
Bhutan	**38,394**	**783**	**16,850**	**348**	**1,137**	**1,804**	**6,129**	**27,053**	**70.46**

Source: Bhutan RNR Statistics 2012, MoAF

Table 6.5: Monthly Maximum and Minimum Average Temperature by Dzongkhag, Bhutan 2012

(Degree Celsius)

Dzongkhag	Temperature	Month												Average
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Bumthang	max	9.80	13.60	15.00	17.80	21.20	22.20	23.30	23.70	22.40	19.30	16.30	13.10	**18.14**
	min	(4.00)	(0.60)	1.30	5.50	8.10	13.80	14.70	14.10	12.70	5.10	(2.80)	(3.50)	**5.37**
	Ave	2.90	6.50	8.15	11.65	14.65	18.00	19.00	18.90	17.55	12.20	6.75	4.80	**11.75**
Chhukha	max	14.40	17.20	…	…	…	…	29.60	…	…	…	…	…	**20.40**
	min	3.00	6.10	…	…	…	…	25.80	…	…	…	…	…	**11.63**
	Ave	8.70	11.65	…	…	…	…	27.70	…	…	…	…	…	**16.02**
Dagana	max	10.40	13.10	16.90	19.40	22.70	22.60	21.50	22.70	21.20	19.40	16.40	12.90	**18.27**
	min	6.80	7.00	9.50	13.20	16.00	17.90	18.70	18.40	18.10	13.00	7.90	6.70	**12.77**
	Ave	8.60	10.05	13.20	16.30	19.35	20.25	20.10	20.55	19.65	16.20	12.15	9.80	**15.52**
Gasa	max	12.10	9.10	11.20	16.70	18.20	18.20	19.50	19.60	18.40	18.10	12.30	11.30	**15.39**
	min	1.10	(1.00)	3.00	9.70	7.00	10.80	8.10	10.30	10.40	10.00	(1.70)	(1.60)	**5.51**
	Ave	6.60	4.05	7.10	13.20	12.60	14.50	13.80	14.95	14.40	14.05	5.30	4.85	**10.45**
Haa Namjayling	max	8.40	12.00	13.70	14.20	18.10	21.60	22.20	22.80	20.80	17.20	15.50	13.80	**16.69**
	min	(6.90)	(3.70)	0.70	5.30	7.10	13.10	14.40	13.00	10.70	1.60	(4.60)	(6.50)	**3.68**
	Ave	0.75	4.15	7.20	9.75	12.60	17.35	18.30	17.90	15.75	9.40	5.45	3.65	**10.19**
Khoma, Lhuentse	max	15.70	12.70	24.20	26.80	31.10	30.10	30.50	30.60	29.90	27.60	21.30	18.10	**24.88**
	min	6.30	7.50	10.80	13.60	17.50	20.10	19.50	20.90	20.60	14.90	12.10	9.20	**14.42**
	Ave	11.00	10.10	17.50	20.20	24.30	25.10	25.00	25.75	25.25	21.25	16.70	13.65	**19.65**
Monggar	max	18.10	21.60	23.00	23.30	26.60	25.50	26.00	26.90	24.90	22.90	20.30	18.00	**23.09**
	min	8.50	11.10	11.80	13.10	16.90	19.40	18.30	18.30	17.10	12.70	8.40	6.70	**13.53**
	Ave	13.30	16.35	17.40	18.20	21.75	22.45	22.15	22.60	21.00	17.80	14.35	12.35	**18.31**
Punakha	max	20.20	23.70	26.70	29.80	33.30	34.00	32.90	33.60	31.70	29.20	27.10	21.70	**28.66**
	min	4.90	8.50	11.10	15.90	20.70	23.20	22.40	22.60	21.60	17.80	8.40	6.70	**15.32**
		12.55	16.10	18.90	22.85	27.00	28.60	27.65	28.10	26.65	23.50	17.75	14.20	**21.99**

Table 6.5: condt...

Paro	max	9.70	14.30	16.30	19.60	23.10	24.80	23.80	25.00	23.30	20.10	17.40	14.90	**19.36**
	min	(5.40)	(1.90)	2.00	6.00	8.80	13.80	14.40	14.30	13.30	5.50	(0.40)	(3.50)	**5.58**
	Ave	2.15	6.20	9.15	12.80	15.95	19.30	19.10	19.65	18.30	12.80	8.50	5.70	**12.47**
Pema Gatshel	max	13.40	16.30	19.10	20.60	24.00	23.10	23.10	24.90	23.30	22.10	19.60	15.70	**20.43**
	min	2.30	5.50	8.30	12.10	14.40	17.40	17.70	17.60	16.40	11.30	6.80	5.10	**11.24**
	Ave	7.85	10.90	13.70	16.35	19.20	20.25	20.40	21.25	19.85	16.70	13.20	10.40	**15.84**
Samdrup Jongkhar	max	17.60	20.90	23.10	23.30	26.40	25.10	27.30	28.30	26.10	25.20	22.60	21.50	**23.95**
	min	9.80	12.20	15.70	18.00	20.40	21.00	21.90	21.90	20.30	16.70	13.70	11.60	**16.93**
	Ave	13.70	16.55	19.40	20.65	23.40	23.05	24.60	25.10	23.20	20.95	18.15	16.55	**20.44**
Sipsu, Samtse	max	20.70	21.90	25.30	28.00	30.00	29.40	28.70	30.40	29.60	29.10	26.70	20.60	**26.70**
	min	11.20	12.70	15.40	19.10	21.40	22.50	23.00	23.90	22.90	21.30	15.60	10.80	**18.32**
	Ave	15.95	17.30	20.35	23.55	25.70	25.95	25.85	27.15	26.25	25.20	21.15	15.70	**22.51**
Bhur, Sarpang	max	19.70	23.50	26.40	25.60	29.00	27.90	28.00	29.50	28.30	28.00	25.80	22.30	**26.17**
	min	12.20	13.90	18.30	18.70	21.40	21.80	22.50	23.70	21.60	19.60	16.40	12.50	**18.55**
	Ave	15.95	18.70	22.35	22.15	25.20	24.85	25.25	26.60	24.95	23.80	21.10	17.40	**22.36**
Thimphu	max	13.80	17.60	19.20	22.50	25.40	26.00	26.30	27.10	24.90	22.70	20.50	18.80	**22.07**
	min	(1.60)	0.70	4.60	12.40	11.00	15.90	18.10	16.20	16.00	7.10	1.10	(1.40)	**8.34**
	Ave	6.10	9.15	11.90	17.45	18.20	20.95	22.20	21.65	20.45	14.90	10.80	8.70	**15.20**
Kanglung, Trashigang	max	15.10	19.10	21.80	24.30	26.30	26.60	26.80	27.90	26.20	24.40	21.20	18.30	**23.17**
	min	4.00	6.30	7.20	10.20	13.10	15.60	15.90	15.80	14.50	10.40	5.80	4.30	**10.26**
	Ave	9.55	12.70	14.50	17.25	19.70	21.10	21.35	21.85	20.35	17.40	13.50	11.30	**16.71**
Trashi Yangtse	max	13.90	17.50	20.70	21.10	25.70	24.90	25.40	26.60	24.80	22.40	18.70	16.00	**21.48**
	min	0.20	2.90	5.20	9.20	11.40	15.90	17.50	17.20	15.20	8.90	2.80	2.10	**9.04**
	Ave	7.05	10.20	12.95	15.15	18.55	20.40	21.45	21.90	20.00	15.65	10.75	9.05	**15.26**
Trongsa	max	11.90	15.50	16.70	19.30	22.50	21.90	22.40	23.60	22.10	20.10	17.80	14.40	**19.02**
	min	0.30	2.60	5.30	9.30	11.00	15.90	16.20	15.80	14.90	9.10	4.00	2.20	**8.88**
	Ave	6.10	9.05	11.00	14.30	16.75	18.90	19.30	19.70	18.50	14.60	10.90	8.30	**13.95**

Table 6.5: condt...

Tsirang	max	12.30	15.50	18.10	20.90	23.50	23.10	23.20	23.90	22.70	21.10	18.20	14.80	**19.78**
	min	3.40	6.30	9.60	14.00	16.80	19.90	20.40	20.60	18.80	13.60	8.30	6.30	**13.17**
	Ave	7.85	10.90	13.85	17.45	20.15	21.50	21.80	22.25	20.75	17.35	13.25	10.55	**16.47**
Wangdue Phodrang	max	19.30	22.00	24.90	27.40	31.60	31.20	30.10	30.30	29.80	28.60	24.90	23.00	**26.93**
	min	4.00	6.20	9.50	13.80	16.80	21.40	20.90	20.90	19.90	14.60	6.60	4.90	**13.29**
	Ave	11.65	14.10	17.20	20.60	24.20	26.30	25.50	25.60	24.85	21.60	15.75	13.95	**20.11**
Zhemgang	max	11.40	14.50	17.60	19.90	23.70	23.30	23.50	25.00	23.10	21.00	17.30	14.60	**19.58**
	min	2.70	4.80	7.80	11.80	14.80	17.60	17.30	17.70	16.40	11.70	7.00	5.50	**11.26**
	Ave	7.05	9.65	12.70	15.85	19.25	20.45	20.40	21.35	19.75	16.35	12.15	10.05	**15.42**

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

Table 6.6: Total Monthly Rainfall at Existing Stations in each Dzongkhag, Bhutan

(Millimeter)

Dzongkhag	Station	Month												Annual total rainfall
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Bumthang	Chamkher	9.1	22.6	26.5	58.9	45.3	68.8	153.9	81.8	114.7	5.6	0.0	0.0	587.2
	Gyetsa	8.0	24.4	29.2	53.4	47.4	104.8	180.2	90.8	67.2	4.6	0.0	0.0	610.0
Chhukha	Chhukha	25.5	39.8	…	…	…	…	1108.4	…	…	…	…	…	1173.7
	Gedu	51.4	38.7	74.2	308.4	241.4	970.2	865.4	220.4	431.8	149.0	0.0	0.0	3350.9
	Phuentsholing	0.0	0.0	0.0	124.6	185.0	1173.3	…	…	…	…	…	…	1482.9
	Tala	…	…	…	…	…	…	…	…	…	…	…	…	…
Dagana	Dagana Dzong	10.2	30.8	50.6	35.7	12.9	85.4	357.0	118.8	261.5	29.1	0.0	0.0	992.0
	Drujeygang	11.3	1.8	16.3	74.0	20.0	664.6	745.1	18.9	571.1	67.0	0.0	0.0	2190.1
	Sunkosh	8.0	11.8	13.3	38.8	14.2	275.1	549.0	80.3	246.9	20.8	0.0	0.0	1258.2
	Tashithang	…	…	…	…	…	…	…	…	…	…	…	…	…
Gasa	Gasa Katey	43.0	14.2	120.2	50.4	134.7	270.0	453.0	295.2	270.4	149.0	3.5	13.0	1816.6
Haa	Haa Namjeyling	25.6	0.0	12.3	80.7	25.3	61.1	149.1	155.3	121.6	15.7	0.0	0.0	646.7

Table 6.6: condt...

Lhuentse	Khomachu	10.0	4.2	29.6	94.8	21.8	62.2	111.6	145.8	122.6	5.7	3.0	0.0	611.3
	Autsho	18.8	9.0	13.3	19.8	21.2	155.9	162.6	125.8	134.6	8.6	0.0	2.6	672.2
	Dungkhar	0.0	11.6	41.3	34.7	93.4	38.5	49.2	48.5	79.0	21.0	0.0	1.5	418.7
	Tangmachu	20.1	6.8	28.9	83.6	20.2	82.1	…	…	…	…	…	…	241.7
Monggar	Monggar (A)	14.2	9.6	7.6	87.0	30.7	219.0	210.4	154.6	328.7	9.2	0.0	0.0	1071.0
	Lingmethang	9.6	5.9	13.2	40.2	62.2	233.8	158.0	155.3	155.8	21.4	0.0	1.6	857.0
	Yadi	4.0	10.8	0.0	145.7	38.1	210.0	237.0	115.0	121.0	13.0	…	…	894.6
Paro	Paro	14.2	1.0	9.8	43.6	16.2	45.4	131.8	127.8	94.6	17.4	0.0	0.0	501.8
	Betikha	20.9	35.8	178.0	488.0	222.0	513.0	481.8	339.0	67.4	28.9	0.0	0.0	2374.8
	Drukgyel Dzong	0.0	2.0	2.0	12.0	6.0	34.0	50.0	40.0	64.0	21.0	0.0	0.0	231.0
Pema Gatshel	Pemagatshel	17.8	11.2	31.2	128.3	33.7	600.8	502.9	221.0	294.6	20.4	0.0	0.0	1861.9
	Dungmain	15.5	0.0	12.1	47.3	86.7	487.0	220.0	34.0	95.1	0.0	0.0	0.0	997.7
	Yurung	8.2	1.5	35.4	146.3	40.4	598.7	668.0	234.4	412.6	10.5	0.0	0.0	2156.0
	Dechenling	18.0	6.0	42.5	334.0	130.5	1059.0	898.0	337.0	306.0	97.0	0.0	0.0	3228.0
Punakha	Punakha Dzong	0.0	9.6	1.9	10.4	7.9	11.8	84.0	107.5	112.8	0.0	0.0	0.0	345.9
	Shelgana	1.4	1.6	6.5	24.2	3.1	48.7	97.1	59.7	61.3	4.0	0.0	0.0	307.6
	Dochula	…	…	…	…	…	…	…	…	…	…	…	…	…
Samdrup Jongkhar	Airong	0.0	0.0	150.0	345.2	873.0	579.6	971.7	930.6	873.4	187.0	0.0	0.0	4910.5
	Deothang	26.9	45.5	37.2	142.6	974.5	787.3	1270.1	481.5	127.1	281.2	3.6	0.0	4177.5
Samtse	Tendu	13.6	9.2	23.4	129.8	93.6	662.6	754.2	552.2	560.0	28.2	0.0	3.8	2830.6
	Samtse (NIE)	28.1	4.2	3.9	145.7	145.7	584.6	1386.6	611.2	567.5	67.6	0.0	22.0	3567.1
	Dorokha	…	…	…	…	…	…	…	…	…	…	…	…	…
	Sipsu	11.2	2.4	1.2	472.0	430.4	1255.9	1250.6	912.1	666.6	167.4	0.0	5.2	5175.0
Thimphu	Gidakom	14.2	14.3	12.0	45.8	16.2	30.5	144.6	93.0	64.8	10.6	0.0	0.0	446.0
	Simtokha	14.8	11.7	9.0	36.1	21.6	55.5	225.6	78.7	99.7	12.0	0.0	0.0	564.7
	MTI Complex	14.3	18.9	8.2	26.6	34.6	64.4	240.9	162.5	113.5	0.8	0.0	0.0	684.7

Table 6.6: condt...

Sarpang	Surey	21.0	6.2	84.4	199.6	108.0	950.7	1905.8	662.7	597.4	250.0	0.0	2.6	4788.4
	Bhur	13.8	10.4	28.2	288.6	224.0	928.0	1684.6	1118.7	568.8	123.0	0.0	0.0	4988.1
	Sarpang	0.0	0.0	2.2	96.6	54.2	438.3	730.3	105.9	148.5	3.0	0.0	0.0	1579.0
Trashigang	Chazam	11.4	0.0	15.2	169.2	38.6	120.0	186.8	126.2	188.9	7.8	7.0	12.0	883.1
	Kanglung	16.4	18.8	9.0	250.4	22.2	255.4	184.8	200.3	184.6	13.4	0.0	0.0	1155.3
	Khaling	14.0	0.0	26.0	577.4	469.0	982.2	1063.7	685.8	936.9	31.2	0.0	15.0	4801.2
	Radhi	0.0	0.0	0.0	73.6	0.0	126.2	88.6	61.6	142.8	0.0	0.0	0.0	492.8
	Thrimshing	15.7	3.2	19.8	51.0	26.7	291.4	221.2	162.1	146.7	45.0	0.0	0.0	982.8
	Wamrong	3.2	0.0	13.7	157.4	138.0	149.5	561.8	362.2	427.0	8.2	22.5	12.9	1856.4
Trashi Yangtse	Tashi Yangtse	12.1	39.0	29.7	129.9	39.3	182.7	224.8	159.2	229.3	7.0	0.0	2.5	1055.5
	Yalang	…	…	…	…	…	…	…	…	…	…	…	…	…
Trongsa	Bjizam	9.2	26.6	26.2	77.6	50.8	144.2	174.0	156.6	-	18.4	0.0	4.0	687.6
	Kuengarabten	…	…	…	…	…	…	…	…	…	…	…	…	…
	Langthel	17.0	20.0	8.0	41.5	35.5	126.5	303.5	99.5		5.5	0.0	0.0	657.0
	Chendebji	0.0	25.6	24.2	76.0	43.6	288.0	325.0	174.8	202.7	13.0	0.0	0.0	1172.9
	Trongsa	0.0	27.8	20.5	127.4	47.6	191.8	188.3	183.4	158.3	8.9	0.0	6.9	960.9
Tsirang	Tsirang	10.2	12.6	17.9	46.6	20.8	378.6	637.6	126.6	278.1	23.2	0.0	0.0	1552.2
Wangdue Phodrang	Wangdue (RNRRC)	8.0	0.0	4.5	36.6	15.4	47.7	121.3	114.3	112.4	14.6	0.0	0.0	474.8
	Nobding	12.5	…	…	…	…	230.2	444.7	368.0	256.4	…	…	…	1311.8
	Phobjikha	0.0	0.0	32.0	135.0	107.5	648.0	379.5	379.5	199.4	120.0	0.0	0.0	2000.9
	Samtengang	0.0	2.0	7.0	32.1	0.0	114.7	268.1	319.0	188.0	0.0	1.5	0.0	932.4
Zhemgang	Buli	19.5	16.5	26.7	85.3	46.9	167.3	459.1	283.7	…	…	…	…	1105.0
	Yebilaptsa	23.4	8.4	…	92.4	18.4	…	…	…	…	…	…	…	142.6
	Zhemgang	13.5	30	8	96.6	33	245.6	447.9	155.8	282.5	21.2	0.2	0.6	1334.9

Source : Metrology Section, Department of Hydromet Services, MoEA,Thimphu.

Table 6.7: Details of Protected Areas by Year of Establishment and Area, Bhutan 2012

Name of Area	Establishment year	Area (Sq. Km)
Existing Protected Areas		
Wangchuck Centenial Park	…	4,914
Torsa Strict Nature Reserve	…	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	…	269
Khaling Wildlife Sanctuary	…	335
Biological Corridors	…	3,307
Royal Botanical Park	2004	47
Total		**19,751**

Source: Policy & Planning Division, MoAF, Thimphu.

Table 6.8: Disposal of Logwood, Natural Resources Development Corporation Limited, Bhutan, (2006-2010)

Item	Units	2006	2007	2008	2009	2010
Logwood						
Logwood (Urban/ Commercial/Auction)	cft	1,791,035	1,853,056	1,559,657	2,068,852	1,999,407
Logwood (Rural)	cft	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		
Total		**2,135,341**	**2,137,693**	**1,827,066**	**2,309,585**	**2,309,450**

Source: Policy & Planning Division, MoAF, Thimphu.

Table 6.9: Supply of Timber at Commerical, Concessional and Free of Royalties, Bhutan (2010-2012)

Product Type	2010							2011							2012						
	Commercial	Nu. in Millions	Concessional	Nu. in Millions	Free	Total	Total Nu. in Millions	Commercial	Nu. in Millions	Concessional	Nu. in Millions	Free	Total	Total Nu. in Millions	Commercial	Nu. in Millions	Concessional	Nu. in Millions	Free	Total	Total Nu. in Millions
Cham	0.03	0.02	2.27	0.67	0.62	3.37	0.68	0.05	0.03	5.39	1.20	0.16	5.60	1.23	0.01	0.01	2.66	0.51	0.30	2.97	0.51
Dangchung	0.07	0.00	0.62	0.02	0.10	0.70	0.02	0.33	0.01	1.05	0.02	0.01	1.40	0.04	0.03	0.00	0.38	0.01	0.01	0.41	0.01
Drashing	8.75	0.48	30.26	0.66	1.15	40.16	1.14	7.50	2.32	52.77	1.32	0.25	60.52	3.63	4.67	2.34	29.40	0.60	0.28	34.35	2.94
Tsim	0.03	0.00	1.93	0.11	0.02	1.99	0.12	0.25	0.02	3.18	0.21	0.00	3.43	0.23	0.17	0.01	2.32	0.12	0.00	2.49	0.13
Shinglep	0.02	0	0.48	0.01	0.00	0.50	0.01	0.10	0.028	0.65	0.01	0.00	0.75	0.04	0.07	0.003	0.31	0.01	0.01	0.38	0.01
Sawn Timber	0.82	0.41	0.00	0.00	0.00	0.82	0.41	1.16	0.49	0.56	0.22	0.00	1.72	0.70	0.54	0.22	0.23	0.04	0.00	0.77	0.25
Firewood	7.97	0.17	39.79	0.33	1.10	48.87	0.50	32.29	0.71	57.62	0.56	1.36	91.27	1.27	22.74	0.48	20.68	0.30	0.23	43.65	0.78
Flag Poles	0.02	0.00	0.03	0.00	0.00	0.05	0.00	1.18	0.06	3.84	0.08	0.00	5.02	0.13	0.25	0.01	0.67	0.01	0.00	0.92	0.02
Fencing Posts	1.85	0.06	4.93	0.16	0.00	6.77	0.22	5.64	0.18	9.07	0.20	0.35	15.07	0.38	0.92	0.04	0.17	0.01	0.01	1.10	0.04
Other Poles/ Posts	2.07	0.12	6.10	0.13	0.01	8.17	0.25	6.00	0.57	15.02	0.21	0.01	21.02	0.78	11.22	0.88	8.99	0.22	0.01	20.21	1.10
Logs	9.21	3.31	0.71	0.02	0.00	9.92	3.33	12.63	21.43	3.32	0.11	0.00	15.95	21.53	19.93	17.03	0.01	0.00	0.04	19.97	17.03
Woodchips	3.21	0.20	0.00	0.00	0.00	3.21	0.20	14.62	0.71	0.00	0.00	0.00	14.62	0.71	7.01	0.38	0.02	0.00	0.00	7.02	0.39
Others	0.19	0.02	0.85	0.03	0.00	1.04	0.05	2.49	0.31	0.29	0.01	0.42	3.20	0.31	3.32	0.13	0.78	0.01	2.16	6.26	0.14
Total	**34.24**	**4.78**	**88.43**	**2.14**	**2.92**	**125.59**	**6.93**	**84.26**	**26.84**	**152.75**	**4.15**	**2.55**	**239.56**	**30.99**	**70.87**	**21.53**	**66.61**	**1.83**	**3.03**	**140.52**	**23.36**

Source: Bhutan RNR Statistics 2012, MoAF

Table 6.10: Quantity of Timber Supplied and Royalties Realized by Dzongkhag, Bhutan (2010-2012)

Dzongkhag	Quantity of Timber Supplied (M3)					
	2010	Nu. in Millions	2011	Nu. in Millions	2012	Nu. in Millions
Bumthang	18,458	2.95	23,090	2.02	10,583	1.06
Chhukha	3,322	0.12	10,850	0.44	15,848	2.30
Dagana	1,514	0.09	4,772	0.25	5,072	0.23
Gasa	489	0.03	3,589	0.35	1,159	0.73
Haa	1,514	0.03	2,148	0.14	1,338	0.07
Lhuentse	4,918	0.15	12,837	0.83	8,899	0.90
Monggar	15,033	1.05	19,140	1.22	16,095	0.88
Paro	25,338	0.25	24,246	1.35	6,818	0.23
Pema Gatshel	9,692	0.23	4,818	0.30	3,295	0.07
Punakha	7,612	0.26	35,974	0.98	4,101	0.14
Samdrup Jongkhar	2,168	0.05	3,615	0.16	1,413	0.05
Samtse	3,804	0.14	14,340	0.58	7,905	0.37
Sarpang	1,075	0.07	3,155	0.31	5,052	0.09
Thimphu	9,660	0.72	14,749	0.69	8,233	1.13
Trashigang	4,557	0.22	13,437	0.51	10,255	0.47
Trashi Yangtse	6,853	0.20	21,310	0.99	7,529	0.36
Trongsa	2,245	0.17	6,288	0.60	2,417	0.12
Tsirang	3,101	0.05	6,325	0.11	4,737	0.13
Wangdue Phodrang	1,837	0.07	7,664	18.80	12,603	13.75
Zhemgang	2,398	0.08	7,218	0.35	7,169	0.29
Total	**125,588**	**6.93**	**239,563**	**31.00**	**140,521**	**23.36**

Source: Bhutan RNR Statistics 2012, MoAF

Table 6.11: Distribution of Geographical Area by Agro-Ecological Zones, Bhutan 2010

Dzongkhag	Total Area (Sq.km)	Distribution of area (Sq.km) by agro-ecological zones					
		Wet Subtropical (100-600)	Humid Subtropical (600-1200)	Dry Subtropical (1200-1800)	Warm Temperate (1800-2600)	Cool Temperate (2600-3600)	Alpine (3600-7500)
Bumthang	2,666.89	0.0	0.0	0.0	1.3	36.1	62.6
Chhukha	1,879.55	7.2	17.8	21.3	27.1	23.7	3.0
Dagana	1,712.70	15.8	19.0	19.1	25.7	16.6	4.0
Gasa	2,951.07	0.0	0.0	0.1	2.2	9.8	87.9
Haa	1,904.65	0.0	2.4	6.9	15.0	35.1	40.6
Lhuentse	2,850.76	0.0	1.0	6.9	20.6	30.6	40.9
Monggar	1,940.26	3.3	17.8	27.0	28.7	21.8	1.5
Paro	1,286.93	0.0	0.0	0.0	13.6	42.2	44.3
Pema Gatshel	1,021.94	20.9	41.7	28.1	9.3	0.0	0.0
Punakha	1,109.57	0.0	0.2	17.6	36.7	29.4	16.2
Samdrup Jongkhar	1,876.62	22.9	23.0	25.6	20.8	7.3	0.4
Samtse	1,256.09	20.9	27.7	22.2	21.0	7.3	0.7
Sarpang	1,655.04	25.9	25.1	24.7	21.2	2.8	0.3
Thimphu	1,791.73	0.0	0.0	0.0	6.2	30.2	63.5
Trashigang	2,197.65	0.1	4.4	14.8	29.2	32.7	18.8
Trashi Yangtse	1,447.35	0.0	2.5	6.8	24.1	34.4	32.2
Trongsa	1,813.71	0.0	2.7	10.2	28.2	41.4	17.5
Tsirang	637.83	7.4	31.6	30.7	22.7	7.0	0.6
Wangdue Phodrang	3,977.28	0.2	3.2	8.9	19.0	32.4	36.4
Zhemgang	2,416.48	11.9	29.6	26.8	19.5	9.9	2.3
Bhutan	**38,394.09**	**5.6**	**10.2**	**13.1**	**18.6**	**23.9**	**28.6**

Source: Bhutan RNR Statistics 2012, MoAF

Table 6.12: Mineral Production by Type, Bhutan, (2008-2012)

Minerals	2008	2009	2010	2011	2012
Dolomite (metric tonnes)	1,247,568.11	1,028,992.60	1,214,619.93	1,082,300.76	1,499,534.68
Lime stone (metric tonnes)	583,706.63	649,951.70	704,911.60	649,291.20	677,128.94
Gypsum (metric tonnes)	248,444.70	299,735.67	344,034.49	352,233.95	313,172.96
Coal (metric tonnes)	123,704.23	48,545.01	87,815.42	108,904.47	98,731.18
Marble (square feet)	12,301.06	13,074.00	71,277.95	71,582.49	59,541.68
Slate (square feet)	8,226.89	18,998.00	…	…	…
Quartzite (metric tonnes)	94,687.65	82,578.00	111,370.67	95,015.79	88,630.78
Talc (metric tonnes)	56,077.39	64,949.00	40,204.18	8,562.14	16,062.59
Stone (metric tonnes)	408,943.11	511,780.54	6,649,977.80	1,842,678.84	1,494,467.05
Granite (metric tonnes)	8,226.89	19,905.00	9,396.44	462.80	1,806.78
Phyllite (metric tonnes)	…	…	11,699.98	8,208.18	1,016.52
Calc Tufa (metric tonnes)	…	…	…	19,897.32	8,872.62
Iron Ore (metric tonnes)	…	…	…	…	3,741.77
Clay	…	…	…	…	7,353.40

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

Table 6.13: Mineral Production by Type and Use, Bhutan, (2008-2012)

Minerals	2008			2009			2010			2011			2012		
	Export	Domestic Use	Total	Export	Domestic Use	Total	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	…	1,214,620	1,071,433	8,981	1,080,414	1,498,105	1,429	1,499,535
Lime stone (metric tonnes)	89,059	494,647	583,707	34,921	615,031	649,952	34,522	670,389	704,912	39,860	585,675	625,535	47,074	630,054	677,128
Gypsum (metric tonnes)	210,081	38,364	248,445	283,141	16,595	299,736	306,536	37,499	344,034	312,371	41,435	353,806	278,203	34,970	313,173
Coal mines (metric tonnes)	80,976	42,728	123,704	27,076	21,469	48,545	58,819	28,997	87,815	73,354	33,551	106,904	46,608	52,123	98,731
Marble (square feet)[1]	…	12,301	12,301	…	13,074	13,074	70,701	187	70,888	700,013	…	700,013	5,523	54,019	59,542
Slate (square feet)[1]	…	8,227	8,227	…	18,998	18,998	…	…	…	…	…	…	…	…	…
Quartzite (metric tonnes)	4,123	90,565	94,688	12,927	69,651	82,578	2,305	109,065	111,371	90,468	45	90,513	2,264	86,367	88,631
Talc (metric tonnes)	56,077	…	56,077	64,949	…	64,949	36,442	…	36,442	8,230	…	8,230	1,606	5	1,611
Stone (metric tonnes	101,577	287,144	388,721	121,968	286,975	408,943	80,871	6,569,107	6,649,978	182,761	1,674,460	1,857,221	45,866	1,448,601	1,494,467
Granite (square feet)[1]	…	14,430	14,430	…	8,227	8,227	…	9,396	9,396	…	427	427	…	1,807	1,807
Phyllite (metric tonnes)	…	…	…	…	…	…	…	11,700	11,700	1,667	6,541	8,208	364	652	1,017
Calc Tufa (metric tonnes)	…	…	…	…	…	…	…	…	…	…	19,897	19,897	…	8,873	8,873
Iron Ore (metric tonnes)	…	…	…	…	…	…	…	…	…	…	…	...	…	3,742	3,742
Clay	…	…	…	…	…	…	…	…	…	…	…	…	…	7,353	7,353

[1] *The unit for the Marble, Slate & Granite is in Metric tonnes for the year 2010.*

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

Table 6.14: Length of Roads by Type, Bhutan (2008-2013)

(Length in Km)

Type of Road	Express-way	Primary National Highway	Secondary National Highway	Dzongkhag Road	Feeder Road	Urban Road	Farm Road	Access Road [1]	All road
2008	6.2	…	…	482.0	820.8	163.1	1,045.6	1,223.8	2,517.7
Black topped	6.2	…	…	449.5	160.9	150.0	0.0	304.6	766.6
Non-black topped	0.0	…	…	32.5	659.9	13.1	1,045.6	919.2	1,751.1
2009	6.2	…	…	490.7	910.8	206.7	1,361.6	1,296.5	2,976.0
Black topped	6.2	…	…	454.2	174.1	190.0	2.7	301.0	827.2
Non-black topped	0.0	…	…	36.5	736.7	16.7	1,358.9	995.5	2,148.8
2010	6.2	…	…	1,066.1	…	295.0	1,980.3	1,313.2	3,347.6
Black topped	6.2	…	…	196.5	…	265.8	0.2	291.2	468.8
Non-black topped	0.0	…	…	869.6	…	29.2	1,980.1	1,022.0	2,878.8
2011	6.2	1,757.2	516.4	1,112.9	…	303.6	3,289.7	1,380.3	8,366.2
Black topped	6.2	1,604.2	473.9	203.1	…	272.8	0.7	296.6	2,857.4
Non-black topped	0.0	153.0	42.5	909.8	…	30.8	3,289.0	1,083.7	5,508.8
2012	6.2	1,768.6	521.2	1,050.9	…	326.9	4,380.9	1,436.7	9,491.5
Black topped	6.2	1,627.3	473.9	203.1	…	295.8	0.0	296.7	2,606.2
Non-black topped	0.0	141.4	47.3	847.8	…	31.2	4,380.9	1,140.0	5,448.5
2013	6.2	1,860.1	578.3	2,154.5	…	349.7	5,255.2	1,350.5	10,578.3
Black topped	6.2	1,662.4	510.9	976.2	…	324.5	2.5	266.7	2,975.3
Non-black topped	0.0	197.7	67.3	1,178.3	…	25.2	5,252.7	1,083.8	7,602.9

The national highway before year 2011 is now primary national highway, the distric road is now secondary national highway and the feeder road is now Dzongkhag road, therefore it is not available for the provious year.

[1]Access road includes Forest road and Power tiller road.

Source: Department of Roads, MoWHS, Thimphu.

Table 6.15: Number of Registered Vechicles by Type and Region (2008-2012)

Region	Government											
	Heavy	Medium	Light	Two-Wheeler	Power Tiller	TR	Earth Mover	Total	Heavy	Med-ium	Light	
2008	902	142	1,930	810	16	41	173	3,957	3,725	507	21,878	
Thimphu	465	10	1,300	469	7	15	105	2,314	1,402	79	14,063	
Phuntsholing	372	97	388	193	0	13	39	1,102	1,901	401	6,597	
Gelephu	29	6	94	79	0	0	9	217	134	5	577	
Samdrup Jongkhar	36	29	148	69	9	13	20	324	288	22	641	
2009	952	170	2,000	839	17	40	192	4,210	4,246	616	25,081	
Thimphu	478	16	1,268	470	8	14	107	2,361	1,427	104	15,769	
Phuntsholing	393	114	453	204	0	13	42	1,219	2,377	468	7,788	
Gelephu	28	7	100	82	0	0	9	226	141	12	676	
Samdrup Jongkhar	53	33	179	83	9	13	34	404	301	32	848	
2010	1009	183	2117	1342	17	42	202	4912	5,625	830	29,446	
Thimphu	502	24	1,305	498	8	13	111	2,461	1,816	171	18,129	
Phuntsholing	438	115	505	541	0	14	46	1,659	3,294	578	9,355	
Gelephu	30	7	109	98	0	1	10	255	193	48	848	
Samdrup Jongkhar	39	37	198	205	9	14	35	537	322	33	1,114	
2011	1075	211	2278	1406	21	56	238	5285	6,897	1,050	33,807	
Thimphu	522	36	1,369	519	12	18	113	2,589	2,093	237	20,561	
Phuntsholing	456	125	559	554	0	17	51	1,762	4,228	705	10,923	
Gelephu	54	12	140	107	0	6	35	354	246	68	1,012	
Samdrup Jongkhar	43	38	210	226	9	15	39	580	330	40	1,311	
2012	1132	226	2531	1460	21	58	241	5669	7,311	1,104	36,658	
Thimphu	546	39	1,503	531	12	20	115	2,766	2,165	257	22,173	
Phuntsholing	481	131	641	581	0	17	51	1,902	4,534	733	11,874	
Gelephu	57	18	161	113	0	6	35	390	264	74	1,170	
Samdrup Jongkhar	48	38	226	235	9	15	40	611	348	40	1,441	

Excludes vehicles of armed forces.
Earth Movers include bull dozers, road rollers, pay loaders, excavators, cranes, etc.
Others include Power tiller and Tractors.
The figures are in cumulative.
Source: Road Safety and Transport Authority, MOIC, Thimphu.

Private						BHT		Diplomats/CD			All Types
Two-Wheeler	Taxi	Power Tiller	TR	Earth Mover	Total	Light	Total	Light	Two-Wheeler	Total	
6,921	2,481	594	108	552	36,696	57	57	64	6	70	**40,780**
3,245	1,748	337	34	211	21,049	57	57	64	6	70	**23,490**
2,049	656	43	55	315	12,017	0	0	0	0	0	**13,119**
733	46	51	2	3	1,551	0	0	0	0	0	**1,768**
894	31	163	17	23	2,079	0	0	0	0	0	**2,403**
7,180	2,859	675	143	737	41,537	63	63	64	8	72	**45,882**
3,309	1,983	378	48	259	23,277	63	63	64	8	72	**25,773**
2,148	773	50	72	450	14,126	0	0	0	0	0	**15,345**
768	60	69	3	5	1,734	0	0	0	0	0′	**1,960**
955	43	178	20	23	2,400	0	0	0	0	0′	**2,804**
7,612	3,600	777	174	1,075	49,139	63	63	68	4	72	**54,186**
3,451	2,522	430	58	336	26,913	63	63	68	4	72	**29,509**
2,344	939	59	89	687	17,345	0	0	0	0	0	**19,004**
818	99	82	3	14	2,105	0	0	0	0	0	**2,360**
999	40	206	24	38	2,776	0	0	0	0	0	**3,313**
8,023	4,856	1,009	222	1,478	57,272	70	70	65	5	70	**62,697**
3,559	3,305	602	67	463	30,817	70	70	65	5	70	**33,546**
2,490	1,343	66	121	939	20,815	0	0	0	0	0	**22,577**
849	151	103	8	33	2,470	0	0	0	0	0	**2,824**
1,125	57	238	26	43	3,170	0	0′	0	0′	0	**3,750**
8,274	5,354	1,107	225	1,677	61,710	70	70	65	5	70	**67,519**
3,656	3,617	697	68	496	33,129	70	70	65	5	70	**36,035**
2,580	1,514	66	123	1,090	22,514	0	0	0	0	0	**24,416**
886	160	103	8	47	2,712	0	0	0	0	0	**3,102**
1,152	63	241	26	44	3,355	0	0	0	0	0	**3,966**

Table 6.16: Length of Roads by Type and Dzongkhag, Bhutan, as on 30 June 2013

(Length in Km)

Dzongkhag	Express-way	Primary National Highway	Secondary National Highway	Dzongkhag Road	Urban Road	Farm Road	Access Road	Total	%
Bumthang	0.0	151.3	0.0	50.0	1.7	169.1	69.2	441.2	4.2
Chhukha	0.0	272.0	0.0	58.6	28.6	334.6	231.5	925.3	8.7
Dagana	0.0	11.0	87.0	62.3	1.5	231.1	48.8	441.6	4.2
Gasa	0.0	0.0	48.7	7.0	0.0	11.0	3.2	69.8	0.7
Haa	0.0	16.0	25.6	34.0	7.9	108.7	54.0	246.2	2.3
Lhuentse	0.0	0.0	45.0	69.4	0.8	376.9	16.3	508.3	4.8
Monggar	0.0	213.4	20.0	71.4	11.4	687.2	77.6	1,081.1	10.2
Paro	0.0	103.0	64.6	41.1	5.2	353.7	32.8	600.4	5.7
Pema Gatshel	0.0	66.6	36.0	94.8	0.0	330.8	23.4	551.5	5.2
Punakha	0.0	52.0	35.2	40.3	4.4	312.6	91.1	535.7	5.1
Samdrup Jongkhar	0.0	73.8	48.0	41.0	7.3	242.6	33.4	446.1	4.2
Samtse	0.0	50.0	49.0	60.4	8.3	213.2	15.3	396.2	3.7
Sarpang	0.0	112.6	0.0	40.3	14.6	203.8	125.2	496.5	4.7
Thimphu	6.2	74.0	23.5	57.9	216.2	58.0	124.4	560.1	5.3
Trashigang	0.0	121.5	5.0	168.3	6.6	610.3	73.2	985.0	9.3
Trashi Yangtse	0.0	0.0	40.0	40.7	8.7	178.6	24.9	292.8	2.8
Trongsa	0.0	174.7	0.0	23.9	0.6	178.0	14.8	391.9	3.7
Tsirang	0.0	77.0	0.0	25.0	3.3	169.3	18.9	293.5	2.8
Wangdue Phodrang	0.0	132.0	0.0	110.8	8.5	257.5	238.1	746.9	7.1
Zhemgang	0.0	159.3	50.7	81.1	14.1	228.5	34.6	568.4	5.4
Bhutan	**6.2**	**1,860.1**	**578.3**	**1,178.3**	**349.7**	**5,255.2**	**1,350.5**	**10,578.3**	**100**

Source: Department of Roads,MoWHS, Thimphu.

Table 6.17: Total Electricity Generation and Supply, Bhutan (2007/08-2012)

Details	2007/08	2008/09	2009/10	2011	2012
Installed capacity (MW)	1,497.36	1,497.29	1,497.29	1,497.29	1,497.29
Chhukha power plant	336.00	336.00	336.00	336.00	336.00
Kurichu power plant	60.00	60.00	60.00	60.00	60.00
Basochu - I power plant	24.00	24.00	24.00	24.00	24.00
Basochu - II power plant	40.00	40.00	40.00	40.00	40.00
THPA	1,020.00	1,020.00	1,020.00	1,020.00	1,020.00
Other hydro power	8.17	8.10	8.10	8.10	8.10
All diesel generators	9.19	9.19	9.19	9.19	9.19
Electricity generation (MU)	6,562.40	6,960.64	6,997.59	7,066.53	6,823.71
Chhukha power plant	1,774.37	1,767.70	1,839.91	1,774.13	1,742.10
Kurichu power plant	379.11	375.92	368.35	361.80	360.93
Basochu - I power plant	115.59	115.72	114.39	114.17	105.82
Basochu - II power plant	210.57	206.29	207.82	208.12	194.00
THPA	4,056.13	4,473.07	4,441.24	4,587.99	4,405.48
Other power plant	24.81	21.78	25.58	20.01	15.21
All diesel generators	1.82	0.17	0.30	0.31	0.18
Exports (MU)	5,429.12	5,609.37	5,352.51	5,283.90	4,924.00
Imports (MU)	7.25	16.72	19.55	19.87	36.75
Total energy requirement (MU)	1,140.49	1,368.17	1,665.00	1,713.93	1,853.76
Total energy sales (MU)	989.80	1,202.71	1,498.01	1,619.95	1,769.59
Energy losses (MU)	150.69	165.47	166.99	93.98	84.17
Percentage losses (%)	13.00	12.00	10.00	5.48	4.54
Peak system demand (MW)	194.00	211.00	237.17	276.24	282.44
Length of HT lines (33/11 KV)					
Overhead lines (km)	2,643.71	2,734.95	2,906.79	3,785.99	4,090.35
Underground lines (km)	57.53	60.79	63.53	71.21	81.45
Length of LT lines					
Overhead lines (km)	3,351.49	3,570.93	3,724.52	5,278.72	5,969.28
Underground lines (km)	165.77	173.30	187.48	189.31	193.35

Source:Department of Hydropower & Power Systems, MoEA, Thimphu.

Table 6.18: Consumption of Electricity by Type of Consumer, 2012

Type of Consumer	Energy Sold (MU)	% of Total Sales	No. of Consumers
Total consumption (MU)	1,619.94	100.00	116,354
Domestic rural	65.04	4.01	61,372
Domestic urban	95.09	5.87	31,492
Commercial	43.44	2.68	8,428
Industrial	10.18	0.63	1,701
Agriculture	1.55	0.10	664
Institutions	46.44	2.87	8,343
Street lighting	2.59	0.16	254
Power house auxiliaries	1.06	0.07	22
Temporary connections	18.16	1.12	3,413
LV Bulk	56.21	3.47	604
MV Industries	109.54	6.76	46
HV Industries	1,170.64	72.26	15

Source:Department of Hydropower & Power Systems, MoEA, Thimphu.

Table 6.19: Percentage of Major Attraction to Bhutan, 2012

Attractions	%
Unique Culture	66.5
Pristine Nature	43.0
Buddhism	25.6
Trekking	12.7
Undiscovered	31.7
Gross National Happiness	33.4
Flora/Fauna	2.7
Work/Business	1.3
Others	4.0

Source: Tourism Council of Bhutan, Thimphu.

Table 6.20: Import of Petroleum Products by Volume and Value (2008-2012)

PoL Products	2008		2009		2010		2011		2012	
	Volume in KL/MT	Value in Nu. Million	Volume in KL/MT	Value in Nu. Million	Volume in KL/MT	Value in Nu. Million	Volume in KL/MT	Value in Nu. Million	Volume in KL/MT	Value in Nu. Million
Diesel (HSD)	62,207.36	1,807.66	68,577.45	1,910.59	88,788.31	2,803.87	105,872.06	3,644.70	124,209.22	4,695.27
Petrol(KL)	0.00	703.35	20,554.78	724.34	23,934.81	969.20	26,877.82	1,369.43	29,316.90	1,636.28
Kerosene(S.K oil)	5,339.01	43.47	5,763.05	49.09	5,588.03	53.62	5,658.81	70.41	5,567.01	73.86
SKO(Industrial)	389.00	11.18	84.10	2.60	240.16	8.06	120.15	5.74	0.00	0.00
Kerosene type jet fuel(ATF)	837.23	37.19	98.70	30.72	1,342.87	48.69	1,455.00	71.96	2,082.02	120.46
LPG	5,726.48	114.82	10,410.52	121.21	24,217.66	145.08	7,458.61	181.45	7,480.71	194.96
Lubricating Oil	1,164.41	124.86	2,780.67	155.20	1,564.64	194.34	1,929.99	275.70	2,380.92	365.25
Furnance Oil	1,880.00	56.58	4,907.11	121.36	3,352.04	103.71	13,985.34	95.40	1,363.36	64.97
LDO	171.00	5.95	368.84	13.31	243.00	10.41	322.00	17.09	189.11	11.43
Petroleum Bitumen	37,884.36	363.85	9,227.94	279.59	3,858.07	128.02	4,956.24	187.91	12,471.37	588.29
Others (waste oils)	40.55	3.88	156.11	9.02	44.35	4.93	235.48	17.38	225.17	17.51
Others (containing biodiesel other than waste oils)	0.99	0.39	4.84	0.40	5.30	0.29	3.05	0.19	19.33	2.07

Source: Bhutan Trade Statistics ,DRC, MoF, Thimphu

Table 6.21: Total Ghg Emissions in Bhutan, 2000

GHG Sources & Sink	Total(CO2, CH4 and N20), CO2 -equiv	GHG, Giga Grams						
		CO2	CH4	N2O	NOx	CO	NMVOC	SO2
1 Energy	270.23	260.31	0.38	0.01	1.76	9	1.3	0.96
2 Industrial Processe	237.76	237.76	0	0	0	0	1.69	0.1
3 Solvent & Other Product Us	-	-	0	0	0	0	0	0
4 Agriculture	1,005.30	-	25.85	1.49	0.2	0.41	0	0
5 Land-Use Change and Forestry	(6,309.00)	(6,309.00)	0	0	0	0	0	0
6 Waste	46.27	-	2	0.01	0	0	0	0
Total GHG Emission, excluding LUCF	1,559.56	498.07	28.23	1.51	1.78	9.41	4.7	1.05
Total GHG Emission, including LUCF	(4,750.04)	(5,810.90)	28.23	1.51	1.78	9.41	4.7	1.05

Source: Second National Communication to the UNFCCC, NEC

Table 6.22: PM 10 Concentration (Microgram/m3) for Thimphu Dzongkhag (2008-2012)

Month	2008	2009	2010	2011	2012
January	…	…	46.667	57.625	57.595
Febuary	…	42.118	65.366	50.338	50.831
March	…	82.280	80.442	54.859	76.033
April	…	50.207	25.934	40.863	41.374
May	…	27.942	59.350	19.243	38.820
June	…	27.917	10.038	21.044	31.073
July	…	12.854	7.880	12.008	22.510
August	…	…	44.673	…	15.683
September	12.098	…	44.923	…	17.253
October	20.168	…	31.795	26.992	39.831
November	…	24.303	188.680	33.598	54.787
December	…	…	70.957	41.765	68.862

Source: National Environment Commission, Thimphu

Table 6.23: Annual Governement Protection Expenditure by Purpose during Tenth Five Year Plan, 2008 - 2009 to 2009 - 2010

(in million Nu.)

Environmental Clusters	2008-09	2009-10
1. Environmental Protection	**18.1**	**38.5**
1.1. Ambient Air Quality	0.7	0.2
1.3. Clean Technology and Environmental clearances	16.3	33.2
1.4. Vehicle emission reduction	…	1.7
1.5. Regulation of ozone depletion substances	1.1	3.4
2. Urban, rural and industrial environmrntal management	**201.1**	**358.1**
2.1. Waste Management	12.6	31.2
2.2. Water supply services	150.0	253.1
2.3. Sanitation services/drainage	38.3	56.9
2.4. other environmental management services	0.2	16.9
3. Biodiversity conservation	**158.4**	**268.9**
3.1. Protected areas and parks management	124.6	81.1
3.2. protected species/plants and wildlife	18.6	24.7
3.3. other biodiversity management, guidelines and support	15.2	163.1
4.Information and Knowledge	**113.8**	**90.6**
4.1. Research and higher education	68.7	41.2
4.2. Primary environmental education	…	0.1
4.3. Environmental awareness and campaigns	18.6	8.2
4.4. Information and statistics	3.4	12.0
4.5. Human Resource Development	23.1	29.1
5.Natural resource management	**360.2**	**383.7**
5.1. Forestry and forest products	322.7	338.8
5.2. forest fires prevention and control	10.2	2.9
5.3. Community level NRM	9.9	16.1
5.4. watershed management and water resources	17.4	25.9
6. Soil conservation and land management	**96.8**	**51.6**
6.1. soil conservation and erosion control	18.4	7.1
6.2. sustainable land management	78.4	44.5
7. Climate change	**177.7**	**313.2**
7.1. Climate change adaptation	20.1	103.3
7.2. Disaster risk reduction	25.1	44.1
7.3. Meteorological services and early warnings	18.1	24.1

Table 6.23: condt...

7.4. climate change mitigation	26.3	62.0
7.5. weather related damage	31.9	6.7
7.6. Irrigation (adaptation and resilience)	47.6	62.3
7.7. Other climate change	8.6	10.7
8. Environmental mainstreaming	**193.8**	**460.2**
8.1. Mainstreaming in plans and policies	21.3	72.2
8.2. Mainstreaming in farm roads	32.2	63.1
8.3. Mainstreaming in road projects	140.3	324.6
8.4. other environmental mainstreaming		0.3
9. Miscellanous (other)	**2.6**	**0.9**
9.1. Eco-tourism	2.5	0.9
9.2. Occupational and Environmental Health	0.1	…
Total	**1,322.5**	**1,965.7**

Source: Report on Pubic Environmental Expenditure for the 10th FYP, UNDP

Table 6.24: Public Expenditure by Institution during Ninth Five Year Plan (2002 - 2008)

(in million Nu.)

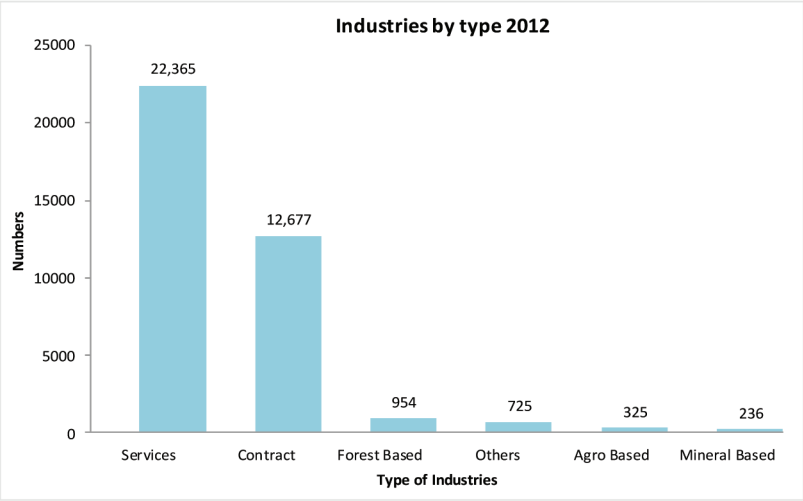
Institution	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	Annual Average
1. Air, Noise and Climate	58.0	34.8	38.2	39.6	55.4	60.8	47.8
2. Natural Resource Management	195.9	226.4	243.7	281.3	398.0	280.6	271.0
3. Biodiversity	121.7	132.2	126.0	151.1	156.1	223.8	151.8
4. Soil and Water Conservation	37.5	36.2	35.1	28.1	44.6	36.2	36.3
5. Sewerage and Water Supply	46.7	77.7	70.5	66.2	49.6	41.0	58.6
6. Waste Management	19.0	40.4	41.0	50.9	30.5	28.6	35.1
7. Training, HRD and R&D	169.8	136.5	108.4	143.6	146.2	174.2	146.4
8. Other Environment	410.6	267.4	252.5	256.2	276.8	271.1	289.1
Total PEE	**1,059.0**	**951.4**	**915.3**	**1,017.0**	**1,157.3**	**1,116.2**	**1,036.0**

Source: Report on Pubic Expenditure Analysis of the RGoB for the 9th FYP, UNDP

CHAPTER 7
INDUSTRIES

Industries cover 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.

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.

As the industrial sector grows in Bhutan, statistics on industry will become increasingly important. The Department of Industry 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.

The number of industrial license holders increased from 2,030 in 2011 to 2,177 in 2012, with more than 90 percent of the establishments operated by the private sectors. Most of the existing industrial establishments are small scale or cottage industries.

Table 7.1: Number of Industrial Establishments by Sector, Bhutan (2008-2012)

Sector	2008	2009	2010	2011	2012
Production & manufacturing	1,389	1,565	1,777	1,977	2,240
New registration	133	173	237	221	256
Existing establishments	1,256	1,392	1,540	1,756	1,984
Services	16,253	17,907	19,231	20,799	22,365
New registration	1,331	1,626	1,437	1,632	1,583
Existing establishments	14,922	16,281	17,794	19,167	20,782
Contract	10,431	10,845	11,352	11,916	12,677
New registration	347	410	503	594	756
Existing establishments	10,084	10,435	10,849	11,322	11,921
Trade	13,769	16,089	18,892	20,373	19,423
New registration	2,429	3,349	3,371	3,603	3,632
Existing establishments	11,340	12,740	15,521	16,770	15,791
All sectors	**41,842**	**46,406**	**51,252**	**55,065**	**56,705**

Source: Department of Industry, Department of Trade, MoEA, Thimphu.

Table 7.2: Number of Licencesed Firms in Manufacturing and Mining Industries by Sub Sector and Ownership, Bhutan (2008-2012)

Industry	2008				2009				2010				2011				2012			
	Public	Joint	Private	Total	Public	Joint	Private	Total	Public	Joint	Private	Total	Public	Joint	Private	Total	Public	Joint	Private	Total
Mining	8	3	63	74	8	3	67	78	11	3	69	83	15	3	71	89	19	3	72	94
Manufacturing	15	6	1,321	1,342	17	6	1,489	1,512	42	23	1,659	1,724	42	23	1,912	1,977	27	9	2,141	2,177
Food processing/ milling	5	1	211	217	6	1	245	252	3	2	215	220	3	2	250	255	7	2	316	325
Textiles and Clothing	0	0	1	1	0	0	1	1	1	2	33	36	1	2	33	36	0	0	26	26
Wood and Paper Products	2	2	570	574	2	2	647	651	2	6	707	715	2	6	823	831	3	3	948	954
Mineral Products	0	3	94	97	1	3	106	110	20	5	152	177	20	5	184	209	6	3	164	173
Others	8	0	445	453	8	0	490	498	16	8	552	576	16	8	622	646	11	1	687	699
Total	**23**	**9**	**1,384**	**1,416**	**25**	**9**	**1,556**	**1,590**	**53**	**26**	**1,728**	**1,807**	**57**	**26**	**1,983**	**2,066**	**46**	**12**	**2,213**	**2,271**

Source: Department of Industry, Department of Geology & Mines, MoEA, Thimphu.

Table 7.3: Number of Industries by Ownership, Size and Type, Bhutan (2008-2012)

Industrial Establishments	2008	2009	2010	2011	2012
Ownership	28,073	30,317	32,360	34,692	37,282
Private	27,972	30,207	32,218	34,550	37,155
Joint	14	14	46	46	27
Public	87	96	96	96	100
Size	28,073	30,317	32,360	34,692	37,282
Large scale	91	103	114	133	141
Medium scale	128	156	201	220	240
Small scale	2,064	2,330	2,878	2,649	3,014
Cottage scale	15,359	16,883	17,815	19,774	21,210
Other (Contract)	10,431	10,845	11,352	11,916	12,677
Type	28,073	30,317	32,360	34,692	37,282
Production & Manufacturing	1,389	1,565	1,777	1,977	2,240
Agro based	217	252	287	291	325
Forest based	574	651	733	831	954
Mineral based	144	163	178	209	236
Others	454	499	579	646	725
Contract	10,431	10,845	11,352	11,916	12,677
Services	16,253	17,907	19,231	20,799	22,365

Source: Department of Industry, MoEA, Thimphu.

Table 7.4: Number of Contract Firms by Size,by Dzongkhag, Bhutan, 2012

Dzongkhag	Size of Contract Firm			Total
	Small	Medium	Large	
Bumthang	307	9	2	318
Chhukha	777	160	45	982
Dagana	323	13	0	336
Gasa	44	0	0	44
Haa	266	49	1	316
Lhuentse	165	25	0	190
Monggar	430	69	3	502
Paro	581	80	1	662
Pema Gatshel	314	37	1	352
Punakha	353	11	1	365
Samdrup Jongkhar	305	88	19	412
Samtse	367	45	1	413
Sarpang	575	52	12	639
Thimphu	3,934	633	141	4,708
Trashi Yangtse	201	37	2	240
Trashigang	535	105	7	647
Trongsa	260	10	0	270
Tsirang	181	5	0	186
Wangdue Phodrang	753	22	0	775
Zhemgang	313	6	1	320
Bhutan	**10,984**	**1,456**	**237**	**12,677**

Source: Department of Industry, MoEA, Thimphu.

Table 7.5: Number of Industrial Firms, by Type, by Dzongkhag, Bhutan, 2012

Dzongkhag	Scale of Industry				Total
	Small	Medium	Large	Cottage	
Bumthang	58	10	2	723	793
Chhukha	737	58	57	2,449	3,301
Dagana	11	2	1	437	451
Gasa	…	…	…	78	78
Haa	43	…	…	250	293
Lhuentse	3	…	…	212	215
Monggar	30	7	1	980	1,018
Paro	167	28	6	1,529	1,730
Pema Gatshel	56	7	5	566	634
Punakha	37	8	3	651	699
Samdrup Jongkhar	43	5	9	911	968
Samtse	147	13	8	716	884
Sarpang	87	2	7	1,402	1,498
Thimphu	1,445	80	37	7,001	8,563
Trashi Yangtse	13	…	…	291	304
Trashigang	32	2	1	866	901
Trongsa	21	2	…	470	493
Tsirang	10	1	…	365	376
Wangdue Phodrang	72	13	4	920	1,009
Zhemgang	2	2	…	393	397
Bhutan	**3,014**	**240**	**141**	**21,210**	**24,605**

Source: Department of Industry, MoEA, Thimphu.

Table 7.6: Number of Industries by Type, by Dzongkhag, Bhutan, 2012

Dzongkhag	Agro Based	Forest Based based	Mineral Based	Services	Contract	Others	All Types types
Bumthang	20	68	2	696	318	7	1,111
Chhukha	54	61	33	3,035	982	118	4,283
Dagana	4	4	5	436	336	2	787
Gasa	1	1	…	76	44	…	122
Haa	2	51	1	236	316	3	609
Lhuentse	3	8	1	202	190	1	405
Monggar	14	72	6	915	502	11	1,520
Paro	17	150	22	1,505	662	36	2,392
Pema Gatshel	12	35	19	556	352	12	986
Punakha	2	16	2	674	365	5	1,064
Samdrup Jongkhar	16	30	8	896	412	18	1,380
Samtse	26	27	49	766	413	16	1,297
Sarpang	56	44	17	1,364	639	17	2,137
Thimphu	57	172	34	7,851	4,708	449	13,271
Trashi Yangtse	2	86	1	213	240	2	544
Trashigang	10	48	8	816	647	19	1,548
Trongsa	6	13	3	471	270	…	763
Tsirang	11	8	6	351	186	…	562
Wangdue Phodrang	5	29	18	949	775	8	1,784
Zhemgang	7	31	1	357	320	1	717
Bhutan	**325**	**954**	**236**	**22,365**	**12,677**	**725**	**37,282**

Source: Department of Industry, MoEA, Thimphu.

Table 7.7: Number of Establishment by Nature of Major Economic Activity, Bhutan, 2010

Major Economic Activity	Establishment	%
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
All Activities	**7,474**	**100**

Note: No Establishment Census has been conducted in the year 2011, therefore the data is of the year 2010 only.
Source: Establishment Census - 2010, MoLHR.

Table 7.8: Establishments by Ownership and Investments, Bhutan, 2010

(Numbers)

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

Source: Establishment Census - 2010, MoLHR.

Table 7.9: Establishments by Major Economic Activity and Ownership, Bhutan, 2010

(Numbers)

Major Economic Activity	Ownership				
	Privately Owned	Govern-ment Owned	Foreign Control	Joint Venture Between Bhutanese & Foreigner	Total
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
Total	**7,289**	**154**	**9**	**22**	**7,474**

Source: Establishment Census - 2010, MoLHR.

Table 7.10: Establishments by Major Economic Activity by Dzongkhag, Bhutan, 2010

Dzongkhag	Type of Establishment							
	Agriculture, Hunting & Forestry	Mining & Quarring	Manu-factu-ring	Electricity, Gasand Water Supply	Cons-truc-tion	Wholesale & Retail trade,Repair of Motor Vehicles & Personal &Household Goods	Hotels & Restua-rents	
Bumthang	1	0	15	1	1	118	59	
Chhukha	0	3	61	4	16	481	265	
Dagana	0	0	5	4	1	111	54	
Gasa	0	0	0	0	0	14	1	
Haa	0	0	21	3	0	71	14	
Lhuentse	0	0	7	2	0	56	7	
Monggar	1	0	23	2	4	173	43	
Paro	1	1	56	1	1	339	143	
Pema Gatshel	0	1	9	0	0	83	40	
Punakha	1	1	19	1	0	90	33	
Samdrup Jongkhar	10	2	29	1	9	223	83	
Samtse	1	3	20	3	14	204	119	
Sarpang	1	1	48	3	4	347	168	
Thimphu	6	7	200	5	11	1,282	469	
Trashigang	2	0	9	3	5	164	41	
Trashi Yangtse	0	0	8	2	0	31	21	
Trongsa	0	1	6	1	9	62	63	
Tsirang	0	0	15	2	0	73	33	
Wangdue Phodrang	1	2	39	1	5	225	75	
Zhemgang	1	0	8	1	2	69	37	
Bhutan	**26**	**22**	**598**	**40**	**82**	**4,216**	**1,768**	

Source: Establishment Census - 2010, MoLHR.

(Numbers)

Financial Intermedia-tion	Real estate, Renting & Business Activities	Public Adm& Defence, Compulsory Social Security	Education	Health & Social Work	Other communi ty,Social & Personal Service Activities	Total	Percent
2	3	0	1	1	10	212	2.8
5	70	3	3	2	52	965	12.9
0	4	0	1	0	0	180	2.4
1	1	0	0	0	0	17	0.2
3	2	0	0	0	1	115	1.5
2	0	0	0	0	1	75	1.0
5	4	0	1	0	5	261	3.5
1	27	1	2	1	28	602	8.1
5	2	0	0	0	4	144	1.9
3	3	0	0	0	3	154	2.1
6	37	0	2	2	18	422	5.6
1	4	1	0	2	10	382	5.1
2	34	0	2	1	21	632	8.5
5	94	7	4	7	127	2224	29.8
5	7	0	0	0	5	241	3.2
3	1	0	0	0	1	67	0.9
2	4	0	0	1	4	153	2.0
3	15	0	2	0	2	145	1.9
5	3	0	0	0	1	357	4.8
4	0	0	1	0	3	126	1.7
63	**315**	**12**	**19**	**17**	**296**	**7474**	**100**

Table 7.11: Establishments by Type of Legal Organization and Investments, Bhutan, 2010

(Numbers)

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

Source: Establishment Census - 2010, MoLHR.

Table 7.12: Establishments by Major Economic Activity and Type of Legal Organization, Bhutan, 2010

(Numbers)

Major Economic Activity	Legal Organization				Total
	Individual Proprietor-ship	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
Total	**7,141**	**160**	**68**	**105**	**7,474**

Source: Establishment Census - 2010, MoLHR.

Table 7.13: 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
Bhutan	**7,289**	**154**	**9**	**22**	**7,474**

Source: Establishment Census - 2010, MoLHR.

Table 7.14: Establishments by Legal Organization, by Dzongkhag, 2010

(Numbers)

Dzongkhag	Type of Legal Organization				Total
	Individual proprietorship	Pertnership 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
Bhutan	**7,141**	**160**	**68**	**105**	**7,474**

Source: Establishment Census - 2010, MoLHR.

Table 7.15: Establishments by Nationality of Ownership, Bhutan, 2010

(Numbers)

Ownership	Number of Establishments
Bhutanese	7,188
Foreigner	286
Total	**7,474**

Source: Establishment Census - 2010, MoLHR.

Table 7.16: 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
Total	**410**	**13**	**2**	**2**	**427**

Source: Establishment Census - 2010, MoLHR.

Table 7.17: Establishments by Kind of Raw Materials Used and Legal Organization, Bhutan, 2010

Raw Materials	Legal Organization				Total
	Individual Proprietor-ship	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
Total	**402**	**13**	**6**	**6**	**427**

Source: Establishment Census - 2010, MoLHR.

Table 7.18: Equipment 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
Total	**152**	**124**	**137**	**127**	**67**	**8**	**615**

Source: Establishment Census - 2010, MoLHR.

Table 7.19: Number of Employees by Major Occupation, Nationality and Their Status, Bhutan, 2010

Major Occupation	Bhutanese				Total	Foreigners				Total
	Regular	Casual	Contract	Self employed		Regular	Casual	Contract	Self employed	
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 Professionals	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 & assemblers	1,780	249	59	20	**2,108**	186	750	21	1	**958**
Elementary occupations	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**
Total	**17,050**	**1,322**	**567**	**5,942**	**24,881**	**2,481**	**3,502**	**252**	**274**	**6,509**

Source: Establishment Census - 2010, MoLHR.

Table 7.20: 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**
Total	**22,106**	**9,284**	**31,390**

Source: Establishment Census - 2010, MoLHR.

Table 7.21: 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**
Bhutan	**22,106**	**9,284**	**31,390**

Source: Establishment Census - 2010, MoLHR.

Table 7.22: Number of Employees Under 18 Years of Age by Dzongkhag, 2010

Dzongkhag	Employees Under 18 Years		Total
	Male	Female	
Bumthang	1	3	4
Chhukha	28	27	55
Dagana	2	0	2
Gasa	0	0	0
Haa	1	1	2
Lhuentse	1	0	1
Monggar	4	6	10
Paro	6	11	17
Pema Gatshel	0	2	2
Punakha	2	1	3
Samdrup Jongkhar	11	7	18
Samtse	4	9	13
Sarpang	11	15	26
Thimphu	21	57	78
Trashigang	7	7	14
Trashiyangtse	1	3	4
Trongsa	2	7	9
Tsirang	3	8	11
Wangdue Phodrang	7	8	15
Zhemgang	0	2	2
Total	**112**	**174**	**286**

Source: Establishment Census - 2010, MoLHR.

CHAPTER 8
TRANSPORT AND COMMUNICATIONS

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 2012, there were 67,519 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 was founded in April 1981 and was commercialized in February 1983. It is a Government owned airline run by the Druk Holding Investment. Bhutan established its first international air links with Kolkata, followed by six destinations in South Asia, including Bangkok. The Division of Civil Aviation was established in January 1986 to provide infrastructure and air traffic services and to regulate the airline industry and it became the member of ICAO (International Civil Aviation Organization). The Paro International Airport inaugurated on 10th April 1999 has taken the air transport sectors further ahead in providing reliable, safe and comfortable travel services. Druk Air Corporation Limited also introduced domestic flights to Bumthang, Younphula (Trashigang) and to Gelephu (Sarpang) in 2011.

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. 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. By March 1999 all the 20 district headquarters had access to telecommunication services.

The national telecommunication network opened the path to global information network. On 2nd 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. Bhutan Telecom Limited (BTL) is the leading provider of telecommunications and Internet services in the Kingdom of Bhutan. Besides fixed line telephony, it provides GSM Mobile services under its flagship brand B-Mobile, and Internet Services under the brand name of DrukNet which was launched on 11 November 2003 coinciding with His Majesty.
Fourth Druk Gyalpo's Birthday. Later, Tashi InfoComm Limited, Bhutan's first private mobile company came into existence on October 2006. Now, B-mobile and TashiCell has its services available in all 20 Dzongkhags.

The Postal Service in Bhutan was first launched on 10th October 1962 with the opening of a post office in Phuentsholing. It was called the Department of Posts and Telegraphs under the Ministry of Communications. Initially, the services offered were basic services such as letter mail, postcards

and parcels. International mail was only exchanged with India. On 1st October 1996, The Division of Posts and Telegraphs was converted to autonomous Commercial Corporation as Bhutan Post. Bhutan became a member of the Universal Postal Union (UPU) and member of the Asian Pacific Postal Union (APPU) in 1983.

Today, the Post's network consists of 89 outlets, including 2 General Post Offices and 17 Post Offices. Its portfolio of services also developed and improved over time and an International Express Mail Service (EMS) was introduced in July 1993. Express mail services were introduced into the domestic sector in 1966. Money order services were improved with the introduction of Facsimile Money Order for Bhutan and Express Money Order (EMO) for exchange with India. In 1997, Bhutan Post set up a transport network for the purpose of carrying both passenger and mail. This network presently covers between Thimphu and Phuentsholing and between Phuentsholing and Calcutta. There are now 128 postal infrastructures in Bhutan.

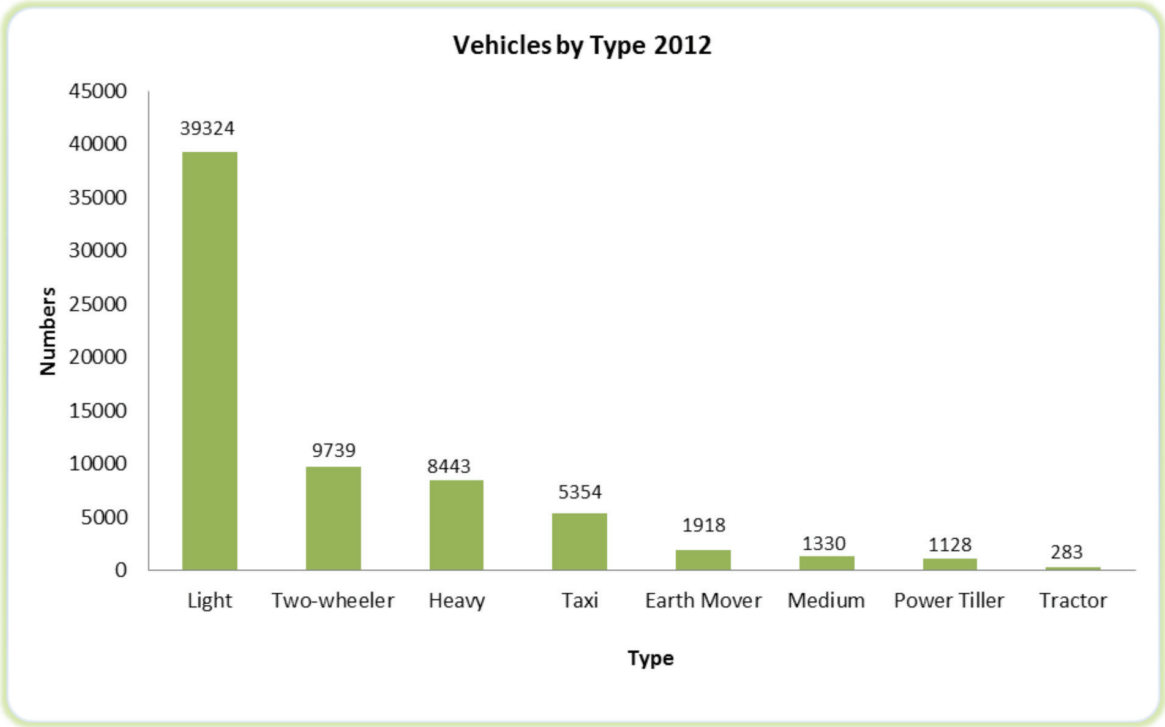


Table 8.1: Number and Length of Motorable Bridges by Type, Bhutan, June 2013

Type of Bridges	Number	%	Length	%
Permanent bridges	186	55.4	5,536.76	52.1
RCT Beam / T-Girder	70	20.8	1,414.30	13.3
RC Slab	29	8.6	521.25	4.9
Pre-Stressed Concrete	14	4.2	721.00	6.8
Rc Arch	3	0.9	265.00	2.5
Composite	20	5.9	376.06	3.5
Steel Pony Truss	4	1.2	190.00	1.8
Steel Langar Arch	6	1.8	494.45	4.7
Steel Hamilton	10	3.0	313.60	3.0
Steel Truss / Girder	13	3.9	774.60	7.3
M-Cell Box Culvert	5	1.5	216.00	2.0
Submersible	7	2.1	193.50	1.8
RCC bridges on GC Roads	5	1.5	57.00	0.5
Temporary (semi-permanent)bridges	132	39.2	4,348.25	40.9
Bailey	92	27.3	2,750.69	25.9
Bailey SN	1	0.3	310.98	2.9
Bailey bridges on Farm Roads	14	4.2	374.99	3.5
Bailey bridges on GC & Farm Roads	25	7.4	911.59	8.6
All bridges	**318**	**94.6**	**9,885.01**	**93.0**

Source: Bridge Division, DoR , MoWHS, Thimphu.

Table 8.2: Number of Pedestrian Bridges Constructed Since 5Th Five Year Plan by Dzongkhag as of June 2013

Dzongkhag	Five Year Plans						Total Constructed (I -X)	Percent (I -X)	Existing Bridge as of June 2013
	V	VI	VII	VIII	IX	X			
Bumthang	7	3	4	2	2	1	20	3.85	17
Chhukha	5	1	3	4	2	4	22	4.23	15
Dagana	4	2	5	4	4	6	28	5.38	23
Gasa	0	2	2	2	1	0	7	1.35	3
Haa	6	1	4	2	0	1	17	3.27	14
Lhuentse	4	2	4	4	6	5	28	5.38	24
Monggar	5	2	5	6	7	7	41	7.88	33
Paro	8	3	2	2	2	3	23	4.42	20
Pema Gatshel	11	2	4	6	4	5	37	7.12	28
Punakha	4	1	1	1	3	3	16	3.08	13
Samdrup Jongkhar	11	6	3	3	3	7	40	7.69	23
Samtse	15	2	1	4	2	4	37	7.12	29
Sarpang	8	5	0	5	3	1	28	5.38	21
Thimphu	1	3	3	0	4	2	14	2.69	11
Trashigang	10	2	4	7	7	2	39	7.50	28
Trashi Yangtse	6	4	3	3	3	7	29	5.58	25
Trongsa	6	3	4	1	2	2	22	4.23	16
Tsirang	4	1	2	2	1	1	16	3.08	13
Wangdue Phodrang	10	5	3	2	3	2	27	5.19	23
Zhemgang	5	4	4	5	6	4	29	5.58	21
Bhutan	**130**	**54**	**61**	**65**	**65**	**67**	**520**	**100.00**	**400**

Source: Rural Infrastructure Services Division, Department of Engineering Services , MoWHS, Thimphu.

Table 8.3: Number of Driving Licenses Issued by Region, Bhutan (2008-2012)

Region	2008	2009	2010	2011	2012
Thimphu	27,696	31,190	35,385	39,194	43,789
Phuentsholing	5,553	6,183	7,353	8,113	9,084
Gelephu	4,652	5,219	6,821	8,020	9,607
Samdrup Jongkhar	3,550	4,158	5,820	6,478	7,632
PDL (Professional Driving Licence)	5,958	6,788	7,557	11,006	13,455
Total	**47,409**	**53,538**	**62,936**	**72,811**	**83,567**

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

Table 8.4: Number of Passengers Carried & Revenue Earned by Druk Air Flights by Area of Operation (2008-2012)

Area of Operation	2008	2009	2010	2011	2012
International	119,105	118,084	132,615	166,264	193,405
Paro to Kolkata	8,557	7,956	11,261	12,647	11,508
Kolkata to Paro	6,932	7,452	10,156	11,305	10,627
Paro to Bangkok	20,700	21,786	23,606	29,935	36,123
Bangkok to Paro	20,508	21,159	22,924	28,841	34,244
Paro to Dhaka	910	1,514	2,910	3,524	3,827
Dhaka to Paro	966	1,383	2,923	3,568	3,522
Paro to Delhi	10,619	10,080	11,288	16,273	18,431
Delhi to Paro	9,620	9,738	11,855	15,888	17,615
Paro to Kathmandu	8,015	8,539	10,386	13,377	16,273
Kathmandu to Paro	8,192	8,750	10,590	14,194	16,793
Kathmandu to Delhi	2,277	2,017	0	108	555
Delhi to Kathmandu	1,530	1,073	0	30	132
Kolkata to Bangkok	4,735	1,640	0	0	0
Bangkok to Kolkata	5,033	1,568	3	0	0
Dhaka to Bangkok	2,352	2,689	2,229	2,238	3,227
Bangkok to Dhaka	2,020	2,375	1,816	1,710	2,355
Gaya to Bangkok	2,256	1,444	685	202	658
Bangkok to Gaya	2,546	1,372	606	243	555
Paro to Gaya	650	988	718	1,180	558
Gaya to Paro	687	891	812	699	652
Paro to Bagdora	0	1,294	1,982	1,493	1,729
Bagdora to Paro	0	1,264	1,920	1,637	1,808
Bagdora to Bangkok	0	649	1,806	1,883	2,145
Bangkok to Bagdora	0	463	1,670	1,863	1,933

Table 8.4: Condt...

Paro to Guwahati	0	0	107	913	880
Guwahati to Paro	0	0	99	479	563
Guwahati to Bangkok	0	0	180	1,122	1,736
Bangkok to Guwahati	0	0	83	912	1,507
Paro to Singapore	0	0	0	0	1,409
Singapore to Paro	0	0	0	0	1,505
Kolkata to Singapore	0	0	0	0	190
Singapore to Kolkata	0	0	0	0	345
Domestic	0	0	0	60	878
Paro to Bumthang	0	0	0	23	271
Bumthang to Paro	0	0	0	21	388
Paro to Gelephu	0	0	0	0	0
Gelephu to Paro	0	0	0	0	0
Paro to Younphula	0	0	0	6	120
Younphula to Paro	0	0	0	10	99
Total Passengers	**119,105**	**118,084**	**132,615**	**166,324**	**194,283**
Revenue (Nu.in millions)	**1,267**	**1,344**	**1,495**	**2,021**	**2,488**

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

Table 8.5: Number of Flights Made by Druk Air by International and Domestic by Area of Operation (2008-2012)

Area of Operation	2008	2009	2010	2011	2012
International	3,224	3,142	2,954	3,810	4,382
Paro to Kolkata	199	175	218	269	285
Kolkata to Paro	199	172	224	234	276
Paro to Bangkok	376	369	353	406	476
Bangkok to Paro	384	371	353	406	478
Paro to Dhaka	89	106	121	131	149
Dhaka to Paro	79	105	112	122	146
Paro to Delhi	184	175	156	235	254
Delhi to Paro	185	180	159	233	243
Paro to Kathmandu	198	184	228	305	357
Kathmandu to Paro	186	183	230	300	357
Paro to Gaya	70	46	32	21	19
Gaya to Paro	75	46	32	20	19
Delhi to katmandu	160	132	0	38	23

Table 8.5: Condt...

kathmandu to Delhi	158	134	0	54	32
Bangkok to kolkata	181	135	0	0	0
Kolkata to Bangkok	187	133	0	1	1
Gaya to Bangkok	70	46	24	9	17
Bangkok to Gaya	76	46	24	8	17
Dhaka to Bangkok	90	91	105	109	129
Bangkok to Dhaka	78	89	93	99	127
Paro to Bagdora	0	56	105	107	111
Bagdora to Paro	0	58	104	102	111
Bagdora to Bangkok	0	55	105	102	104
Bangkok to Bagdora	0	55	102	100	104
Paro to Guwahati	0	0	17	103	105
Guwahati to Paro	0	0	18	104	103
Guwahati to Bangkok	0	0	17	104	105
Bangkok to Guwahati	0	0	18	88	103
Paro to Singapore	0	0	0	0	35
Singapore to Paro	0	0	0	0	35
Kolkata to Singapore	0	0	0	0	35
Singapore to Kolkata	0	0	0	0	26
Domestic	0	0	0	8	148
Paro to Bumthang	0	0	0	3	56
Bumthang to Paro	0	0	0	3	56
Paro to Gelephu	0	0	0	0	0
Gelephu to Paro	0	0	0	0′	0′
Paro to Younphula	0	0	0	1	18
Younphula to Paro	0	0	0	1	18
All sectors	**3,224**	**3,142**	**2,954**	**3,818**	**4,530**

Source: Druk Air Corporation Ltd., Thimphu.

Table 8.6: Number of Telephone Connection Capacity by Dzongkhag (2011-2012)

Dzongkhag	2011	2012
Bumthang	755	734
Chhukha	3,997	3,797
Dagana	185	208
Gasa	17	32
Haa	385	400
Lhuentse	103	111
Monggar	854	868
Paro	1,835	1,921
Pema Gatshel	298	290
Punakha	594	619
Samdrup Jongkhar	1,197	1,251
Samtse	822	815
Sarpang	1,198	1,311
Thimphu	11,121	10,637
Trashigang	918	1,020
Trashi Yangtse	156	147
Trongsa	778	674
Tsirang	672	367
Wangdue Phodrang	1,092	1,355
Zhemgang	513	448
Bhutan	**27,490**	**27,005**

Source: Bhutan Infocom Media Authority, Thimphu.

Table 8.7: Number of Telephone Trunk Circuits, Bhutan, 2012

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	120
Thimphu INTS-Nepal	Bothway	37
Thimphu INTS-Thailand	Bothway	29
Thimphu INTS-India	Bothway	505
Thimphu INTS-Bangladesh (Mir Telecom)	Bothway	29
Thimphu INTS-Thimphu TLS	Bothway	119
Thimphu INTS-Wangdue Phodrang	Bothway	30
Thimphu INTS-Tashi Cell	Bothway	60

Table 8.7: Condt...

Thimphu TLS-Trongsa	Bothway	90
Thimphu TLS-Gelephu	Bothway	60
Thimphu TLS-Paro	Bothway	119
Thimphu TLS-Wangdue Phodrang	Bothway	91
Thimphu TLS - VoIP National	Bothway	30
Thimphu TLS - Thimphu corVAN	Bothway	60
Thimphu TLS - Kanglung	Bothway	151
Thimphu TLS - Samtse	Bothway	59
Thimphu TLS - Druknet	OG	60
Thimphu TLS - Phuentsholing	Bothway	243
Thimphu TLS - Tashi cell	Bothway	246
Trongsa - Gelephu	Bothway	60
Trongsa - Zhemgang cor DECT	Bothway	30
Trongsa - Zhemgang corVAN	Bothway	30
Trongsa - Trongsa corVAN	Bothway	60
Trongsa - Kanglung	Bothway	60
Trongsa - Kanglung corVAN	Bothway	60
Kanglung - Mongar corVAN	Bothway	60
Kanglung - Samdrup Jongkhar corVAN	Bothway	60
Gelephu - Gelephu corDECT	Bothway	30
Gelephu - Kanglung E10	Bothway	60
Phuentsholing - Samtse	Bothway	58
Phuentsholing - Paro	Bothway	60
Paro - Paro corVAN	Bothway	60
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	360
Thimphu B-Mobile MSC-PSTN Wangdue	Bothway	122
Samtse - Samtse corVAN	Bothway	61
Wangdue - Tsirang corVAN	Bothway	60
Wangdue - Wangdue corVAN	Bothway	60
Total trunk lines (National, International and DAMA)		**4,288**

Source: Bhutan Infocom Media Authority, Thimphu.

Table 8.8: Number of Trunk Lines, Connection Capacities, Sets in Use & Mobile Subscribers (2008-2012)

Details	2008	2009	2010	2011	2012
Trunk lines	4,015	3,868	3,498	3,677	3,465
Satellite Communications	402	662	677	762	823
International Lines	402	662	677	762	823
Digital Microwave	480	480	2,250	2,250	2,250
Digital Radio Concentrator System	15	…	…	…	…
DRMASS	120	120	120	120	…
VOIP	3	…	…	…	…
SDH	11,340	11,340	120,960	120,960	…
Connection capacity	55,750	54,482	55,188	51,428	49,826
Telephone sets in use	27,937	26,384	26,361	27,488	27,005
B-Mobile Subscribers	1,78,346	2,62,052	3,05,215	3,83,089	4,21,715
Internet (B-mobile)	…	…	…	…	109,526
3 G	…	…	…	…	18,686
GPRS/Edge	…	…	…	…	90,840
Internet (Druknet)	…	…	8,841	13,311	16,893
Broadband	…	…	8,675	13,113	16,666
Leaseline	…	…	166	198	227

Source: Bhutan Infocom Media Authority, Thimphu.

Table 8.9: Number of Telephone Trunk Calls and Revenue Earnings, Bhutan (2008-2012)

Type of Call	2008	2009	2010	2011	2012
Domestic calls	19,324,867	17,462,920	19,085,989	23,976,142	20,762,924
International calls	1,266,838	979,362	957,168	882,272	802,764
India	1,247,812	819,727	784,701	723,032	666,529
Other	19,026	159,635	172,467	159,240	136,235
All calls	**20,591,705**	**18,442,282**	**20,043,157**	**24,858,414**	**21,565,688**
Revenue earnings (Nu.in Million)	1,217	1,314	1,515	1,834	2,209

Source: Bhutan Infocom Media Authority, Thimphu.

Table 8.10: Number of B-Mobile Trunk Calls and Revenue Earnings, Bhutan, 2012

Type of Call	2012
Total no. of subcribers	421,715
Domestic calls	…
International calls	…
India	…
Other	…
Mobile/GPRS subscribers	90,840
Mobile 3G	18,686
Revenue earnings (Nu.in Million)	1,760

Since the Bhutan telecom Ltd. did not have data recording system, they have no data for the past years, will be available only by Febuary 2014.
Source: Bhutan Infocom Media Authority, Thimphu.

Table 8.11: Number of Tashicell Trunk Calls and Revenue Earnings, Bhutan (2009-2012)

Type of Call	2009	2010	2011	2012
Total no. of subcribers	60,777	83,903	96,428	136,077
Domestic calls	…	26,725,740	383,117,819	55,516,712
International calls	2,221,560	3,580,560	5,051,474	7,096,986
India	1,999,440	3,222,360	4,546,327	6,742,137
Other	222,120	358,200	505,147	354,849
Mobile/GPRS subscribers	1,229	2,356	6,567	10,115
Revenue earnings (Nu. In Million)	189.05	280.98	400.01	422.24

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 8.12: Number of Postal Infractructures (2008-2012)

Postal Infrastructure	2008	2009	2010	2011	2012
General Post Offices	2	2	4	4	4
Post Offices	41	41	40	40	39
Community Mail Offices	47	32	30	30	41
Fax Offices	37	37	40	40	44
Total	**127**	**112**	**114**	**114**	**128**

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 fascimile services, they are not different establishment.
Source:Bhutan Postal Corp. Ltd., Thimphu.

Table 8.13: Volume of Mail, by Type of Article (2008-2012)

Type of Service	2008	2009	2010	2011	2012
Domestic Mail					
Ordinary Mail	662,204	594,295	323,680	315,907	316,763
Registered	86,925	54,073	57,905	50,439	92,586
Parcel	1,428	1,742	1,108	1,615	1,869
Facsimile message	25,219	24,742	9,997	2,751	1,827
Newspapers	122,758	144,114	120,616	127,308	129,854
Local Urgent Mail (LUM)	123,093	138,775	132,241	159,674	197,445
Express mail service (EMS)	26,556	10,536	8,367	8,201	9,779
International Mail Dispatch					
Ordinary Mail	95,509	102,330	52,252	34,302	33,616
Registered	11,829	9,110	7,353	7,278	5,390
Parcel	294	333	325	191	238
FedEx	98	120	178	267	216
Facsimile message	644	600	433	343	109
Post Overnight Courier (POC)	3,449	4,525	2,677	3,156	5,736
Express mail service (EMS)	3,918	4,258	4,209	4,084	4,288
International Mail Receipt					
Ordinary Mail	604,469	411,909	185,428	228,708	224,133
Registered	11,694	9,377	9,700	8,651	8,408
Parcel	1,287	1,852	2,071	2,254	2,009
FedEx	162	1,030	1,588	1,306	2,316
Facsimile message	439	661	233	237	765
Post Overnight Courier (POC)	3,537	3,671	2,083	1,212	2,678
Express mail service (EMS)	5,426	6,364	7,360	7,520	8,534
Revenue Earnings (Nu. in million)	88.59	90.04	99.86	111.47	102.19
Total mail items	**1,790,938**	**1,524,417**	**929,804**	**965,404**	**1,048,661**

Source:Bhutan Postal Corp. Ltd, Thimphu.

Table 8.14: Financial Services, Number and Value of Money Order by Type, Bhutan (2008-2012)

Type	2008	2009	2010	2011	2012
Total money orders					
Number of orders	76,139	102,119	104,514	49,289	92,016
Amount of orders	174,737,274	237,085,484	277,938,966	133,948,206	3,029,648
Domestic money order					
Number of orders	71,201	98,809	102,967	48,579	46,150
Amount of orders	160,547,857	227,566,408	273,978,772	131,688,271	125,103,857
International money order					
Dispatched					
Number of orders	4,773	3,285	1,517	707	721
Amount of orders	13,717,519	9,450,301	3,871,628	2,251,435	2,318,978
Receipts					
Number of orders	165	25	30	3	2
Amount of orders	471,898	68,775	88,566	8,500	1,475
Others					
Number of pensioners	528	732	1,006	1,229	1,438
Amount of pensioners	13,105,460	18,598,960	26,843,100	32,995,014	38,871,645

Source:Bhutan Postal Corp. Ltd, Thimphu.

Table 8.15: Volume of Mail, by Type of Article, White Pegion Courier Service (2009-2011)

Type of Service	2009	2010	2011
Domestic Mail			
Registered	7,950	10,580	55
Parcel	396	589	625
Facsimile message	…	…	1,195
Local Urgent Mail (LUM)	35,000	43,000	55
Express mail service (EMS)	…	…	25,390
International Mail Dispatch			
Registered	…	…	65
Parcel	363	561	24
FedEx	…	…	105
International Mail Receipt	…	…	…
Revenue Earnings (Nu. In million)	…	…	…
Total mail items	**43,709**	**54,730**	**27,514**

Since the data has not been provided by the source for the year 2012 , so the data remains the same.
Source: White Pegion Courier Service, Thimphu

Table 8.16: Volume of Mail, by Type of Article, Tamu Courier (2009-2012)

Type of Service	2009	2010	2011	2012
Domestic Mail				
Documents	20,000	25,000	29,000	31,536
Non-Documents	2,500	3,000	6,500	5,200
Local	1,900	2,500	3,900	4,120
Inbound (India & International)				
Documents	80	120	99	120
Non-Documents	50	70	60	50
Outbound (India & International)				
Documents	1,500	1,700	1,950	2,100
Non-Documents	500	750	800	900
Newspapers (Numbers)				
Kuensel	700,050	735,000	745,000	745,992
Bhutan Today	90,000	100,000	100,000	108,000
Bhutan Times	1,500	2,000	4,700	4,800
Business Bhutan	50,000	55,000	54,500	54,000
The Bhutanese	50,000	55,000	54,500	54,000
Revenue Earnings (Nu. In million)	8.00	10.00	13.00	14.00
Total Mail Items	**918,030**	**980,140**	**1,001,009**	**1,010,818**

Source: Tamu Courier Service, Thimphu.

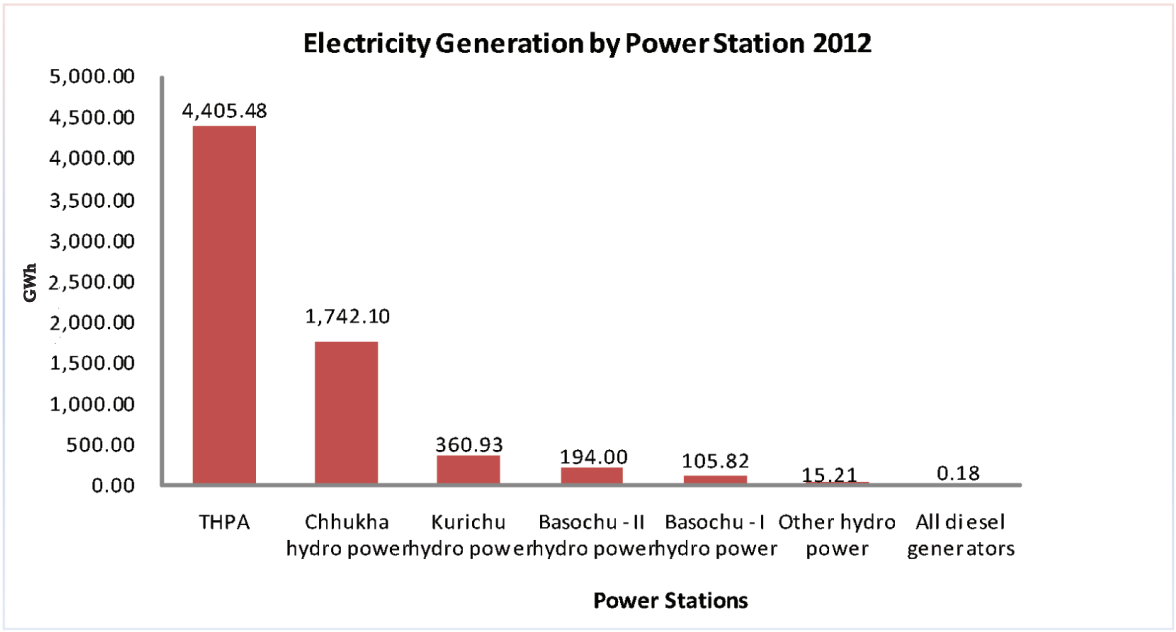
Table 8.17: Volume of Mail, by Type of Article, DHL (2008-2012)

Type of Service	2008	2009	2010	2011	2012
Inbound					
Documents (DOX)	1,812	2,121	3,117	4,490	5,173
World wide Express (WPX)	780	810	878	932	1,028
Outbound					
Documents (DOX)	981	1,179	1,063	1,158	1,357
World wide Express (WPX)	280	352	421	671	823
Revenue Earnings (Nu. In million)	3.51	3.78	3.64	5.26	5.97
Total mail items	**3,857**	**4,466**	**5,483**	**7,256**	**8,387**

Source: DHL Courier Service, Thimphu.

CHAPTER 9
ENERGY

Electricity is the main energy source of lighting in 88 percent of households in Bhutan as per the Bhutan Living Standard Survey (BLLS) 2012. It is also the most widely used sources of energy for cooking with 84 percent households. 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. The economy of the country is largely dependent on the development of Hydropower generations. Hydropower plants contribute significantly to the overall GDP Growth and economy, both during constructions and operation phases. 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 revenue earned from export of electricity is a significant contributor to the overall revenues of the kingdom.



The Chukha Hydro power with the installed capacity of 336 MW, the Kurichu Hydro power with 60 MW and Basochu Hydro Power with 64 MW generated 1,742.10 MU, 360.93 MU and 299.82 MU respectively in 2012. With the commissioning of mega Tala Hydro Power Project with the installed capacity of 1,020 MW, there is a substantial increase in the energy generation of the country. During the year 2012 it has generated 4,405.48 Million Unit of electricity. In 2012, the total electricity generation was 6823.71 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.

Table 9.1: Hydro Generating Stations and their Capacities, Bhutan (2009/10-2012)

Generating Stations	2009/10					2011					2012				
	Installed Capacity	Generating Capacity	Peak Generation	Energy Generation	Year of Commissi-oning	Installed Capacity	Generating Capacity	Peak Generation	Energy Generation	Year of Commissi-oning	Installed Capacity	Generating Capacity	Peak Generation	Energy Generation	Year of Commissi-oning
	(No. x MW)	(MW)	(MW)	(GWh)		(No. x MW)	(MW)	(MW)	(GWh)		(No. x MW)	(MW)	(MW)	(GWh)	
Large Hydroelectric plants															
Chhukha	4 x 84.00	360.000	360.000	1,839.909	1986-88	4 x 84.00	360	360.000	1774.125	1986-88	4 x 84.00	360.000	360.000	1742.101	1986-88
Kurichu (Mongar)	4 x 15.00	60.000	64.000	368.347	2001	4 x 15.00	60	64.000	361.804	2001	4 x 15.00	60.000	64.000	360.926	2001
Basochu..I (W/phodrang)	2 x 12.00	24.000	24.000	114.388	2002	2 x 12.00	24	24.000	114.167	2002	2 x 12.00	24.000	24.000	105.819	2002
Basochu..II (W/phodrang)	2 x 20.00	40.000	40.000	207.822	2004	2 x 20.00	40	40.000	208.122	2004	2 x 20.00	40.000	40.000	194.004	2004
Tala (Chukha)	6 x 170.00	1,020.000	1,122.000	4,441.244	2006-07	6 x 170.00	1020	1122.000	4587.992	2006-07	6 x 170.00	1020.000	1122.000	4405.479	2006-07
Total	1,480.00	1504.000		6971.710		1,480.00	1504.000		7046.211		1,480.00	1504.000		6808.329	
Mini and Micro Hydels	(No. x KW)	(KW)	(MW)	(GWh)		(No. x KW)	(KW)	(MW)	(GWh)		(No. x KW)	(KW)	(MW)	(GWh)	
Jushina (Thimphu)	4 x 90	270	0.260	1.296	1967	4 x 90	270.000	0.255	1.468	1967	4 x 90	270.000	0.255	1.333	1967
Hesothangkha (Wangdue)	3 x 100	200	0.082	0.334	1972	3 x 100	200.000	0.085	0.477	1972	3 x 100	200.000	0.085	0.381	1972
Chenari (Tashigang)	3 x 250	300	0.000	0.000	1972	3 x 250	0.000	0.000	0.000	1972	3 x 250	0.000	0.000	0.000	1972
Gidakom (Thimphu)	5 x 250	816	0.995	6.318	1973	5 x 250	816.000	0.965	6.222	1973	5 x 250	816.000	0.965	5.335	1973
Khalanzi (Mongar)	3 x 130	260	0.202	0.498	1976	3 x 130	260.000	0.170	0.037	1976	3 x 130	0.000	0.000	0.000	1976
Chumey (Bumthang)	3 x 500	750	1.090	4.098	1988	3 x 500	1000.000	0.890	2.677	1988	3 x 500	1000.000	0.890	3.141	1988
Gangzur (Lhuentse)	2 x 60	120	0.066	0.119	2000	2 x 60	120.000	0.050	0.109	2000	2 x 60	120.000	0.050	0.054	2000
Rukubji (Wangdue)	1 x 40	40	TRUE	0.063	1986-87	1 x 40	40.000	0.013	0.073	1986-87	1 x 40	40.000	0.013	0.076	1986-87

Table 9.1: Condt...

Tangsibji (Trongsa)	1 x 30	30	0.020	0.047	1986-87	1 x 30	30.000	0.017	0.046	1986-87	1 x 30	30.000	0.017	0.023	1986-87
Sherabling (Trongsa)	1 x 50	50	0.035	0.044	1986-87	1 x 50	50.000	0.030	0.050	1986-87	1 x 50	50.000	0.030	0.042	1986-87
Bubja (Trongsa)	1 x 30	30	0.026	0.143	1986-87	1 x 30	30.000	0.022	0.058	1986-87	1 x 30	30.000	0.022	0.009	1986-87
Tamzhing (Bumthang)	1 x 30	30	0.000	0.103	1986-87	1 x 30	30.000	0.000	0.000	1986-87	1 x 30	0.000	0.000	0.000	1986-87
Ura (Bumthang)	1 x 50	50	0.000	0.153	1986-87	1 x 50	50.000	0.000	0.000	1986-87	1 x 50	50.000	0.000	0.045	1986-87
Kekhar (Zhemgang)	1 x 20	20	0.000	0.026	1986-87	1 x 20	20.000	0.000	0.000	1986-87	1 x 20	20.000	0.000	0.035	1986-87
Surey (Sarpang)	Discommissioned				1986-87	Dismantled	0.000	0.000	0.000	1986-87	Dismantled	0.000	0.000	0.000	1986-87
Changchey (Tsirang)	2 x 100	200	0.114	1.049	1991	2 x 100	200.000	0.036	0.274	1991	2 x 100	200.000	0.036	0.110	1991
Tingtibi (Zhemgang)	2 x 100	200	0.105	0.459	1992	2 x 100	200.000	0.019	0.262	1992	2 x 100	200.000	0.019	0.033	1992
Darachhu (Dagana)	2 x 100	200	0.125	0.053	1992	2 x 100	0.000	0.000	0.000	1992	2 x 100	0.000	0.000	0.000	1992
Lingzhi (Thimphu)	1 x 8	8	0.000	0.000	1999	1 x 8	8.000	0.000	0.000	1999	1 x 8	8.000	0.000	0.000	1999
Rangjung (Tashigang)	2 x 1100	2200	2.278	9.756	1996	2 x 1100	2200.000	1.743	7.763	1996	2 x 1100	2200.000	1.743	3.849	1996
Rongchu (Lhuentse)	2 x 100	200	0.180	0.816	2001	2 x 100	200.000	0.150	0.427	2001	2 x 100	200.000	0.150	0.531	2001
Chendebji (Trongsa)	1 x 70	70	0.000	0.089	2005	1 x 70	70.000	0.000	0.038	2005	1 x 70	70.000	0.000	0.038	2005
Sengor (Mongar)	1 x 100	100	0.000	0.119	2007	1 x 100	100.000	0.000	0.028	2007	1 x 100	100.000	0.000	0.028	2007
Total	**8,098**	**6144**		**25.582**		**8,098**	**5894.000**		**20.007**		**8,098**	**5604.000**		**15.063**	

Since the Bhutan Power Corporation(BPC) has started compiling the Power Data Book on Power Sector for every calender year from 2010 onwards, the Department of Hydropower & Power Systems has also stopped the compilation of the Power Databook for the fiscal years from 2010-11 onwards, therefore the power data here also reflects the calender year starting from the year 2011.The generating capacity of power plants and their peak generation are not available, so the generating capacity and peak generation from last year (2011) where applicable has been used.

Source:Department of Hydropower & Power Systems, MoEA, Thimphu.

Table 9.2: Details of Diesel Generator Sets, Bhutan, 2012

Generating stations/ Locations	2012				
	No of Machines	No. & Capacity of Machines (No.X MW)	Total Capacity (MW)	Energy Generated (KWh)	Year of Commissioning
Thimphu	7	1X625	4204.0	0.0	1978
		2X318		1844.0	1980
		1X1188		2661.0	1982
		1X1250		386.0	1984/85
		1X380		0.0	…
		1X125		0.0	1999-00
Paro	1	1X110	110.0	0.0	1977
Chhukha	2	1X380	505.0	58,863.0	1966
		1X125		0.0	1979
Tsirang	3	1X380	600.0	2,144.0	1969
		1X60		0.0	1991
		1X160		0.0	1999-00
Trongsa	1	1X380	380.0	0.0	1976
Sarpang	4	1X350	1246.0	500.0	1991
		1X318		0.0	1991
		1X515		0.0	1991
		1X63		0.0	1999-00
Zhemgang	2	1X380	430.0	83,389.0	1983
		1X50		0.0	1999-00
Dagana	1	1X380	380.0	0.0	1983
Trashigang	2	1X100	127.0	0.0	1991
		1X27		0.0	1998/99
Monggar	1	1X380	380.0	4,672.0	1999-00
Samdrup Jongkhar	2	1X380	410.0	2,533.0	1999-00
		1X30		0.0	1991
Bumthang	3	1X380	1140.0	0.0	1998
		1X380		740.0	1999-00
		1X380		10,814.0	1999-00
Trashi Yangtse	1	1X380	380.0	6,977.0	1999-00
Pema Gatshel	1	1X380	380.0	1,488.0	1999-00

Table 9.2: Condt...

Samtse	1	1X60	60.0	0.0	2000-01
Total			10,732.0	177,011.0	
Other Diesel sets					
Penden Cement Authority Ltd.	2	2X1000	2,000.0		1981/84
Bhutan Board Products Ltd.	2	1X160	160.0		…
		1X349	349.0		
Chukha Hydro Power Plant	4	2X450	900.0		…
		2X280	560.0		
Bhutan Ferro Alloys Ltd.	2	2X380	760.0		1995
Bhutan Carbide & Chemical Ltd.	3	3X125	375.0		1987
Basochu Hydro Power Plant	1	1X130	130.0		2000
Kurichu Hydro Power Plant	3	2X320	640.0		1998/00
		1X500	500.0		2007
Tala Hydro Power Plant	1	1X2500	2,500.0		2006/07
S.D.Eastern Bhutan Ferro Silicon Pvt.Ltd.	2	2X125	250.0		2007/08
Total			**9,124.0**		

Source:Department of Hydropower & Power Systems, MoEA, Thimphu.

Table 9.3: Major Transmission Lines, 2012

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	…	...	…	…	…	Charged at 66 kV
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 - Kanglung	…	…	…	29.705	…	…	…	Realigned at Kilikhar
Kilikhar - Tangmachu	…	…	…	42.800	…	…	…	Charged at 33 kV
Gyleposhing - Nangkor	…	…	…	31.000	…	…	…	
Nangkor - Deothang	…	…	…	23.300	…	…	…	
Nangkhor - Nganglam	…	…	…	33.793	…	…	…	
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	…	…	…	Charged at 33 kV
CHPC - Gedu	…	…	…	…	20.400	…	…	

Table 9.3: Condt...

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	…	…	Realihned at Dochula
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	…	…	Charged at 33 kV
Yurmoo - Bumthang	…	…	…	…	34.856	…	…	Charged at 33 kV
Malbase Multi Circuit	…	…	…	…	…	…	3.405	
Tsirang - Jigmeling	…	…	30.565					
Tsirang - Dagachu Port head yard	…	…	20.202					
Jigmeling - Pelrithang (Lodrai)	…	…	10.420					Charged at 132 kV
Tshendengang - Dagapela (LILO)	…	…	4.457					
Total	**74.143**	**183.739**	**101.424**	**344.456**	**302.052**	**5.960**	**3.405**	**1015.280**

D/C stands for double circuit and S/C for single circuit.
Source:Department of Hydropower & Power Systems, MoEA, Thimphu.a

Table 9.4: Monthly Revenue From Sale of Energy from Chhukha Power Plant (2008-2012)

(Nu. in Million)

Month	2008			2009			2010			2011			2012		
	Export	Inter-nal	Total	Export	Inter-nal	Total	Export	Inter-nal	Total	Export	Inter-nal	Total	Export	Inter-nal	Total
January	97.2	7.4	104.6	112.5	7.2	119.6	103.5	9.3	112.9	90.7	4.7	95.4	92.0	5.3	97.2
February	71.5	6.7	78.2	79.9	6.1	85.9	68.0	8.4	76.4	78.2	3.9	82.2	73.3	4.7	77.9
March	87.5	6.1	93.7	83.0	7.0	90.0	94.9	8.4	103.3	76.9	4.1	81.0	89.8	4.8	94.6
April	156.1	5.1	161.2	151.5	6.3	157.8	152.0	7.1	159.1	110.0	3.1	113.1	173.6	4.1	177.7
May	201.7	5.2	206.9	224.8	5.8	230.6	227.8	7.1	234.9	223.8	3.4	227.2	188.6	3.6	192.3
June	515.7	5.3	521.0	392.2	5.7	397.9	399.2	6.9	406.1	394.6	3.3	397.9	323.1	3.8	326.9
July	580.7	5.3	586.0	575.9	6.3	582.3	585.0	7.7	592.7	585.2	3.7	588.8	553.3	4.0	557.4
August	590.6	4.3	594.9	576.8	6.6	583.4	579.6	3.5	583.0	566.5	3.8	570.3	572.0	4.1	576.1
September	554.6	5.7	560.2	546.6	6.8	553.5	556.6	3.4	560.0	480.7	3.7	484.4	551.9	4.1	556.0
October	460.8	6.3	467.1	505.0	7.0	511.9	515.3	3.7	519.0	435.7	4.1	439.8	367.1	4.8	371.9
November	248.2	6.9	255.1	261.1	8.1	269.1	261.8	4.0	265.8	232.0	4.7	236.7	152.0	5.3	157.3
December	159.9	7.2	167.1	157.4	9.2	166.6	143.8	4.6	148.4	144.9	5.0	150.0	78.5	5.7	84.2
Total	**3,724.5**	**71.4**	**3,795.9**	**3,666.6**	**82.0**	**3,748.6**	**3,687.4**	**74.1**	**3,761.4**	**3,419.2**	**47.5**	**3,466.7**	**3,215.3**	**54.3**	**3,269.5**

Interal refers to the sale of energy by BPC only.
Source:Department of Hydropower & Power Systems, MoEA, Thimphu.

Table 9.5: Monthly Revenue From Sale of Energy From Tala Power Plant (2008-2012)

(Nu. in Million)

Month	2008			2009			2010			2011			2012		
	Export	Inter-nal	Total	Export	Inter-nal	Total	Export	Inter-nal	Total	Export	Inter-nal	Total	Export	Inter-nal	Total
January	332.4	16.0	348.4	338.5	19.1	357.6	73.7	27.9	101.6	83.2	12.9	96.1	79.5	13.7	93.2
February	197.5	16.9	214.4	340.7	38.9	379.5	22.1	26.9	49.0	44.6	11.9	56.4	41.1	12.9	54.1
March	133.4	31.7	165.0	72.1	18.6	90.7	52.8	29.3	82.1	42.2	12.2	54.5	62.2	13.7	75.9
April	226.8	14.7	241.5	67.2	23.9	91.1	146.3	27.5	173.8	89.3	11.2	100.5	236.9	11.9	248.7
May	260.5	15.2	275.7	173.6	0.00	173.6	277.9	28.3	306.2	301.1	11.1	312.2	248.8	12.7	261.4
June	0.00	16.4	16.4	0.00	24.4	24.4	672.3	27.6	699.8	720.6	10.7	731.4	603.9	11.8	615.8
July	1,236.4	15.3	1,251.6	360.4	22.8	383.2	1,293.0	28.0	1,321.0	1,297.1	11.1	1,308.2	1,368.5	12.1	1,380.6
August	0.00	16.9	16.9	1,584.2	48.0	1,632.2	1,272.7	12.1	1,284.8	1,286.6	12.7	1,299.3	1,434.3	12.2	1,446.5
September	2,598.8	18.6	2,617.4	1,282.6	49.7	1,332.3	1,239.0	11.8	1,250.8	1,140.2	12.4	1,152.6	1,241.4	12.8	1,254.2
October	1,245.8	18.3	1,264.2	1,942.7	25.6	1,968.4	820.2	11.2	831.4	687.0	12.7	699.7	590.8	14.2	605.0
November	0.00	0.00	0.00	329.2	25.8	355.1	362.9	11.1	374.0	289.3	13.3	302.6	219.9	13.5	233.4
December	707.4	21.3	728.8	156.8	28.2	185.0	164.0	13.0	177.0	154.6	13.2	167.8	97.8	14.3	112.1
Total	**6,939.0**	**201.3**	**7,140.2**	**6,648.0**	**325.1**	**6,973.0**	**6,396.7**	**254.7**	**6,651.4**	**6,135.9**	**145.2**	**6,281.1**	**6,224.9**	**155.9**	**6,380.8**

Interal refers to the sale of energy by BPC only.
Source:Department of Hydropower & Power Systems, MoEA, Thimphu.

Table 9.6: Monthly Revenue From Sale of Energy From Kurichu Power Plant (2008-2012)

(Nu. in Million)

Month	2008			2009			2010			2011			2012		
	Export	Inter-nal	Total	Export	Inter-nal	Total	Export	Inter-nal	Total	Export	Inter-nal	Total	Export	Inter-nal	Total
January	2.82	13.98	16.79	2.79	15.04	17.83	0.73	14.64	15.37	(4.67)	19.91	15.24	0.00	17.42	17.42
February	2.97	11.18	14.15	4.92	10.37	15.29	4.18	8.95	13.13	(2.64)	15.11	12.47	0.00	15.44	15.44
March	6.76	15.04	21.8	5.14	14.51	19.64	13.50	10.54	24.04	(2.83)	18.46	15.63	0.00	18.88	18.88
April	24.13	12.61	36.73	23.63	14.53	38.16	14.14	15.64	29.78	8.35	15.75	24.10	15.46	16.71	32.18
May	42.23	15.41	57.64	28.27	14.62	42.89	29.93	16.02	45.95	32.04	15.48	47.52	32.91	17.22	50.13
June	46.02	14.67	60.69	41.68	14.22	55.89	41.86	16.89	58.75	47.51	14.12	61.63	49.82	16.07	65.89
July	50.92	16.29	67.2	50.90	14.49	65.39	48.07	17.17	65.24	42.66	13.77	56.43	51.60	15.96	67.56
August	51.51	15.90	67.41	52.61	14.65	67.26	51.15	13.86	65.02	47.03	15.33	62.36	51.56	16.80	68.36
September	52.22	13.96	66.18	52.03	14.40	66.42	46.82	13.23	60.04	47.47	15.57	63.04	37.38	14.64	52.02
October	43.22	14.58	57.8	41.19	15.04	56.23	49.32	14.40	63.73	37.44	15.79	53.23	39.89	16.34	56.24
November	19.45	14.82	34.27	15.34	15.44	30.77	23.27	15.28	38.55	15.50	15.95	31.45	6.56	18.49	25.05
December	6.74	16.05	22.79	7.72	14.55	22.27	4.44	17.29	21.73	0.11	19.41	19.52	0.00	22.87	22.87
Total	**348.99**	**174.49**	**523.45**	**326.22**	**171.86**	**498.04**	**327.41**	**173.91**	**501.33**	**267.97**	**194.64**	**462.62**	**285.17**	**206.85**	**492.02**

Interal refers to the sale of energy by BPC only.
Source:Department of Hydropower & Power Systems, MoEA, Thimphu.

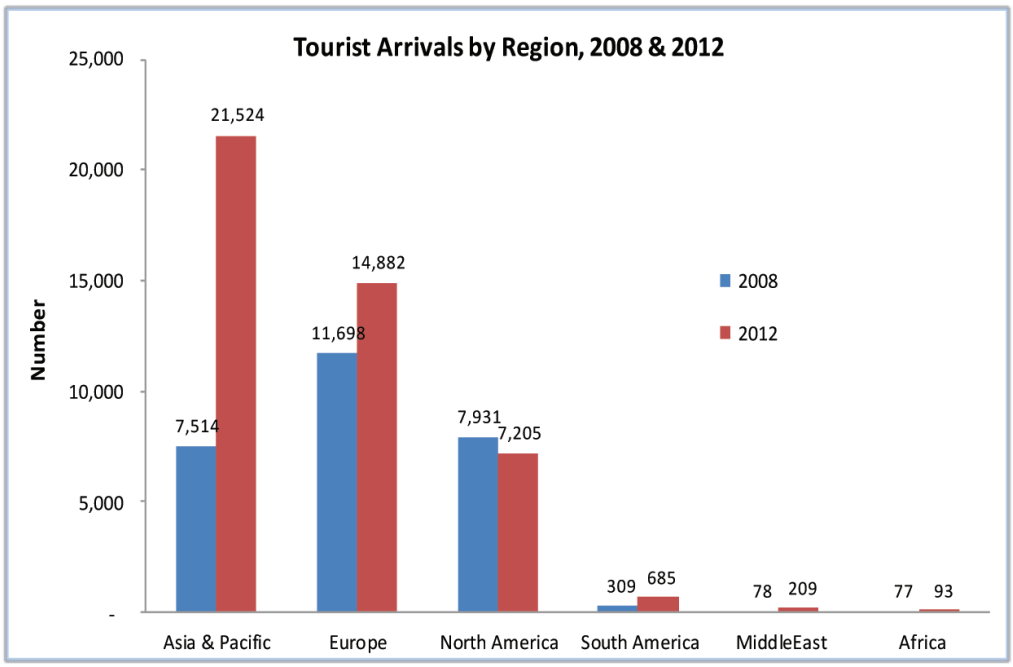
Table 9.7: Details of Domestic Electrical Energy Consumption (2007/08-2012)

Details	2007/08	2008/09	2009/10	2011	2012
Total Consumers	81,200	89,100	95,500	116,400	131,700
Sales of energy (Nu.in million)	989.8	1202.7	1498.0	2830.0	3096.9
Per capita energy consumption (Units)	1773.0	2038.8	2392.9	2419.9	2572.2

Per capita energy consumption for 2012 is based on population of 7,20,679.
No. of towns have been modified by Bhutan Power Corporation.
Source: BPC, Thimphu.

CHAPTER 10
TOURISM

The tourism industry in Bhutan began in 1974. The government agency, erstwhile Bhutan Tourism Corporation, controlled tourism until its privatization in 1991. The potential as far as foreign exchange earnings are concerned is very high. The revenue generation from the tourism sector has increased from over USD 2 million in the late 1980's to over USD 38 million in 2008. The gross earnings from international leisure tourism alone reached USD 62.80 million in 2012 an increase of 31.71percent comparing to 2011.



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. The total Visitor arrivals (international, regional, business, official and FAM visitors) to Bhutan peaked at 105,407 in 2012 which shows a growth rate of 64.62 percent comparing to previous year. Whilst international Dollar paying arrivals visiting for the purpose of holiday alone recorded an increase of 19.40 percent and the regional arrivals decreased slightly by 4.70 percent compared to previous year.

From the International segment, Japanese arrivals surpassed US arrivals for the first time by contributing 15.98 percent followed by USA with 13.67 percent of total international visitors. China remained the third biggest contributing 8.57 percent in 2012. 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 the month of October, November and April. Paro with 32.69 percent and Thimphu with 24.70 percent recorded maximum bed nights by Dzongkhag. "Culture and Nature" has always been the Unique Selling Proposition (USP) for the tourism industry of Bhutan.

Table 10.1: Annual International Tourist Arrivals by Country and Region, Bhutan (2008-2012)

(Numbers)

Country	2008	2009	2010	2011	2012
Africa	77	70	101	92	93
Algeria	0	0	0	0	0
Benin	0	0	1	1	0
Chad	0	0	1	3	2
Egypt	0	18	10	0	0
Kenya	1	2	4	6	2
Liberia	1	0	0	0	0
Lithuania	0	4	6	0	0
Mauritius	3	5	1	14	0
Morocco	0	4	0	0	1
Namibia	5	0	1	1	5
Nigeria	0	0	0	3	4
Reunion	0	0	0	0	0
Seychelles	0	0	0	0	1
Somalia	1	0	0	0	0
South Africa	65	32	70	62	77
Sudan	0	0	0	1	0
Swaziland	1	4	3	0	0
Tanzania	0	0	3	1	0
Tunisia	0	1	0	0	0
Uganda	0	0	1	0	0
Zambia	0	0	0	0	1
Asia & Pacific	7,514	7,800	8,692	15,119	21,528
Afganisthan	0	0	0	0	2
American Samoa	0	0	70	0	0
Australia	1,524	970	1,318	1,773	1,926
Azerbaijan	0	0	0	1	0
Bangladesh	1	0	0	0	0
Brunei Darussalam	0	0	1	3	1
Burma	5	5	0	0	12
Cambodia	1	2	0	0	3
China	1,069	1,143	1,494	2,896	3,766
Chinese – Macau	0	1	3	0	0

Table 10.1: Condt...

Fiji	0	0	0	0	0
Indonesia	36	98	110	295	202
Japan	2,743	3,136	2,963	3,943	6,967
Kazakhstan	1	5	0	15	3
Kyrgyzstan	0	0	0	1	1
Laos	0	0	0	4	2
Malaysia	221	367	356	788	1,307
Maldives	0	0	1	0	0
Mongolia	0	0	1	7	3
Myanmar	0	0	1	3	12
Nepal	78	41	60	145	150
New Zealand	180	122	105	144	192
North Korea	43	0	0	3	11
Pakistan	1	5	2	2	12
Phillipines	72	59	119	128	243
Singapore	667	708	785	1,349	1,605
South Korea	97	49	182	407	630
Sri Lanka	26	6	30	6	17
Taiwan	114	83	184	891	801
Thailand	627	975	875	2,235	3,573
Uzbekistan	1	0	1	0	2
Vietnam	7	25	31	80	85
Europe	11,698	9,697	11,751	13,886	14,234
Albania	0	0	0	2	0
Andorra	0	3	1	1	6
Armenia	0	0	0	10	1
Austria	472	420	505	528	611
Belarus	2	2	2	1	11
Belgium	432	364	404	539	505
Bosnia	0	1	0	2	1
Bulgaria	13	12	11	11	14
Croatia	8	4	1	6	15
Cyprus	6	5	5	4	7
Czech Republic	65	77	71	135	148

Table 10.1: Condt...

Denmark	127	153	412	430	332
Estonia	54	14	31	2	12
Finland	191	161	174	245	112
France	1,402	1,189	1,454	1,585	1,847
Georgia	0	0	0	0	5
Germany	1,717	1,587	2,250	2,287	2,880
Gibraltar	0	0	1	0	0
Greece	45	107	88	70	60
Hungary	54	49	65	45	69
Iceland	13	0	0	7	5
Ireland	98	59	59	78	72
Italy	751	759	1,028	1,014	786
Latvia	9	3	9	44	32
Liechtenstein	0	2	0	3	5
Lithuania	32	4	7	44	3
Luxembourg	14	16	23	33	38
Malta	0	0	5	4	9
Moldova	0	0	0	0	2
Monaco	0	0	0	0	6
Montenegro	0	0	0	1	1
Netherlands	915	780	847	933	993
Norway	109	92	136	214	142
Poland	233	184	268	311	240
Portugal	91	116	116	214	118
Russia	245	270	275	291	365
Romania	12	19	52	35	19
Serbia	0	0	2	2	5
Slovakia	55	53	32	38	36
Slovenia	63	30	64	11	41
Spain	803	485	528	727	789
Sweden	177	88	137	256	241
Switzerland	597	543	789	781	932
Turkey	91	51	100	66	208
Ukraine	44	28	27	81	44

Table 10.1: Condt...

United Kingdom	2,758	1,968	1,772	2,795	2,466
Yugoslavia	0	1	0	0	0
Middle East	78	171	145	326	209
Bahrain	0	0	0	1	0
Iran	0	2	1	4	1
Israel	78	159	127	278	172
Jordan	0	0	1	21	3
Kuwait	0	4	2	8	8
Lebanon	0	1	5	4	5
Oman	0	1	1	2	5
Saudi Arabia	0	3	0	2	12
United Arab Emirates	0	1	8	5	3
Yemen	0	0	0	1	0
North America	7,931	5,467	6,141	7,511	7,199
Canada	852	556	786	1,061	999
Mexico	138	125	166	224	193
USA	6,941	4,786	5,189	6,226	6,007
South America	309	276	365	545	680
Antigua	0	0	0	1	0
Argentina	21	59	40	80	88
Bahamas	0	0	1	0	0
Bolivia	0	0	0	0	2
Brazil	249	178	229	304	462
Belize	0	0	1	1	0
Chile	15	8	18	45	40
Colombia	5	14	27	45	40
Costa Rica	0	0	10	1	5
Cuba	1	0	0	1	0
Dominican Republic	0	0	4	0	2
Ecuador	0	0	1	0	4
El Salvador	0	0	0	2	0
Granada	0	0	0	1	0
Guatemala	0	2	0	11	0
Haiti	0	0	0	1	0

Table 10.1: Condt...

Hondurus	1	0	2	0	0
Jamaica	0	0	3	1	0
Panama	0	0	0	2	8
Paraguay	0	0	1	0	0
Peru	7	6	19	12	6
Trinidad and Tobago	0	0	4	3	1
Uruguay	0	1	1	0	7
Venezuela	10	8	3	34	15
Virgin Islands U.S	0	0	1	0	0
Total arrivals	**27,607**	**23,481**	**27,195**	**37,479**	**43,943**

Note: The total number of tourist arrivals here shows only dollar paying tourist.
Source: Tourism Council of Bhutan, Thimphu.

Table 10.2: Tourist Arrivals By Country of Residence and Revenue Receipts, Bhutan, (2008-2012)

(Numbers)

Region	2008	2009	2010	2011	2012
North America	7,931	5,467	6,141	7,511	7,199
South America	309	276	365	545	680
Asia and Pacific	7,514	7,800	8,692	15,119	21,528
Europe	11,698	9,697	11,751	13,886	14,234
Africa	77	70	101	92	93
Middle East	78	171	145	326	209
All regions (persons)	**27,607**	**23,481**	**27,195**	**37,479**	**43,943**
Tourism revenue receipts[1]					
Ngultrums (million)	1,689.49	1,402.72	1,645.37	2,226.66	3,355.40
Or					
US Dollars (million)	38.83	31.88	35.98	47.68	62.80

[1]*The revenue receipts includes only for the International Tourist.*
Source: Tourism Council of Bhutan, Thimphu.

Table 10.3: Number of Tourist Arrivals by Season and Month, Bhutan (2007-2012)

Season & Month	2007	2008	2009	2010	2012
Winter	**4,265**	**5,848**	**4,291**	**8,375**	**14,692**
November	2,733	4,126	2,607	4,432	7,039
December	1,091	1,190	1,017	2,277	4,294
January	441	532	667	1,666	3,359
Spring	**6,019**	**7,996**	**7,258**	**10,046**	**20,753**
February	814	1,311	811	2,125	4,086
March	2,539	3,512	2,184	4,401	6,977
April	2,666	3,173	4,263	3,520	9,690
Summer	**2,213**	**3,816**	**3,365**	**8,009**	**20,104**
May	1,045	1,862	1,743	3,559	9,011
June	580	869	764	2,618	7,207
July	588	1,085	858	1,832	3,886
Autumn	**8,597**	**9,976**	**8,566**	**14,569**	**23,042**
August	1,133	1,386	1,220	2,442	5,013
September	2,952	2,428	3,020	4,927	7,305
October	4,512	6,162	4,326	7,200	10,724

Note: The total number of tourist arrivals here shows dollar paying tourist, regional high end tourist, international business and regional business tourist.
Data not available from the source for the year 2011.
Source: Tourism Council of Bhutan, Thimphu.

Table 10.4: Percentage of Tourist Arrivals by Purpose of Visit, Bhutan, 2012

Purpose	%
Holiday	71.4
Private Business trip	11.0
Visiting Friends/Family	4.1
Meeting/Incentives/Conventions/Exhibition	3.4
Government Guest	1.8
Coporate Guest	1.7
Living in Bhutan	0.2
Working in Bhutan	3.8
Others	2.6

Source: Tourism Council of Bhutan, Thimphu.

Table 10.5: Total Number of Tourist Arrivals by Dzongkhag, 2012

Dzongkhag	No. of visitors
Bumthang	11,538
Chhukha	5,388
Dagana	1
Gasa	416
Haa	2,954
Lhuntse	146
Mongar	2,289
Paro	43,023
Pema Gatshel	105
Punakha	32,738
Samdrup Jongkhar	1,930
Samtse	4
Sarpang	99
Thimphu	41,545
Trashi Yangtse	835
Trashigang	2,230
Trongsa	7,435
Tsirang	38
Wangdue	13,150
Zhemgang	186

Source: Tourism Council of Bhutan, Thimphu.

Table 10.6: Top Ten Tour Operators by Number of Tourists, Bhutan 2012

Tour Operator	Tourists
Norbu Bhutan Travels	3,782
Himalayan Kingdom Tours	1,613
International Treks and Tours	1,403
Luxury Division (BTCL)	1,389
Druk Aisa Tours and Treks	1,311
All Bhutan Connection	1,109
Saga Metho Travel	1,077
Etho Metho Tours and Treks Ltd.	1,058
Yangphel Adventure Travel	965
Bhutan Tourism Corporation Ltd.	915

Source: Tourism Council of Bhutan, Thimphu.

Table 10.7: Top Ten Accomodation Providers by Bed Nights, 2012

Accomodation Providers	Bed Nights
Olathang Hotel – Paro	10,636
Meri Phensum Resort – Punakha	10,374
Phuentsho Pelri Hotel - Thimphu	10,371
Uma Resort – Paro	9,537
Zangto Pelri Hotel - Punakha	8,373
Damchen Resort - Punakha	8,321
Tashi Namgay Resort - Paro	8,254
Zhiwaling Hotel - Paro	7,156
Tenzingling Hotel - Paro	6,902
Kisa Hotel - Thimphu	6,842

Source: Tourism Council of Bhutan, Thimphu.

CHAPTER 11
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.

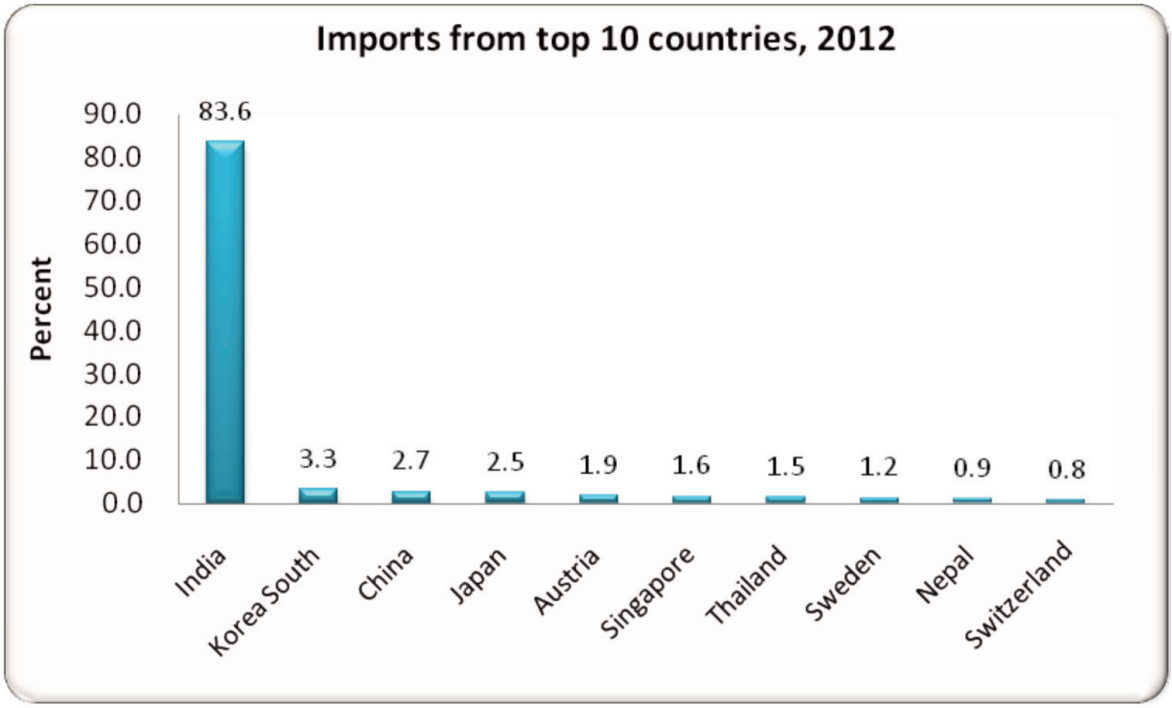


Table 11.1: Balance of Trade, Bhutan, (2008-2012)

(Nu. in Million)

Trade	2008	2009	2010	2011	2012
Exports	22,590.64	23,992.74	29,324.39	31,485.95	28,600.13
India	21,480.02	22,434.39	26,000.89	26,377.97	26,627.35
Third Countries	1,110.62	1,558.35	3,323.50	5,107.98	1,972.78
Imports	23,495.12	25,650.18	39,084.09	48,697.64	52,977.51
India	17,339.55	19,968.01	29,338.00	35,201.07	41,722.18
Third Countries	6,155.57	5,682.17	9,746.09	13,496.57	11,255.33
Balance of trade	(904.48)	(1,657.44)	(9,759.70)	(17,211.69)	(24,557.37)
India	4,140.47	2,466.38	(3,337.11)	(8,823.10)	(15,094.83)
Third Countries	(5,044.95)	(4,123.82)	(6,422.59)	(8,388.59)	(9,462.54)

Note: Figures within bracket indicate deficit (-).

Source : Bhutan Trade Statistics, Department of Revenue & Customs, Ministry of Finance.

Table 11.2: Top Ten Commodities of Exports, Bhutan, 2012

Commodity Description	Value (Nu. in Million)	Percent share
Containing by weight more than 55% of silicon (Ferro-silicon)	6,730.66	47.10
Other, of free-cutting steel (bars and rods of iron and non-alloy steel	1,448.87	10.14
Other (Copper wire)	1,279.36	8.95
Other, of rectangular (other than square) cross-section (semi-finished products of iron and steel)	1,148.07	8.03
Of calcium (Carbides of calcium)	901.12	6.31
Portland pozzolana cement	742.72	5.20
Of silicon (Carbides of silicon)	676.62	4.73
Gypsum; anhydrite	485.88	3.40
Oranges	452.64	3.17
Neither crushed nor ground (Cardamom)	424.69	2.97
Total	**14,290.63**	**100.00**

Table 11.3: Top Ten Commodities of Imports, Bhutan, 2012

Commodity	Value (Nu. in Million)	Percent share
Other light oils and preparations (HSD)	4,695.27	30.77
Ferrous products obtained by direct reduction of iron ore.	2,178.69	14.28
Motor spirit (gasolene) including aviation spirit	1,636.28	10.72
Of which the maximum cross-sectional dimension exceeds 6mm (Copper Wire)	1,414.00	9.27
Other (Wood Charcoal)	994.35	6.52
Towers and lattice masts	915.80	6.00
Waste and scrap of cast iron	884.36	5.80
Coke and semi-coke	856.77	5.62
Parts, including regulators (of hydraulic turbine and water wheels)	847.47	5.55
Other coal	835.04	5.47
Total	**15,258.0**	**100.0**

Source : Bhutan Trade Statistics, Department of Revenue & Customs, Ministry of Finance.

Table 11.4: Direction of Trade by Import Ranking Order for Year 2012

Country	Value (Nu. in Million)	Percent share
India	41,709.48	83.6
Korea South	1,658.94	3.3
China	1,330.17	2.7
Japan	1,260.75	2.5
Austria	939.70	1.9
Singapore	783.47	1.6
Thailand	740.65	1.5
Sweden	609.16	1.2
Nepal	467.76	0.9
Switzerland	392.71	0.8
Total	**49,892.78**	**100.00**

Source : Bhutan Trade Statistics, Department of Revenue & Customs, Ministry of Finance.

Table 11.5: Direction of Trade by Export Ranking Order for Year 2012

Country	Value (Nu. in Million)	Percent share
India	17,502.18	90.98
Bangladesh	1,172.17	6.09
Italy	124.97	0.65
Japan	113.73	0.59
Nepal	107.45	0.56
Hong Kong	79.09	0.41
Netherlands	70.05	0.36
Germany	30.31	0.16
Singapore	20.42	0.11
Bulgaria	16.77	0.09
Total	**19,237.14**	**100.00**

Source : Bhutan Trade Statistics, Department of Revenue & Customs, Ministry of Finance.

Table 11.6: Overall Balance of Payments Estimates, Bhutan, FY 2007/08 To 2011/12

(Nu. in Million)

Item	2007/08	2008/09	2009/10	2010/11 (r)	2011/12 (p)
A.Current Account	(1,134.28)	(664.31)	(6,634.93)	(18,599.38)	(17,585.17)
Exports cif	24,170.78	24,657.53	25,401.76	30,160.10	29,890.39
Imports, cif	(27,092.40)	(28,979.96)	(39,339.95)	(53,704.99)	(53,875.48)
Trade balance	(2,921.61)	(4,322.43)	(13,938.19)	(23,544.89)	(23,985.09)
Services	(1,562.61)	(903.41)	(1,007.06)	(1,553.50)	(1,955.09)
Credit	2,206.89	2,699.98	3,213.59	3,707.86	5,142.52
Debit	(3,769.50)	(3,603.39)	(4,220.64)	(5,261.36)	(7,097.61)
Income	(1,381.18)	(1,449.43)	(2,836.84)	(3,663.27)	(3,872.51)
Credit	1,397.56	1,012.61	762.25	753.88	875.39
Debit	(2,778.74)	(2,462.04)	(3,599.09)	(4,417.16)	(4,747.91)
Current Transfers	4,731.13	6,010.96	11,147.16	10,162.28	12,227.53
Credit	6,797.28	7,716.59	12,880.43	12,517.81	14,356.16
Of Which, Budgetary Grants	5,935.42	6,575.07	11,118.88	10,497.73	10,471.38
Debit	(2,066.16)	(1,705.63)	(1,733.27)	(2,355.52)	(2,128.64)
B.Capital and Financial Account	2,344.60	5,224.00	9,621.40	21,418.70	13,135.13
Capital Transfers	635.48	1,413.23	3,719.54	3,652.00	1,318.60

Table 11.6: Condt...

Foreign Direct Investment	125.02	312.68	885.95	1,181.55	483.70
Portfolio Investment	…	…	…	…	…
Other Investment	1,584.10	3,498.09	5,015.91	16,585.15	11,332.83
o/w RGOB loans, net	(517.23)	1,207.06	3,859.93	12,467.87	9,804.05
o/w Other loans, net	2,149.96	1,988.30	443.99	3,118.73	2,602.18
C.Net Errors and Omissions	1,235.09	919.56	1,986.98	1,516.05	(1,006.01)
D.Overall balance	**2,445.40**	**5,479.25**	**4,973.45**	**4,335.38**	**(5,456.05)**

Notes: Figures within bracket indicate deficit (-). (r) = revised; (p) = provisional estimates
The data in this table are sourced from RMA Annual Report 2011/12 (published in January 2013) and may be different from the last series provided because of the revisions & increase in data coverage as well .
Source : Royal Monetary Authority of Bhutan, Thimphu

Table 11.7: Gross International Reserves (End Period), Bhutan, 2008/09 To 2011/12

(Nu. in Million)

Item	2008/09	2009/10	2010/11	2011/12
1. Rupee reserves	628.10	1,378.56	774.60	1,516.27
Royal Monetary Authority of Bhutan	118.40	137.25	91.20	229.88
Bank of Bhutan Ltd.	373.00	922.98	329.40	857.25
Bhutan National Bank Ltd.	136.70	196.26	99.50	171.79
TBank Ltd.	…	50.00	39.80	53.27
Druk PNB Ltd.	…	72.07	214.70	204.07
Bhutan Development Bank Ltd.	…	…	…	…
2.Convertible currency reserves (US $)	759.60	745.10	888.80	742.92
Royal Monetary Authority of Bhutan	666.60	730.66	841.70	719.04
Bank of Bhutan Ltd.	7.64	15.36	35.10	9.00
Bhutan National Bank Ltd.	17.03	15.85	10.00	14.24
TBank Ltd.	…	0.00	0.20	0.11
Druk PNB Ltd.	…	0.18	1.70	0.53
Bhutan Development Bank Ltd.	…	…	…	…
3.Total reserves(1+2)	704.42	791.65	906.00	769.98
4. Months of Merchandise Imports				
Total reserves	13.93	11.24	9.08	9.61
Rupee reserves	0.32	0.58	0.23	0.45
Convertible currency reserves (US $)	72.70	38.63	36.56	37.18

Note: (1) Convertible currency reserves of RMA have been revised from July 2007 onwards to exclude the 75% local currency component of Bhutans' IMF Quota and the Kuwait fund investment. (2) Data from 2010/11 onwards are based on imports of the previous year and will change when import figures of the current year become available.
Source: Royal Monetary Authority, Thimphu

Table 11.8: Monthly Average Exchange Rates, Ngultrum Per US $, (2008 - 2012)

Month	2008	2009	2010	2011	2012
January	39.37	48.83	45.96	45.40	51.35
February	39.73	49.26	46.33	45.40	49.16
March	40.36	51.23	45.50	45.00	50.32
April	40.03	50.06	44.50	44.40	51.80
May	42.13	48.53	45.81	44.90	54.44
June	42.82	47.77	46.56	44.90	56.03
July	42.84	48.48	46.84	44.40	55.53
August	42.94	48.34	46.57	45.30	55.56
September	45.56	48.44	46.06	47.60	54.56
October	48.66	46.72	44.41	49.30	53.02
November	49.00	46.57	45.02	50.80	54.78
December	48.64	46.63	45.16	52.70	54.65
Calendar year average exchange rate	**43.50**	**48.41**	**45.73**	**46.70**	**53.43**
Fiscal year	**2007/2008**	**2008/2009**	**2009/10**	**2010/11**	**2011/12**
Fiscal year average exchange Rate	40.37	47.78	46.65	45.30	50.27

Source: Royal Monetary Authority, Thimphu.

CHAPTER 12
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 Bank Limited 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.

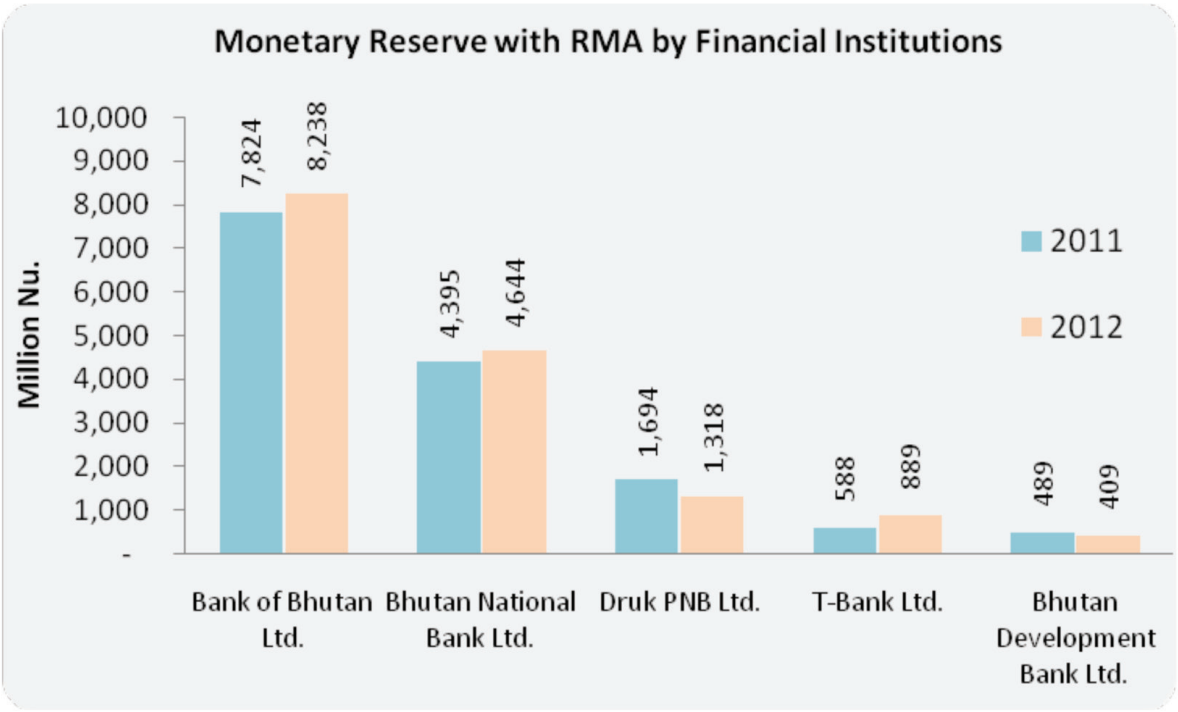


Table 12.1: Monetary Survey: Royal Monetary Authority, Bhutan National Bank and Bank Of Bhutan, (2008-2012)

(Nu. in Million)

Item	2008	2009	2010	2011	2012
Assets total	46,906.29	57,425.01	66,979.70	78,726.40	86,747.21
Foreign Assets	36,081.88	39,074.97	38,964.01	38,915.10	35,775.67
Rupee	3,471.11	2,532.87	3,069.06	(1,902.30)	(14,920.23)
Others	32,610.77	36,542.10	35,894.95	40,817.40	50,695.90
Domestic Credit	10,824.41	18,350.05	26,818.67	39,811.30	50,971.54
Claims on Government. (Net)	(7,417.91)	(3,239.27)	(3,583.76)	(1,697.00)	4,167.37
Claims on Other Public Sector (1)	1,054.01	1,183.97	363.92	1,245.80	1,645.36
Claims on private sector (2)	16,267.17	19,768.96	29,987.99	40,262.50	45,158.81
Liabilities total	46,906.29	57,425.01	66,979.70	78,726.40	86,747.21
Broad money (M2)	31,384.37	43,862.76	51,112.05	53,228.60	56,289.67
Narrow Money (M1)	16,233.40	22,622.78	29,042.95	33,199.60	33,296.46
Nu. Outside Banks	3,839.10	4,980.12	5,608.53	6,910.60	5,254.43
Demand Deposits	12,394.29	17,642.66	23,434.42	26,289.00	28,042.03
Quasi Money (3)	15,150.98	21,239.98	22,069.10	20,029.00	22,993.21
Other items(net)	14,521.93	13,527.29	15,842.64	25,497.80	30,457.54

Notes: Starting from January 2003 onwards, a mojor 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) It includes claims on Government Corps. and claims on Joint Corps.
(2) It includes claims on Non-bank financial institutions.
(3)Quasi Money stands for time deposits plus foreign currency deposits.
** Figures in the brackets ( ) are negative*
Source : Royal Monetary Authority of Bhutan, Thimphu.

Table 12.2: Monetary and Financial Statistics of Royal Insurance Corporation of Bhutan (2008-2012)

(Nu. in Million)

Item	2008	2009	2010	2011	2012
Assets total	2,600.73	3,328.88	5,584.08	6,446.50	7,222.99
Reserves	332.92	313.73	330.10	223.10	306.86
Foreign Assets	31.14	30.00	1.76	1.39	2.35
Rupee	0.04	0.04	0.04	0.00	0.04
Others	31.10	29.96	1.72	1.35	2.30
Domestic Credit**	2,227.29	2,975.77	4,842.85	5,423.90	5,690.66
Claims on Government	0.00	0.26	62.12	0.00	0.00
Claims on Government Corps.	0.00	0.00	0.19	0.00	0.00
Claims on Public Sector [1]	46.14	43.68	69.09	14.00	13.98
Claims on private sector	2,178.15	2,928.83	4,708.46	5,406.90	5,673.68
Claims on NBFIs	3.00	3.00	3.00	3.00	3.00
Claims on DMBs	9.38	9.38	409.38	798.13	1,223.13
Liabilities total	2,600.73	3,328.88	5,584.08	6,446.55	7,222.99
Life fund	261.40	342.29	472.45	0.00	0.00
Private provident funds	183.42	233.07	308.26	0.00	0.00
Group Insurance Fund	206.08	433.73	498.44	0.00	0.00
Credit from DMB	0.00	0.00	300.00	500.00	650.00
Credit from NBFIs	780.00	1,184.00	2,660.98	2,637.97	2,614.97
Capital accounts	644.15	799.83	974.42	1,210.52	1,507.06
Other items (net)	525.69	335.95	369.54	2,098.06	2,450.96

Notes: DMBs = Deposit Money Banks, NBFIs = Non Bank Financial Institutions.
***Domestic credit excluding the claims on DMBs*
[1] With effect from January 1, 2011 Claims on Joint Corporations has been reclassified as Claims on Public Sector as per the new reporting format of the Financial Regulations and Supervision Department of the RMA
Source: Royal Monetary Authority of Bhutan, Thimphu.

Table 12.3: Monetary and Financial Statistics of Bhutan National Bank Limited, (2008-2012)

(Nu. in Million)

Item	2008	2009	2010	2011	2012
Assets total	15,704.43	20,601.45	20,896.15	22,551.65	25,489.90
Reserves with RMA	5,232.41	7,833.21	6,127.68	4,394.62	4,643.99
Foreign Assets	754.50	1,152.61	734.17	929.41	2,446.54
Rupee	290.90	467.48	172.77	130.57	134.41
Others	463.60	685.12	561.40	798.83	2,312.13
Domestic Credit	9,717.52	11,615.63	14,030.56	17,227.62	18,399.37
Claims on Government	586.29	527.00	527.00	527.00	527.00
Claims on Government Corps	…	51.27	234.28	0.37	…
Claims on Public Sector	7.58	7.58	7.58	585.9[1]	592.26
Claims on private sector	9,119.92	11,026.04	13,261.70	15,892.42	17,260.87
Claims on NBFIs	3.73	3.73	3.73	221.92	19.23
Liabilities total	15,704.43	20,601.45	20,896.15	22,551.65	25,489.90
Demand Deposits (Current and saving Deposits)	3,125.76	3,866.84	7,370.46	6,479.31	5,309.39
Time Deposits	9,862.89	15,910.10	14,288.77	11,240.27	11,715.85
Foreign currency Deposits	259.44	322.87	320.32	525.89	690.67
Capital accounts	1,518.13	1,610.55	1,794.05	4,077.96	6,087.99
Other items (net)	938.21	(1,108.92)	(2,877.45)	228.21	1,686.00

[1]With effect from January 1, 2011 Claims on Joint Corporations has been reclassified as Claims on Public Sector as per the new reporting format of the Financial Regulations and Supervision Department of the RMA

Source: Royal Monetary Authority Bhutan, Thimphu.

Table 12.4: Monetary and Financial Statistics of Bhutan Development Bank Limited, December (2010-2012)

(Nu. in Million)

Item	2010	2011	2012
Assets total	3,937.24	5,046.89	6,678.76
Reserves With RMA	295.46	489.34	409.13
Foreign Assets	…	…	14.81
Rupee	…	…	14.81
Others	…	…	…
Domestic Credit	3,641.78	4,557.55	6,254.82
Claims on Govt.	…	…	…
Claims on Govt. Corporations	5.03	6.20	213.01
Claims on Public Sector	0.88	1.38	7.38[1]
Claims on private sector	3,635.88	4,549.97	6,034.44
Claims on NBFIs	…	3.00	…
Liabilities total	3,937.24	5,046.89	6,678.76
Demand Deposits (Current and Saving Deposits)	338.44	692.81	1,012.38
Time Deposits	147.04	728.75	2,691.44
Foreign Currency Deposits	…	…	…
Foreign Liabilities	352.95	375.52	433.68
Domestuc Borrowing	1,065.00	955.00	845.00
Capital accounts	1,342.60	1,555.90	1,816.14
Other items(net)	691.21	738.91	(119.87)

[1]With effect from January 1, 2011 Claims on Joint Corporations has been reclassified as Claims on Public Sector as per the new reporting format of the Financial Regulations and Supervision Department of the RMA
Source: Royal Monetary Authority of Bhutan, Thimphu.

Table 12.5: Monetary and Financial Statistics of Royal Monetary Authority of Bhutan, (2008-2012)

(Nu. in Million)

Item	2008	2009	2010	2011	2012
Assets total	33,509.31	39,114.69	40,249.46	40,782.09	53,286.19
Foreign assets	33,377.89	38,928.06	39,997.71	40,047.41	47,910.87
Indian rupee	2,291.87	3,830.41	4,919.35	273.76	137.28
Convertible Foreign Currency (Including Gold)	31,086.02	35,097.66	35,078.36	39,773.65	47,773.60
Claims on deposit money banks	114.62	170.81	232.00	715.28	3,457.00
Claims on Government	…	…	…	…	1,900.00
Claims of private sector	16.80	15.81	19.75	19.39	17.42
Liabilities total	33,509.31	39,114.69	40,249.46	40,782.09	53,286.19
Reserve money	15,528.36	21,741.21	27,248.63	21,173.43	19,148.35
Currency outside banks	3,842.18	4,980.12	5,608.53	6,910.56	5,254.43
Foreign Liabilities	0.0	3,000.00	3,000.00	3,000.00	16,363.48
Rupee	0.0	3,000.00	3,000.00	3,000.00	16,363.48
Others	0.0	0.0	0.0	0.0	0.0
Government deposits	7,477.20	3,239.27	4,110.76	2,782.77	2,322.41
RMA Bills Outstanding	1,019.92	2,022.32	1,021.41	43.95	29.92
Capital Account	1,076.25	1,006.48	3,183.09	3,096.43	2,878.66
Other items (net)	8,407.58	8,105.41	1,685.57	10,685.50	12,543.37

Source: Royal Monetary Authority of Bhutan, Thimphu.

Table 12.6: Monetary and Financial Statistics, Bank of Bhutan Limited, (2008-2012)

(Nu. in Million)

Item	2008	2009	2010	2011	2012
Assets total	19,645.00	24,905.37	27,908.61	24,766.03	27,571.83
Reserve with RMA	9,387.20	13,306.64	15,373.78	7,824.08	8,237.79
Foreign assets	1,690.52	1,640.86	815.93	1,188.90	1,579.67
Rupee	888.33	1,234.98	446.59	589.56	614.20
Other	802.18	405.88	369.34	599.35	965.47
Claims on Government	…	…	527.00	558.74	970.78
Claims on Government's corpns.	527.00	605.70	124.61	558.74	722.49
Claims on public sector	358.35	42.06	42.06	144.67 [1]	82.22
Claims on private sector	7,130.46	8,727.10	10,358.94	14,265.01	15,450.42
Claims on NBFIs	551.48	583.01	666.28	301.69	528.45
Liabilities total	19,645.00	24,905.37	27,908.61	24,766.03	27,571.83
Demand deposit (a)	9,271.45	13,774.40	14,092.56	16,635.65	17,776.49
Time deposit	4,218.54	4,352.27	4,325.56	3,363.21	3,971.76
Foreign currency deposits	810.10	654.74	695.90	1,016.48	657.72
Capital accounts	1,808.25	2,172.81	2,596.51	3,046.24	3,451.42
Other items (net)	3,536.67	3,951.16	6,198.09	704.45	1,714.43

*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.*

[1]With effect from January 1, 2011 Claims on Joint Corporations has been reclassified as Claims on Public Sector as per the new reporting format of the Financial Regulations and Supervision Department of the RMA

Source: Royal Monetary Authority of Bhutan, Thimphu.

Table 12.7: Monetary and Financial Statistics of T-Bank Ltd, December (2010- 2012)

(Nu. in Million)

Item	2010	2011	2012
Assets total	1,668.01	2,895.58	3,259.70
Reserve with RMA	429.51	588.12	889.21
Foreign assets	95.25	86.77	70.27
Rupee	90.28	84.08	65.03
Other	4.97	2.69	5.24
Domestic Credit	1,143.26	2,220.69	2,300.22
Claims on Government	0.0	0.0	0.0
Claims on Government Corps	0.0	0.0	0.0
Claims on Public Sector	0.0	25.2[1]	28.00
Claims on private sector	1,143.26	2,192.50	2,272.22
Claims on NBFIs	…	2.99	…
Liabilities Total	1,668.01	2,895.58	3,259.70
Demand deposit	191.22	450.07	766.75
Time deposit	453.69	1,318.88	1,533.23
Foreign currency deposits	0.0	0.0	0.0
Foreign liabilities	0.0	0.0	0.0
Rupee	0.0	0.0	0.0
Other	0.0	0.0	0.0
Government deposites	0.0	0.0	0.0
Capital accounts	119.67	274.35	318.85
Other items (net)	913.44	852.28	640.87

[1]With effect from January 1, 2011 Claims on Joint Corporations has been reclassified as Claims on Public Sector as per the new reporting format of the Financial Regulations and Supervision Department of the RMA

Source: Royal Monetary Authority, Thimphu.

Table 12.8: Monetary and Financial Statistics of PNB Ltd, December (2010- 2012)

(Nu. in Million)

Item	2010	2011	2012
Assets total	4,228.69	4,548.70	5,534.94
Reserve with RMA	1,835.90	1,693.98	1,317.87
Foreign assets	673.90	38.17	550.66
Rupee	440.08	19.77	477.53
Other	233.82	18.40	73.14
Domestic Credit	1,718.88	2,816.55	3,666.41
Claims on Government	0.0	0.0	90.64
Claims on Government's corpns.	0.0	0.0	0.0
Claims on public sector[1]	0.0	0.0	0.0
Claims on private sector	1,568.47	2,781.42	3,389.41
Claims on NBFIs	150.41	35.13	186.35
Liabilities total	4,228.69	4,548.70	5,534.94
Demand deposit	1,451.74	2,031.18	3,177.03
Time deposit	1,599.06	1,817.42	1,731.74
Foreign currency deposits	238.77	18.12	0.80
Foreign liabilities	0.0	0.0	0.0
Rupee	0.0	0.0	0.0
Other	0.0	0.0	0.0
Credit from RMA	0.0	0.0	0.0
Capital accounts	296.80	496.74	767.79
Other items (net)	642.31	185.25	(142.42)

[1] With effect from January 1, 2011 Claims on Joint Corporations has been reclassified as Claims on Public Sector as per the new reporting format of the Financial Regulations and Supervision Department of the RMA

Source: Royal Monetary Authority, Thimphu.

Table 12.9: Monetary and Financial Statistics of Bhutan Insurance Limited, December (2010-2012)

(Nu. in Million)

Item	2010	2011	2012
Assets total	230.20	367.17	437.76
Reserves	60.89	23.61	32.82
Foreign Assets	0.00	0.00	0.00
Rupee	0.00	0.00	0.00
Others	0.00	0.00	0.00
Domestic Credit	169.31	343.57	404.93
Claims on Govt. (Net)	0.00	0.00	0.00
Claims on Govt. Corps.	0.00	0.00	0.00
Claims on public sector[1]	0.00	0.00	0.00
Claims on private sector	123.31	303.57	364.93
Claims on NBFIs	0.00	0.00	0.00
Claims on DMBs	46.00	40.00	40.00
Liabilities total	230.20	367.17	437.76
Life fund	50.01	0.00	0.00
Private provident funds	13.16	0.00	0.00
Group Insurance Fund	0.00	0.00	0.00
Credit from DMB	50.00	85.00	35.00
Credit from NBFIs	0.00	40.00	0.00
Capital accounts	109.73	127.34	264.08
Other items (net)	7.30	114.83	138.68

Notes: NBFIs stands for Non Bank Financial Institutions; DMBs Deposit Money Banks

[1]With effect from January 1, 2011 Claims on Joint Corporations has been reclassified as Claims on Public Sector as per the new reporting format of the Financial Regulations and Supervision Department of the RMA

Source: Royal Monetary Authority of Bhutan, Thimphu.

Table 12.10: Investments of Financial Institutions by Industry, Amounts Outstanding, (2008-2012)

(Nu. in Million)

Industry	2008	2009	2010	2011	2012
Agriculture	573.50	403.27	499.45	843.23	1,193.82
Bank of Bhutan Ltd	1.10	3.04	2.99	3.30	2.32
Royal Insurance Corporation of Bhutan Ltd	…	…	…	…	…
Bhutan Development Bank Ltd	572.40	400.23	494.96	838.43	1,189.90
Bhutan National Bank Ltd	…	…	…	…	…
Druk PNB Ltd	…	…	…	1.50	1.60
T Bank Ltd	…	…	1.50	…	…
Bhutan Insurance Ltd	…	…	…	…	…
Service and Tourism	2,958.90	3,718.64	5,905.93	5,239.20	6,374.50
Bank of Bhutan Ltd	1,312.10	1,698.16	3,076.13	1,855.30	2,073.00
Royal Insurance Corporation of Bhutan Ltd	70.40	72.97	114.39	78.20	110.00
Bhutan Development Bank Ltd	631.50	800.78	847.49	1,011.10	1,289.00
Bhutan National Bank Ltd	944.90	1,146.73	1,524.53	1,842.80	2,199.50
Druk PNB Ltd	…	…	56.68	329.00	509.10
T Bank Ltd	…	…	286.70	122.70	193.90
Bhutan Insurance Ltd	…	…	…	0.00	0.00
Manufacturing	4,364.40	4,727.27	5,928.52	7,165.30	7,819.55
Bank of Bhutan Ltd	1,906.30	1,973.92	1,918.05	2,360.80	2,790.40
Royal Insurance Corporation of Bhutan Ltd	271.00	289.18	463.13	611.70	626.10
Bhutan Development Bank Ltd	425.60	453.79	513.19	533.30	605.20
Bhutan National Bank Ltd	1,761.50	2,010.38	2,714.96	2,976.20	3,016.40
Druk PNB Ltd	…	…	101.34	539.20	493.70
T Bank Ltd	…	…	217.86	110.00	243.60
Bhutan Insurance Ltd	…	…	…	34.10	44.15
Building and construction	5,768.20	6,615.33	8,936.13	12,104.60	14,475.42
Bank of Bhutan Ltd	1,497.60	1,767.85	2,130.60	3,593.80	4,824.40
Royal Insurance Corporation of Bhutan Ltd	723.40	873.05	1,545.83	1,801.60	1,935.80
Bhutan Development Bank Ltd	370.40	367.62	440.43	525.20	685.90
Bhutan National Bank Ltd	3,176.80	3,606.81	4,118.84	5,089.70	5,710.60
Druk PNB Ltd	…	…	279.88	681.60	877.70
T Bank Ltd	…	…	410.34	409.10	434.60
Bhutan Insurance Ltd	…	…	10.21	3.70	6.42
Trade and commerce	3,772.50	4,478.44	5,706.99	4,765.90	4,379.50
Bank of Bhutan Ltd	954.80	769.11	668.80	1,430.10	973.70
Royal Insurance Corporation of Bhutan Ltd	690.40	939.64	1,296.83	1,427.80	1,553.30
Bhutan Development Bank Ltd	285.10	304.13	325.80	408.60	534.10
Bhutan National Bank Ltd	1,842.20	2,465.56	2,766.42	354.00	404.00
Druk PNB Ltd	…	…	173.85	681.50	470.30

Table 12.10: Condt...

T Bank Ltd	…	…	466.91	413.70	406.20
Bhutan Insurance Ltd	…	…	8.39	50.10	37.90
Transport	1,325.40	1,763.90	3,196.90	4,732.60	4,356.56
Bank of Bhutan Ltd	546.80	652.10	727.30	1,114.30	1,190.50
Royal Insurance Corporation of Bhutan Ltd	198.40	376.70	887.50	952.00	773.57
Bhutan Development Bank Ltd	117.10	167.70	272.50	376.60	349.58
Bhutan National Bank Ltd	463.10	567.40	872.00	1,457.20	1,281.32
Druk PNB Ltd	…	…	170.40	242.10	214.94
T Bank Ltd	…	…	193.90	421.10	378.01
Bhutan Insurance Ltd	…	…	73.20	169.30	168.64
Personal loans	2,746.70	3,989.10	5,094.26	8,055.44	8,995.36
Bank of Bhutan Ltd	1,716.50	2,404.04	2,437.02	4,812.77	5,090.82
Royal Insurance Corporation of Bhutan Ltd	218.70	360.58	423.94	19.07	600.28
Bhutan Development Bank Ltd	69.90	292.84	723.72	835.16	1,567.76
Bhutan National Bank Ltd	741.60	931.64	1,039.14	1,082.51	732.70
Druk PNB Ltd	…	…	361.05	123.52	524.00
T Bank Ltd	…	…	109.08	714.83	406.88
Bhutan Insurance Ltd	…	…	0.31	467.58	72.92
Loan Against Shares	118.00	200.43	221.11	490.80	569.43
Bank of Bhutan Ltd	6.80	28.72	1.44	159.50	144.16
Royal Insurance Corporation of Bhutan Ltd	13.10	21.73	54.43	25.50	28.65
Bhutan Development Bank Ltd	0.00	12.94	…	…	…
Bhutan National Bank Ltd	98.10	137.04	157.40	104.40	97.80
Druk PNB Ltd	…	…	0.16	174.20	274.85
T Bank Ltd	…	…	7.69	19.40	16.37
Bhutan Insurance Ltd	…	…	…	7.80	7.60
Others	…	…	12.63	4,115.69	5,276.10
Bank of Bhutan Ltd	…	…	…	323.36	355.61
Royal Insurance Corporation of Bhutan Ltd	…	…	…	19.54	21.25
Bhutan Development Bank Ltd	…	…	…	24.79	26.00
Bhutan National Bank Ltd	…	…	…	3,678.07	4,417.69
Druk PNB Ltd	…	…	…	44.87	209.51
T Bank Ltd	…	…	…	6.82	218.71
Bhutan Insurance Ltd	…	…	12.63	18.25	27.33
Total	**21,961.49**	**26,283.10**	**36,005.02**	**47,512.70**	**53,440.24**

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 12.11: Interest Rates of Deposits in Financial Institutions, 2008 To 2012

(in percent)

Type of Deposit	2008	2009	2010	2011	2012
Savings	4.5	4.5	4.5	4.5	5.0
Fixed deposit					
i) 3 months to less than 1year	4.5	4.5	4.5	4.5	5.0
ii) 1 year to less than 2 years	6.0	6.0	6.0	6.0	7.0
iii) 2 year to less than 3 years	6.0	6.0	6.0	6.0	7.5
iv) 3 years less than 5 years	7.0	7.0	7.0	7.0	8.0
v) 5 years less than 7 years	7.0	7.0	7.0	7.0	8.5
vi) 7 years and above	7.0	7.0	7.0	7.0	8.8
For Institutions & Companies					
i) 91 days to less than 1 year	2.0	2.0	2.0	2.0	6.5
ii) 1 year to less than 2 years	…	…	…	…	7.0
iii) 2 years to less than 3 years	…	…	…	…	7.5
iv) 3 years to less than 5 years	…	…	…	…	8.0
v) 5 years to less than 7 years	…	…	…	…	8.5
vi) 7 years to less than 10 years	…	…	…	…	8.5
vii) 10 years to less than 12 years	…	…	…	…	8.5
viii) 12 years and above	…	…	…	…	8.5

Source: Bank of Bhutan,Main Branch, Phuntsholing

Table 12.12: Interest Rates and Repayment Period by Sector and type of Loan, Financial Institutions, Bhutan (2010-2012)

Sector	2010		2011		2012	
	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	…	13.0	6 months	14.0	1 year
(convertible currency areas)***	14.0	…	13.0	6 months	15.0	2 years
General trade	13.8	1.0	13.8	1 year	16.0	3 years
Buses and trucks						
Term Loan	13.0	5	10 - 11.5	3 - 5 years	11.73 -12.33	1-7 years

Table 12.12: contd...

Working Capital	14.0	1	14.0	1 year	…	…
Other passanger vehicles	12.0	7	10 - 11.5	3 - 5 years	11.73 -12.33	1-7 years
Agriculture and Livestock	13.0	10	12.0	5 years	11.73 -12.34	1-6 years
Manufacturing Industry						
Term Loan	12.0	10	12.0	10	11.73 -13.13	1-15 years
Working Capital	13.0	1	13.0	1 year	11.73 -13.14	1-15 years
Service Industries *						
Term Loan	10.0	10	10.0	10	11.73 -13.14	1-15 years
Working Capital	12.75	1	12.75	1 year	11.73 -13.14	1-15 years
Personal loans	15.0	5	15.00	5	15.00	5 years
Equity finance	12.0	5	12.0	5	11.73 -12.23	1- 6 years
Housing						
New Construction	10.00	25	10.00	25	11.73 -14.63	1- 20 years
Repair / Renovation	10.00	10	10.00	10	13.00	10 years
Consumer Loans	12.00	7	12.00	7	11.73 -13.33	1- 7 years

*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 12.13: Royal Securities Exchange of Bhutan Ltd. Number of Share Holders, (2008-2012)

(Numbers)

Company	2008	2009	2010	2011	2012
Bhutan Board Products Ltd. (BBPL)	491	491	494	494	487
Bhutan Carbide & Chemical Ltd. (BCCL)	259	259	259	258	259
Bhutan Dairy and Agro Products Ltd. *	96	96	…	…	…
Bhutan Ferro Alloys Ltd. (BFAL)	44	44	43	43	43
Bhutan Insurance Ltd. (BIL)	…	4,432	4,393	4,310	4,445
Bhutan National Bank Ltd. (BNBL)	4,357	4,374	4,308	4,415	4,523
Bhutan Polymers Company Ltd. (BPCL)	129	128	128	128	128
Bhutan Times Ltd. (BTL)	288	289	289	289	288
Bhutan Tourism Corpn. Ltd (BTCL)	162	162	159	158	157
Druk Ferro Alloys Ltd. (DFAL)	…	366	471	467	460
Druk Mining Ltd. **	67	67	67	…	…
Druk Petroleum Corpn. Ltd.***	71	71	71	…	…

Table 12.13: contd...

Druk plaster & Chemicals Ltd. (DPOP)	213	213	212	214	214
Druk PNB Bank (DPNB)	…	…	23,216	22,540	22,564
T Bank Ltd. (TBL)	…	…	…	8,066	7,909
Druk Satair Corporation Ltd. (DSCL)	1,276	1,279	1,277	1,276	1,272
Druk Wang Alloys Ltd. (DWAL)	504	507	501	498	498
Jigme Mining Corporation Ltd. (JMCL)	426	418	418	415	416
Kuensel Corporation Ltd. (KCL	233	233	232	232	232
Penden Cement Authority Ltd. (PCAL)	1,472	1,462	1,467	1,456	1,449
Royal Insurance Corpn. of Bhutan (RICB)	1,556	1,556	1,553	1,536	1,524
S.D Eastern Bhutan Coal Company Ltd. (EBCC)	1,082	1,082	1,081	1,075	1,074
State Trading Corpn. of Bhutan Ltd. (STCB)	125	125	135	135	135
Total	**10,088**	**14,891**	**40,774**	**48,005**	**48,077**

*Note: * Delisted in June 2010, **Delisted in June 2011, ***Delisted in March 2011*
Source: Royal Securities Exchange of Bhutan Ltd, Thimphu.

Table 12.14: Royal Securities Exchange of Bhutan Ltd. Market Information at the End of December 2012

Company	Paid-up Shares	Price per share (Nu)	Market capitalization (Nu in million)
Bhutan Board Products Ltd. (BBPL)	1,400,014	140	196.00
Bhutan Carbide & Chemical Ltd. (BCCL)	1,000,000	900	900.00
Bhutan Ferro Alloys Ltd. (BFAL)	1,500,000	600	900.00
Bhutan Insurance Ltd. (BIL)	2,000,000	200	400.00
Bhutan National Bank Ltd. (BNB)	20,275,023	300	6,082.51
Bhutan Polymers Company Ltd. (BPCL)	249,334	100	24.93
Bhutan Times Ltd. (BTL)	400,000	105	42.00
Bhutan Tourism Corpn. Ltd (BTCL)	209,400	400	83.76
Druk Ferro Alloys Ltd. (DFAL)	2,897,762	150	434.66
Druk plaster & Chemicals Ltd. (DPOP)	100,000	200	20.00
Druk PNB Bank (DPNB)	4,490,273	300	1,347.08
T Bank Ltd. (TBL)	2,200,000	300	660.00
Druk Satair Corporation Ltd. (DSCL)	913,086	300	273.93
Druk Wang Alloys Ltd. (DWAL)	1,940,000	450	873.00
Jigme Mining Corporation Ltd. (JMCL)	568,763	700	398.13
Kuensel Corporation Ltd. (KCL)	500,000	130	65.00
Penden Cement Authority Ltd. (PCAL)	3,400,007	930	3,162.01
Royal Insurance Corpn. of Bhutan (RICB)	2,400,000	600	1,440.00

Table 12.14: contd...

S.D Eastern Bhutan Coal Company Ltd. (EBCC)	521,000	300	156.30
State Trading Corpn. of Bhutan Ltd. (STCB)	900,008	190	171.00
Total	**47,864,670**		**17,630.32**

Source: Royal Securities Exchange of Bhutan Ltd. Thimphu.

Table 12.15: Total Volume Traded as of December, Royal Securities Exchange of Bhutan Ltd (2008-2012)

(Numbers)

Company	2008	2009	2010	2011	2012
Bhutan Board Products Ltd. (BBPL)	100	…	…	…	84
Bhutan Carbide & Chemicals Ltd.	970	20,000	…	…	…
Bhutan Ferro Alloys Ltd.	534	…	50	…	…
Bhutan Insurance Ltd.	…	1,001,428	32,247	19,981	1,024,815
Bhutan National Bank Ltd.	2,413,164	187,789	26,913	3,329,839	14,116,796
Bhutan Polymers Company Ltd.	…	…	…	…	…
Bhutan Times Ltd.	…	300	…	…	…
Bhutan Tourism Corpn. Ltd	19,160	…	80	60	…
Druk Ferro Alloys Ltd.	1,222,600	…	1,973,715	2,650	50,150
Druk Plaster & Chemicals Ltd.	…	…	…	…	…
Druk Punjab Bank	…	…	3,029,820	27,950	1,504,829
T Bank Ltd. (TBL)	…	…	…	2,384,948	40,897
Druk Satair Corpn. Ltd.	…	…	456,543	…	…
Druk Wang Alloys Ltd.	1,252,500	270,000	11,450	970	650
Jigme Mining Corporation Ltd.	199,180	143,053	…	144,331	1,277
Kuensel Corporation Ltd.	216	…	…	…	978
Penden Cement Authority Ltd.	1,134,737	50,895	1,220	5,490	1,440
Royal Insurance Corpn. of Bhutan Ltd.	3,500	1,440,550	1,350	4,450	5,160
S.D Eastern Bhutan Coal Company Ltd.	2,986	…	150.0	486.0	1,261
State Trading Corpn. of Bhutan Ltd.	30	200	209,800	200,003	300,005
Total	**6,249,677**	**3,114,215**	**5,743,338**	**6,121,158**	**17,048,342**

Note: Total traded volume is inclusive of Initial Public Offering (IPO), Secondary trading and Corporate actions
Source:Royal Securities Exchange of Bhutan Ltd.

Table 12.16: Traded Values, Royal Securities Exchange of Bhutan Ltd. (2008-2012)

(Nu. in Million)

Company	Capital Market	2008	2009	2010	2011	2012
Bhutan Board Products Ltd. (BBPL)	Primary	…	…	…	…	…
	Secondary	0.02	…	…	…	…
Bhutan Carbide & Chemicals Ltd. (BCCL)	Primary	…	…	…	…	…
	Secondary	0.78	18.00	…	…	0.08
Bhutan Ferro-Alloys Ltd. (BFAL)	Primary	…	…	…	…	…
	Secondary	0.29	…	0.03	…	…
Bhutan National Bank Ltd. (BNBL)	Primary	236.52	…	…	…	…
	Secondary	21.00	76.45	12.03	60.97	181.13
Bhutan Polymers Company Ltd. (BPCL)	Primary	…	…	…	…	…
	Secondary	…	…	…	…	…
Bhutan Tourism Corpn. Ltd (BTCL)	Primary	…	…	…	…	…
	Secondary	5.75	…	0.03	0.02	…
Bhutan Times Ltd. (BTL)	Primary	…	…	…	…	…
	Secondary	…	0.03	..	..	…
Druk plaster & Chemicals Ltd. (DPOP)	Primary	…	…	…	…	…
	Secondary	…	…	…	…	…
Druk Satair Corpn. Ltd. (DSCL)	Primary	…	…	…	…	…
	Secondary	…	…	…	…	…
Druk PNB Bank Ltd.	Primary	…	…	300.00	…	…
	Secondary	…	…	8.81	9.67	5.03
T Bank Ltd.	Primary	…	…	…	220.00	…
	Secondary	…	…	…	48.75	10.71
Druk Wang Alloys Ltd.	Primary	125.25	27.00	…	…	…
	Secondary	…	…	2.28	0.54	0.37
S.D Eastern Bhutan Coal Company Ltd.	Primary	…	…	…	…	…
	Secomdary	0.55	…	0.05	0.15	0.38
Kuensel corporation Ltd.	Primary	…	…	…	…	…
	Secondary	0.03	…	…	…	0.13
Penden Cement Authority Ltd.	Primary	113.34	…	…	…	…
	Secondary	1.12	37.05	0.92	4.55	1.32
Royal Insurance Corpn. of Bhutan Ltd.	Primary	…	144.00	…	…	…
	Secondary	1.46	0.19	0.47	1.91	2.77
State Trading Corpn. of Bhutan Ltd.	Primary	…	…	…	…	…
	Secondary	0.01	0.04	1.86	…	…
Jigme Mining Corporation Ltd.	Primary	19.90	14.22	…	…	…
	Secondary	0.15	0.45	…	1.44	0.89

Table 12.16: contd...

Druk Ferro Alloys Ltd.	Primary	122.26	…	12.64	…	…
	Secondary	…	…	115.04	0.43	10.02
Bhutan Insurance Ltd.	Primary	…	100.00	…	…	…
	Secondary	…	0.15	4.36	4.47	6.27
Total		**648.43**	**417.58**	**458.52**	**352.90**	**219.10**

Source: Royal Securities Exchange of Bhutan Ltd.

Table 12.17: Dividend Declared by Company, 2008 - 2012

(In Percent)

Company	2008	2009	2010	2011	2012
Bhutan Board Products Ltd. (BBPL)	6	15	15	12	…
Bhutan Carbide & Chemical Ltd. (BCCL)	10	…	20	10	25
Bhutan Ferro Alloys Ltd. (BFAL)	40	50	85	65	60
Bhutan Insurance Ltd. (BIL)	…	…	8	15	10
Bhutan Times Ltd. (BTL)	…	…	…	…	…
Bhutan National Bank Ltd. (BNB)	29	29	29	…	17
Bhutan Polymers Company Ltd. (BPCL)	25	35	30	10	5
Bhutan Tourism Corpn. Ltd (BTCL)	30	…	20	25	25
Druk Ferro Alloys Ltd. (DFAL)	…	…	17	23	17
Druk PNB Bank (DPNB)	…	…	…	…	6
Druk plaster & Chemicals Ltd. (DPOP)	15	30	60	15	25
Druk Satair Corporation Ltd. (DSCL)	45	100	60	75	70
Druk Wang Alloys Ltd. (DWAL)	…	…	40	60	30
S.D Eastern Bhutan Coal Company Ltd. (EBCC)	80	30	60	65	75
Jigme Mining Corporation Ltd. (JMCL)	70	70	100	100	100
Kuensel Corporation Ltd. (KCL)	9	12	18	20	12
Penden Cement Authority Ltd. (PCAL)	70	100	100	100	100
Royal Insurance Corpn. of Bhutan (RICB)	30	15	25	30	35
T Bank Ltd. (TBL)	…	…	…	…	…
State Trading Corpn. of Bhutan Ltd. (STCB)	20	10	25	20	…

Source: Royal Securities Exchange of Bhutan Ltd.

Table 12.18: Bonus, Rights, Employee Stock Options (ESoP) Issued by the Company, 2008 - 2012

(No. of shares)

Company	2008	2009	2010	2011	2012
Bhutan Board Products Ltd. (BBPL)	…	…	…	…	…
Bhutan Carbide & Chemical Ltd. (BCCL)	…	…	…	…	…
Bhutan Ferro Alloys Ltd. (BFAL)	…	…	…	…	…
Druk Ferro Alloys Ltd. (DFAL)	…	…	1,267,632	…	…
Bhutan Tourism Corpn. Ltd (BTCL)	…	…	…	…	…
Bhutan National Bank Ltd. (BNBL)	2,365,117	…	…	3,203,166	13,516,682
Druk Satair Corporation Ltd. (DSCL)	…	…	456,543	…	…
Jigme Mining Corporation Ltd. (JMCL)	…	142,232	…	142,231	…
Penden Cement Authority Ltd. (PCAL)	1,133,337	…	…	…	…
Royal Insurance Corpn. of Bhutan (RICB)	…	1,440,000	…	…	…
State Trading Corpn. of Bhutan Ltd. (STCB)	…	…	200,000	200,003	300,005
Druk PNB Bank (DPNB)	…	…	…	…	1,490,273
Bhutan Insurance Ltd. (BIL)	…	…	…	…	1,000,000
Total	**3,498,454**	**1,582,232**	**1,924,175**	**3,545,400**	**16,306,960**

Source: Royal Securities Exchange of Bhutan Ltd.

CHAPTER 13
PUBLIC FINANCE

Until the inception of five year development plan in the country, the economic activities were basically involved in traditional way. The economic transaction was done through barter system; taxes were being collected in the form of kind and labor. The citizens were to remit certain portion of their agricultural, forest and livestock produce to government and mandatory to provide labor services to accomplish national developmental activities.

With start of Five Year Plan development in 1961 and steady economic integration at regional to global level has necessitated institutionalization of contemporary public finance system in the country. For this, the position of a Finance Secretary was created in the Royal Secretariat in 1963 and Ministry of Finance is one among the first few Ministries established in 1968. Further with introduction of Bhutanese paper currency in 1974, there has been systematic transition from barter system to monetized economy and the ancient taxation system has been gradually phased out and replaced by monetary taxation. In order to institutionalize the fair and equitable taxation and for coherent and rational tax system, taxation policy were initiated in the year 1989. The taxation policy was further revised in 1992, to trim down the tax formation and also to widen tax base in the country.

As required by Public Finance Act, 2007, the Ministry of Finance is responsible for overall financial management through effective and efficient use of public resources. As mandated for maintaining sound fiscal and macroeconomic policies, it coordinate, presents and produce macro-fiscal or government finance statistics of the country. Share of government expenditure to GDP is substantial and is significant for overall economic development of the country.

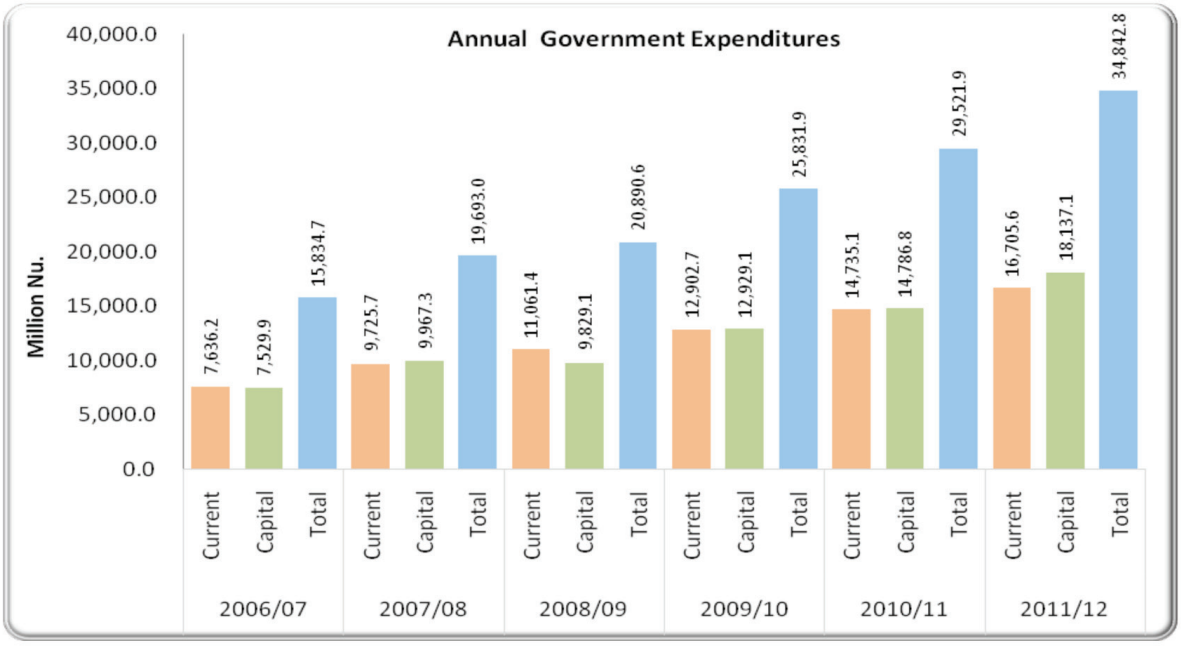


Table 13.1: Annual Current Expenditure of the Government by Agency, 2007/08 To 2011/12

(Nu. in million)

Agency	2007/08	2008/09	2009/10	2010/2011	2011/12
Ministry	**5,718.647**	**6,236.157**	**6,973.991**	**7,770.973**	**9,234.328**
Ministry Of Home & Cultural Affairs	706.79	822.52	869.56	1,041.93	1,244.78
Ministry Of Finance	2,518.32	2,678.36	2,805.83	2,996.69	3,702.94
Ministry Of Foreign Affairs	242.81	255.46	325.22	393.28	484.04
Ministry Of Agriculture & Forests	725.49	828.68	1,011.58	1,159.47	1,326.20
Ministry Of Economic Affairs	187.23	169.17	208.54	248.34	258.38
Ministry Of Works & Human Settlement	317.14	332.17	355.98	372.67	406.10
Ministry Of Information & Communications	103.27	111.46	137.87	148.17	271.95
Ministry Of Health	636.49	751.46	886.67	1,034.47	1,196.97
Ministry Of Education	154.52	154.71	218.77	199.16	164.76
Ministry Of Labour & Human Resources	126.57	132.15	153.98	176.79	178.20
Judiciary	**97.60**	**113.72**	**145.65**	**172.06**	**189.34**
Constitutional Bodies	333.37	108.91	143.02	234.37	381.22
Royal Civil Service Commission	16.85	19.94	25.62	32.85	35.07
Anti-Corruption Commission	9.47	11.89	19.49	24.59	29.59
Election Commission Of Bhutan	256.26	18.95	22.11	86.52	213.26
Royal Audit Authority	50.79	58.13	75.80	90.42	103.30
Autonomous Bodies	**852.82**	**1,371.00**	**1,610.99**	**1,928.61**	**1,687.30**
His Majesty's Secretariat	16.54	30.22	49.11	50.92	36.21
His Majesty's Secretariat (4th King)	15.08	15.61	16.67	17.67	17.67
National Assembly Of Bhutan	19.16	51.32	60.16	75.83	88.31
National Council Of Bhutan	13.01	33.83	43.60	49.90	55.21
Council For Religious Affairs	242.27	373.19	398.53	437.38	472.20
Cabinet Secretariat	12.58	39.82	36.73	33.22	39.30
Office Of The Attorney General	9.94	11.90	12.83	17.07	17.46

Table 13.1: contd...

Bhutan Olympic Committee	25.94	29.83	29.07	29.82	32.25
Dzongkha Development Commission	11.02	11.88	13.48	17.13	16.63
National Land Commission	59.01	114.13	147.48	237.64	242.24
Centre For Bhutan Studies And GNH Research	17.59	13.89	23.91	24.02	16.03
Gross National Happiness Commission	17.91	27.16	29.47	32.25	35.14
National Environment Commission	17.00	16.54	19.41	19.72	27.26
Royal Institute Of Management	21.26	25.06	36.69	39.53	44.06
Royal University Of Bhutan	233.00	300.57	328.39	393.04	-
National Statistics Bureau	13.28	14.60	19.75	20.08	27.32
Bhutan Narcotic Control Agency	3.13	4.70	8.92	9.61	11.89
Bhutan Information Communication Media Authority	6.04	6.65	11.88	12.63	14.31
Thromdeys	99.05	207.84	260.89	316.19	334.63
Drug Regulatory Authority	…	3.10	4.37	7.01	7.78
Tourism Council Of Bhutan	…	28.97	32.78	52.59	46.05
National Commission For Women & Children	…	10.18	14.73	15.19	18.44
Royal Education Council	…	…	12.14	20.17	17.97
Bhutan Council For School Examination & Assessment	…	…	…	…	59.45
Royal Privy Council	…	…	…	…	9.49
Dzongkhag Administration	**2,632.64**	**3,124.51**	**3,898.42**	**4,495.65**	**5,052.94**
Gewog Administration	**90.64**	**107.14**	**130.61**	**133.42**	**160.53**
Total Expenditure	**9,725.72**	**11,061.43**	**12,902.68**	**14,735.08**	**16,705.65**

Source : Annual Financial Statement, Department of Public Accounts, MoF, Thimphu.

Table 13.2: Annual Capital Expenditure of the Government by Agency, 2007/08 To 2011/12

(Nu. in million)

	2007/08	2008/09	2009/10	2010/2011	2011/12
Ministry	**7,818.597**	**7,245.156**	**8,365.016**	**8,285.279**	**10,180.910**
Ministry Of Home & Cultural Affairs	241.883	327.870	435.859	538.049	713.135
Ministry Of Finance	1,974.888	2,195.492	981.471	931.333	1,243.859
Ministry Of Foreign Affairs	38.703	16.735	28.023	22.899	155.582
Ministry Of Agriculture & Forests	511.366	629.237	776.698	627.826	756.363
Ministry Of Economic Affairs	595.406	658.182	839.680	1641.957	610.754
Ministry Of Works & Human Settlement	2,968.013	2,076.061	3,702.069	2403.801	3,666.457
Ministry Of Information & Communications	141.865	80.510	380.534	1034.758	1,311.630
Ministry Of Health	695.801	591.514	470.375	387.956	477.007
Ministry Of Education	539.840	571.006	579.699	529.922	959.351
Ministry Of Labour & Human Resources	110.832	98.549	170.608	166.778	286.772
Judiciary	**25.084**	**58.508**	**132.061**	**85.211**	**341.032**
Constitutional Bodies	130.992	137.383	180.529	151.458	216.531
Royal Civil Service Commission	67.309	90.629	124.542	98.796	110.159
Anti-Corruption Commission	11.462	18.742	21.447	29.004	40.406
Election Commission Of Bhutan	47.139	13.307	16.061	9.918	22.078
Royal Audit Authority	5.081	14.705	18.479	13.74	43.888
Autonomous Bodies	**564.748**	**619.536**	**1,380.141**	**1,674.566**	**1,628.565**
His Majesty's Secretariat	44.214	64.095	13.553	7.409	5.675
His Majesty's Secretariat (4th King)	0.176	0.180	0.166	0.211	1.478
National Assembly Of Bhutan	55.794	32.338	3.601	7.822	5.476
National Council Of Bhutan	20.722	26.139	7.078	3.034	6.129
Council For Religious Affairs	43.550	49.686	57.397	96.482	173.505
Cabinet Secretariat	10.919	4.973	2.422	12.37	16.372
Office Of The Attorney General	4.760	4.326	5.449	2.279	24.659

Table 13.2: contd...

Bhutan Olympic Committee	1.634	2.432	9.536	20.316	16.817
Dzongkha Development Commission	3.332	2.879	3.375	6.518	6.632
National Land Commission	77.140	80.747	134.171	111.988	165.981
Centre For Bhutan Studies And GNH Research	3.008	2.399	4.678	0.63	3.250
Gross National Happiness Commission	20.744	48.009	313.803	237.555	56.187
National Environment Commission	26.198	29.002	56.666	35.221	56.709
Royal Institute Of Management	29.761	35.728	17.132	34.527	80.623
Royal University Of Bhutan	191.110	123.477	381.084	576.057	721.113
National Statistics Bureau	7.527	10.511	27.013	3.732	7.857
Bhutan Narcotic Control Agency	2.242	2.221	2.199	1.77	4.324
Bhutan Information Communication Media Authority	1.688	7.989	190.582	131.176	40.098
Thromdeys	20.228	12.668	28.567	58.531	74.850
Drug Regulatory Authority	…	2.024	2.788	0.811	3.538
Tourism Council Of Bhutan	…	72.932	96.453	259.061	86.644
National Commission For Women & Children	…	4.783	2.035	1.91	11.373
Royal Education Council	…	…	20.393	65.156	50.077
Bhutan Council For School Examination & Assessment	…	…	…	…	9.012
Royal Privy Council	…	…	…	…	0.186
Dzongkhag Administration	**1,172.641**	**1,209.203**	**1970.864**	**3047.693**	**3381.981**
Gewog Administration	**255.247**	**559.357**	**900.532**	**1542.639**	**2388.097**
Total Expenditure	**9,967.310**	**9,829.144**	**12,929.143**	**14,786.846**	**18,137.116**

Source : Annual Financial Statement, Department of Public Accounts, MoF, Thimphu.

Table 13.3: Sectoral Government Expenditures, 2007/08 To 2011/12

(Nu. in million)

Sectors	2007/08		2008/09		2009/10		2010/11		2011/12	
	Current	Capital	Current	Capital	Current	Capital	Current	Capital	Current	Capital
Social Services	2,933.040	1,958.094	3,596.68	1,939.30	4,517.89	2,499.56	5,201.64	3,051.95	5,409.87	4,269.84
Health	961.687	829.919	1,131.86	798.63	1,364.25	787.54	1,544.74	744.16	1,783.51	1,171.16
Education	1,971.353	1,128.175	2,464.83	1,140.67	3,153.64	1,712.02	3,656.90	2,307.78	3,626.36	3,098.68
Economic Services	1,659.691	4,049.974	1,818.43	3,663.81	2,165.26	6,530.49	2,417.60	7,806.12	2,766.80	8,650.05
Agriculture	1,008.127	863.460	1,144.49	1,127.70	1,374.26	1,715.04	1,495.95	2,353.15	1,686.60	3,047.62
Mining & Manuft. Industries	126.047	71.325	111.03	71.11	145.86	60.59	175.47	61.94	182.05	57.11
Transport & Communication	337.762	2,480.277	343.65	1,706.44	395.70	3,708.71	437.36	3,381.55	579.15	4,601.97
Energy	39.521	491.192	47.62	585.42	50.09	776.03	56.60	1,571.07	60.30	540.31
Other Economic Services	148.234	143.720	171.64	173.14	199.35	270.12	252.22	438.41	258.70	403.04
Housing & Public Amenities	248.001	734.144	296.36	595.31	336.89	858.67	304.79	763.50	307.22	764.14
Public Order & Safety Services	652.649	97.984	813.98	319.90	875.84	429.51	1,138.33	488.59	1,341.52	773.50
Religion & Culture Services	322.517	274.375	498.72	274.34	511.32	442.36	538.10	631.03	582.81	854.10
General Services	3,909.821	2,852.738	4,037.27	3,036.48	4,495.52	2,168.54	5,134.60	2,045.66	6,297.43	2,825.49
General Public Service	2,190.585	2,852.738	2,303.43	3,036.48	2,247.30	1,555.43	2,737.98	1,448.23	3,285.16	1,957.47
National Debt Services	1,719.236	0.000	1,733.83	0.00	2,248.22	613.11	2,396.63	597.43	3,012.27	868.03
Total Expenditure	**9,725.719**	**9,967.309**	**11,061.43**	**9,829.14**	**12,902.71**	**12,929.14**	**14,735.06**	**14,786.85**	**16,705.65**	**18,137.12**

Source: Annual Financial Statement (AFS), Department of Public Accounts, Ministry of Finance

Table 13.4: Summary of National Revenue of the Government by Source, Bhutan, 2007/08 To 2011/12

(Nu. in Million)

By Source	2007/08	2008/09	2009/10	2010/11	2011/12
Tax Revenue	**5,238.78**	**6,482.41**	**9,655.78**	**11,593.49**	**14,676.93**
Direct Tax	3,387.20	4,328.73	6,989.91	8,025.58	8,987.04
Corporate Tax	1,817.69	2,340.94	4,710.10	5,109.89	5,186.09
Business Income Tax	464.94	553.43	707.30	1,109.88	1,299.15
Personal Income Tax	264.66	387.48	566.98	704.93	925.18
Other Tax Revenue	839.91	1,046.89	1,005.54	1,100.89	1,576.62
Motor Vehicle Tax	107.95	117.49	135.72	177.46	209.55
Business & Prof. licences	52.90	65.47	57.58	65.87	75.57
Airport Tax	22.56	25.90	28.97	35.08	42.05
Municipal Tax	25.37	9.70	9.85	5.92	3.33
Health Contribution	58.19	71.28	92.80	105.17	131.48
Royalties	572.95	757.05	680.61	711.38	1,114.62
Indirect Tax	1,851.57	2,153.68	2,665.87	3,567.90	5,689.89
Sales Tax	830.99	918.24	1,191.77	1,636.41	2,392.36
Excise Duty	877.72	1,040.69	1,262.76	1,605.34	2,836.92
Import Duty	129.48	177.96	195.68	305.95	438.38
Other Tax Revenue	13.39	16.79	15.67	20.20	22.23
Non Tax Revenue	**7,107.63**	**7,566.63**	**5,982.65**	**5,865.31**	**5,677.53**
Admin.Fees & Charges	238.57	236.77	284.12	389.93	336.75
Capital Revenue	84.36	96.42	93.49	93.32	105.84
Revenue from Govt. Dept	256.91	194.76	203.63	236.93	300.63
Dividend	2,479.82	1,915.09	3,018.84	2,997.21	2,946.90
Net Surplus Transfer	2,366.12	3,394.54	656.73	398.09	254.25
Other Non-Tax Revenue	22.50	33.77	31.61	18.68	68.74
Interest Receipt from Corporations	1,659.35	1,695.28	1,694.24	1,731.17	1,664.42
Total Revenue	**12,346.40**	**14,049.04**	**15,638.43**	**17,458.80**	**20,354.46**

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

Table 13.5: Fiscal Framework of Government, Bhutan 2007/07 To 2011/12

(Nu. in Millions)

Item	2007/08	2008/09	2009/10	2010/11	2011/12
Revenue & Grants	**18,317.33**	**23,443.00**	**30,990.68**	**28,171.76**	**32,646.36**
Domestic Revenue	12,346.40	14,049.04	15,638.43	17,458.80	20,354.46
Tax revenue	5,238.78	6,482.41	9,655.78	11,593.49	14,676.93
Non-tax revenue	7,107.63	7,566.63	5,982.65	5,865.31	5,677.53
Grants	5,935.42	6,575.07	11,118.88	10,497.73	12,501.52
India	4,671.11	4,394.88	7,306.39	7,882.77	9,003.44
Others	1,264.31	2,180.19	3,812.49	2,614.96	3,498.08
Other receipts	35.50	2,818.89	4,233.37	215.24	(209.63)
Outlay	**18,065.04**	**22,350.54**	**29,888.99**	**29,842.45**	**33,688.01**
Total Expenditure	19,693.02	20,890.58	25,831.83	29,521.92	34,842.76
Current	9,725.71	11,061.43	12,902.69	14,735.08	16,705.65
Capital	9,967.30	9,829.15	12,929.14	14,786.85	18,137.11
Net lending (NL)	(1,653.70)	(1,580.30)	(400.37)	(906.61)	(1,036.57)
Advance/Suspense (Net)	25.72	196.36	334.73	1,227.13	(118.18)
Other Payments	…	2,843.91	4,122.81	…	…
Fiscal Balance	**252.29**	**1,092.46**	**1,101.68**	**(1,670.69)**	**(1,041.65)**
Financing	(252.29)	(1,092.46)	(1,101.68)	1,670.69	1,041.65
Net Borrowings	(1,319.21)	(1,218.71)	81.99	293.97	(1,007.15)
Borrowings	757.58	832.92	2,817.51	3,110.01	6,212.87
Repayments	2,076.78	2,051.63	2,735.53	2,816.04	7,220.01
Resource Gap	**(1,066.92)**	**(126.25)**	**1,183.67**	**(1,376.72)**	**(2,048.80)**

Source : Annual Financial Statement (AFS), Department of Public Accounts, Ministry of Finance

Table 13.6: Revenue Collection by Sector, 2007/08 To 2011/12

(Nu. in Millions)

Sector	2007/08	2008/09	2009/10	2010/11	2011/12
Agriculture	**230.06**	**191.42**	**209.42**	**368.02**	**375.85**
Industry	**5,323.23**	**6,288.48**	**4,210.79**	**4,476.27**	**4,205.12**
Manufacturing	373.68	562.80	420.76	658.34	592.57
Electricity	4,949.55	5,725.68	3,790.03	3,817.92	3,612.55
Service	**4,915.41**	**5,558.46**	**6,245.14**	**7,472.56**	**10,511.49**
Transport, communication, hotel & restaurant	1,873.57	1,909.95	1,938.93	2,042.12	2,498.07
Trade	2,422.34	2,789.40	3,464.45	4,882.97	7,166.66
Finance	619.50	859.12	841.76	547.47	846.75
Gross Sectoral Revenue Collection*	**10,468.70**	**12,038.35**	**10,665.34**	**12,316.84**	**15,092.46**

** Sectoral revenue are based on gross collection and excludes PIT collections, Druk Holding Investment (DHI) dividends and interest receipts on loan from corporations*

Source: National Revenue Report, Department of Revenue & Customs, Ministry of Finance

Table 13.7: Government Debt Stock & Debt Service, 2007/08 To 2011/2012

(Nu. in Millions)

Debt	2007/08	2008/09	2009/10	2010/11	2011/12
Total Public Debt	**33,070.99**	**34,759.03**	**36,788.48**	**48,619.18**	**62,813.11**
Domestic Debt	1,402.42	1,227.12	1,051.82	876.51	1,092.55
External Debt	31,668.57	33,531.91	35,736.67	47,742.67	61,720.56
Indian Rupee Debt	17,320.25	17,483.39	18,277.57	24,647.54	32,546.30
Convertible Currency Debt	14,348.32	16,048.52	17,459.10	23,095.13	29,174.26
Total Debt Service	**3,796.00**	**3,864.02**	**4,478.71**	**4,610.09**	**9,106.05**
Domestic	262.06	253.86	742.92	733.88	5,067.55
External	3,533.94	3,610.16	3,735.79	3,876.21	4,038.50
Interest payment	1,719.22	1,812.39	1,743.18	1,794.05	1,886.04
Domestic	86.76	78.56	70.10	59.21	76.15
External	1,632.46	1,733.83	1,673.08	1,734.85	1,809.88
Indian Rupee	1,500.83	1,497.56	1,497.56	1,497.56	1,497.56
Convertible Currency	131.64	236.28	175.52	237.29	312.33
Principal payment	2,076.78	2,051.63	2,735.53	2,816.04	7,220.01
Domestic	175.30	175.30	672.82	674.68	4,991.40
External	1,901.48	1,876.33	2,062.71	2,141.37	2,228.62
Indian Rupee	1,669.39	1,581.84	1,581.84	1,581.84	1,581.84
Convertible Currency	232.09	294.49	480.87	559.52	646.78
Exchange Rate (Nu/USD)*	**42.86**	**48.19**	**46.59**	**44.96**	**57.22**

** The exchange rate as on period ending*

Source: Annual Financial Statement (AFS), Department of Public Accounts, Ministry of Finance

CHAPTER 14

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 conversation 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.

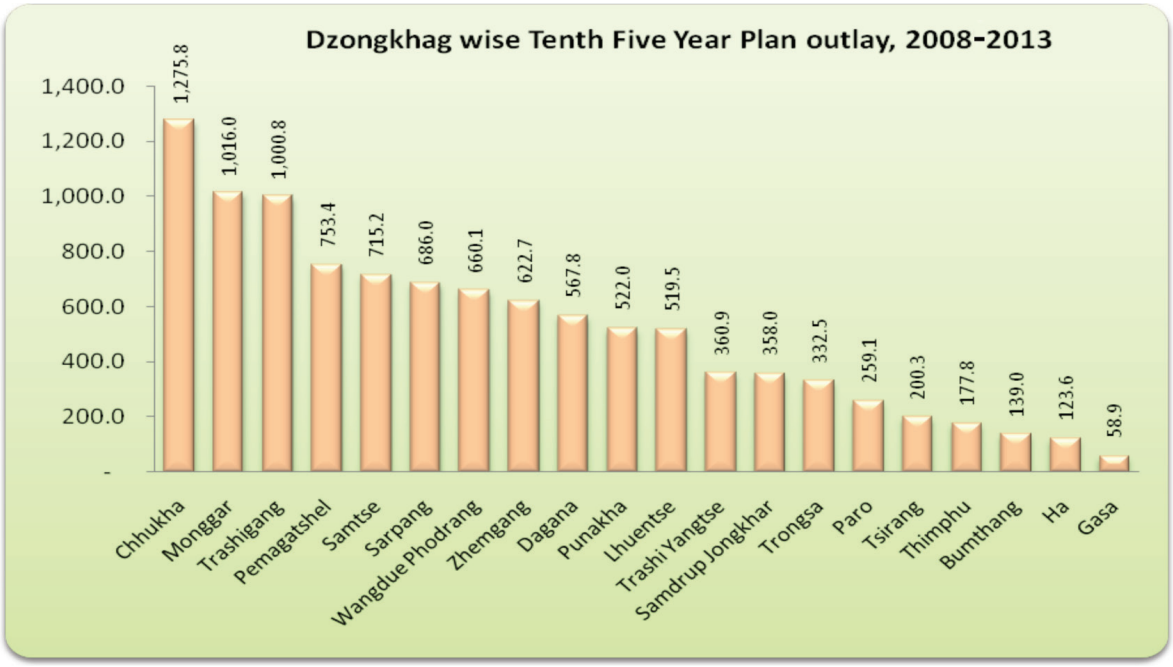


Table 14.1: Tenth Plan Budgetary Outlay and Allocation, Bhutan, 2008/2013

(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 Commision	77.10	30.60	107.70	0.07
Council for Ecclesiasstical 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
Drug Regulatory Authority	16.15	-	16.15	0.01
Tourism Council ob 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

Table 14.1: contd...

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 Econimic 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
Total Outlay	**72,640.47**	**73,611.76**	**146,252.22**	**100.00**

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

Table 14.2: 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	-	0.11
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 Commision	0.10	0.07
Council for Ecclesiasstical Affairs	1.10	1.71

Table 14.2: contd...

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	-	0.07
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
Drug Regulatory Authority	..	0.01
Tourism Council ob Bhutan	0.30	0.49
Ministries	**48.49**	**67.56**
Ministry of Agriculture	6.50	5.55
Ministry of Education	3.70	7.09
Ministry of Finance	2.30	20.74
Ministry of Foreign Affairs	2.10	1.21
Ministry of Health	6.40	5.86
Ministry of Home and Cultural Affairs	0.09	4.99
Ministry of Information and Communication	14.80	2.97
Ministry of labour and Human Resources	0.40	1.50
Ministry of Econimic Affairs	12.20	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	**24.50**	**18.75**
Dzongkhags	21.30	4.92
Gewogs	3.20	3.28
Total Outlay	**..**	**86.97**

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

Table 14.3: 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
Total	**7,802.5**	**9,318.3**	**17,120.8**

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

Table 14.4: 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	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
Trashi 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
Total	**4,379.7**	**5,969.7**	**10,349.4**

Note:. Capital budget does not include the gewogs capital budget
Source: Gross National Happiness Commission (GNHC), Thimphu.

CHAPTER 15
NATIONAL ACCOUNTS

The System of National Accounts (SNA) is a systematic framework of accounts that measures the level of economic development and the rate of economic growth over time. It gives a macroeconomic depiction of how the economy as a whole functions and its relationship with the rest of the world. This is measured conventionally through Gross Domestic Product (GDP).

GDP represents the end result of all economic activities that take place in the economy. It is the sum total of value of all goods and services produced within the economic boundary of the country, which are available for final uses such as consumption, investment and exports.

GDP is measured both in current and constant prices. The base year for GDP estimation in Bhutan is the year 2000. The current price estimate reflects the monetary value of all goods and services produced in the economy at prices prevailing in the year of reporting, while the constant price estimate reflects the monetary value of all goods and services at the base year prices. The estimation and compilation methodology is as per the United Nations System of National Accounting. GDP in Bhutan is estimated using production and expenditure approach.

The objective of the National Accounts Report is to provide timely, comprehensive and reliable description of the condition and performance of the economy. This is done through measurement of GDP, Gross National Income (GNI), and Final Consumption Expenditure (FCE), Gross Capital Formation (GCF), Saving and Net Exports. These information serve as useful and critical information to politicians, policy makers, planners, academicians, researchers and other users in the overall socio-economic planning and policy formulation, monitoring, analysis, and evaluation of the performance of the economy.

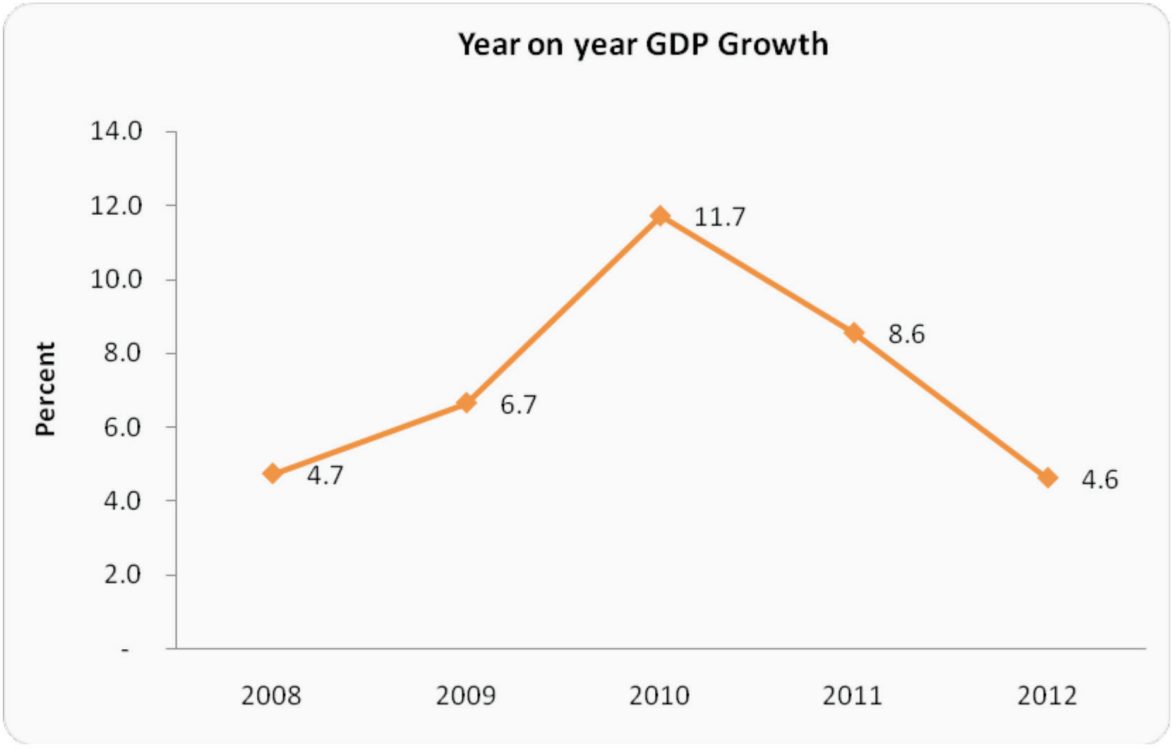


Table 15.1: GDP by Economic Activity at Current Prices, (2008 - 2012)

(Nu. in million)

Sectors	2008	2009	2010	2011	2012
1. Agriculture, Livestock & Forestry	10,078.28	11,158.67	12,177.83	13,868.37	16,893.53
1.1 Crops	5,060.59	5,668.24	6,530.14	7,665.37	9,925.76
1.2 Livestock	2,624.54	2,894.92	3,109.68	3,473.20	3,993.83
1.3 Forestry & Logging	2,393.15	2,595.51	2,538.01	2,729.79	2,973.94
2. Mining & Quarrying	1,251.99	1,392.03	1,616.89	1,941.73	1,961.96
3. Manufacturing	4,593.44	5,017.23	6,324.15	7,044.82	8,934.49
4. Electricity & Water Supply	11,552.22	11,813.45	12,763.60	11,911.61	12,303.14
5. Construction	6,250.98	7,469.68	10,308.86	13,916.57	15,887.54
6. Wholesale & Retail Trade	2,694.65	2,935.27	3,752.55	4,641.79	6,236.35
7. Hotels & Restaurants	569.15	537.61	608.01	948.65	1,378.52
8. Transport, Storage & Communications	5,365.77	5,989.87	6,943.32	9,489.10	10,345.52
9. Financing, Insurance, Real Estates & Business Services	4,576.55	4,962.11	5,545.89	7,007.73	7,712.46
9.1 Finance & Insurance	3,174.35	3,466.21	3,987.66	5,136.84	5,708.77
9.2 Real Estate & Dwellings	1,374.00	1,460.30	1,507.70	1,815.30	1,947.27
9.3 Business Services	28.20	35.60	50.53	55.59	56.42
10. Community, Social & Personal Services	5,930.42	7,963.33	9,262.50	10,882.24	11,248.97
10.1 Public Administration	3,762.71	4,728.37	5,517.28	6,478.03	6,775.74
10.2 Education & Health	2,167.71	3,234.96	3,745.21	4,404.22	4,473.23
11. Private Social & Recreational Services	267.73	276.42	297.97	338.03	390.05
12. Taxes Net of Subsidies	1,613.12	1,704.90	2,895.07	3,922.37	6,162.52
GDP	**54,744.29**	**61,220.56**	**72,496.64**	**85,913.00**	**99,455.05**

Source: National Accounts Statistics, NSB

Table 15.2: Percentage Share of GDP by Economic Activity at Current Prices, (2008 - 2012)

Sectors	2008	2009	2010	2011	2012
1. Agriculture, Livestock & Forestry	18.41	18.23	16.80	16.14	16.99
1.1 Crops	9.24	9.26	9.01	8.92	9.98
1.2 Livestock	4.79	4.73	4.29	4.04	4.02
1.3 Forestry & Logging	4.37	4.24	3.50	3.18	2.99
2. Mining & Quarrying	2.29	2.27	2.23	2.26	1.97
3. Manufacturing	8.39	8.20	8.72	8.20	8.98
4. Electricity & Water Supply	21.10	19.30	17.61	13.86	12.37
5. Construction	11.42	12.20	14.22	16.20	15.97
6. Wholesale & Retail Trade	4.92	4.79	5.18	5.40	6.27
7. Hotels & Restaurants	1.04	0.88	0.84	1.10	1.39
8. Transport, Storage & Communications	9.80	9.78	9.58	11.05	10.40
9. Financing, Insurance, Real Estates & Business Services	8.36	8.11	7.65	8.16	7.75
9.1 Finance & Insurance	5.80	5.66	5.50	5.98	5.74
9.2 Real Estate & Dwellings	2.51	2.39	2.08	2.11	1.96
9.3 Business Services	0.05	0.06	0.07	0.06	0.06
10. Community, Social & Personal Services	10.83	13.01	12.78	12.67	11.31
10.1 Public Administration	6.87	7.72	7.61	7.54	6.81
10.2 Education & Health	3.96	5.28	5.17	5.13	4.50
11. Private Social & Recreational Services	0.49	0.45	0.41	0.39	0.39
12. Taxes Net of Subsidies	2.95	2.78	3.99	4.57	6.20
Overall GDP	**100**	**100**	**100**	**100**	**100**

Source: National Accounts Statistics, NSB

Table 15.3: Sectoral Growth Rates of GDP in Constant Prices, (2008 - 2012)

(Nu. in million)

Sectors	2008	2009	2010	2011	2012
1. Agriculture, Livestock & Forestry	0.71	2.66	0.85	2.41	3.44
1.1 Crops	1.86	2.24	1.17	2.94	4.10
1.2 Livestock	0.54	2.35	2.94	1.16	1.14
1.3 Forestry & Logging	(1.35)	3.88	(2.33)	2.93	4.99
2. Mining & Quarrying	20.09	(6.91)	8.51	24.19	(2.24)
3. Manufacturing	8.51	6.88	20.18	7.30	8.94
4. Electricity & Water Supply	13.32	(2.65)	5.45	(5.51)	(0.57)
4.1. Electricity	13.31	(2.67)	5.51	(5.41)	(0.59)
4.2. Water Supply	15.27	4.54	(14.67)	(43.15)	12.95
5. Construction	(10.22)	16.53	20.61	14.71	4.18
6. Wholesale & Retail Trade	0.86	6.21	20.02	19.21	24.17
7. Hotels & Restaurants	45.40	(12.90)	3.87	41.17	27.81
8. Transport, Storage & Communications	5.32	9.23	11.11	21.54	1.08
9. Financing, Insurance, Real Estates & Business Services	5.04	6.20	8.52	21.84	(2.86)
9.1 Finance & Insurance	5.57	6.77	10.12	25.82	(4.14)
9.2 Real Estate & Dwellings	1.44	3.91	2.28	7.44	3.28
9.3 Business Services	302.52	20.96	32.62	10.27	(17.46)
10. Community, Social & Personal Services	3.06	28.59	13.03	3.42	(6.43)
10.1 Public Administration	3.06	20.41	13.32	3.36	(5.32)
10.2 Education & Health	3.06	42.77	12.61	3.52	(8.06)
11. Private Social & Recreational Services	5.21	2.00	1.99	2.75	2.66
12. Taxes Net of Subsidies	6.52	(0.65)	57.00	20.04	49.86
Overall GDP	**4.74**	**6.66**	**11.73**	**8.55**	**4.62**

Source: National Accounts Statistics, NSB

Table 15.4: Gross Domestic Product by Major Sectors in Current Prices, (2008 - 2012)

(Nu. in Million)

Sector	2008	2009	2010	2011	2012
1. Primary	11,330.27	12,550.70	13,794.72	15,810.09	18,855.49
2. Secondary	22,396.64	24,300.36	29,396.61	32,873.00	37,125.17
3. Tertairy	21,017.39	24,369.51	29,305.31	37,229.91	42,575.85
Overall GDP	**54,744.29**	**61,220.56**	**72,496.64**	**85,913.00**	**98,556.51**

Source: National Accounts Statistics, NSB

Table 15.5: Percentage Share of GDP by Major Sector in Current Prices, 2008 - 2012

Sector	2008	2009	2010	2011	2012
1. Primary	20.7	20.5	19.0	18.4	19.1
2. Secondary	40.9	39.7	40.5	38.3	37.7
3. Tertairy	38.4	39.8	40.4	43.3	43.2
Overall GDP	**100**	**100**	**100**	**100**	**100**

Source: National Accounts Statistics, NSB

Table 15.6: Year on Year GDP Growth, (2008-2012)

(in Percent)

Sector	2008	2009	2010	2011	2012
1. Primary	2.53	1.60	1.63	4.76	2.72
2. Secondary	5.64	3.94	12.65	3.24	3.17
3. Tertairy	4.82	12.19	15.21	15.49	6.62
Overall GDP	**4.74**	**6.66**	**11.73**	**8.55**	**4.62**

Source: National Accounts Statistics, NSB

Table 15.7: GDP by Expenditure at Current Prices, (2008 - 2012)

(Nu. in million)

Description	2008	2009	2010	2011	2012
1. Final Consumption Expenditure	32,134.35	40,284.29	46,239.96	52,610.20	58,713.25
Households & NPISHs	21,761.78	27,202.22	31,752.11	35,562.37	40,022.10
General Government	10,372.57	13,082.07	14,487.85	17,047.84	18,691.15
2. Gross Domestic Capital Formation	24,144.92	28,446.49	43,809.50	56,819.74	63,543.69
Construction	13,330.62	15,049.64	24,863.87	33,517.76	38,513.43
Machinery & Equipment	10,199.22	13,666.16	18,573.54	23,617.77	25,148.32
Changes in Inventories	615.08	(269.31)	372.08	(315.79)	(118.06)
3. Net Export	(5,063.15)	(11,240.11)	(22,695.01)	(27,868.23)	(29,029.30)
Export of Goods & Services	26,277.43	26,031.02	27,575.01	30,306.33	33,992.70
Import of Goods & Services	31,340.59	37,271.13	50,270.02	58,174.56	63,022.00
GDP, Expenditure	51,216.11	57,490.67	67,354.45	81,561.71	93,227.65
GDP, Production	54,744.29	61,220.56	72,496.64	85,913.00	98,556.51
Statistical Discrepancy	3,528.18	3,729.89	5,142.19	4,351.29	5,328.86

Source: National Accounts Statistics, NSB

Table 15.8: GDP Share of Expenditure at Current Prices, (2008 - 2012)

(in Percent)

Expenditure	2008	2009	2010	2011	2012
1. Final Consumption Expenditure	62.74	70.07	68.65	64.50	63.53
Households & NPISHs	42.49	47.32	47.14	43.60	44.18
General Government	20.25	22.76	21.51	20.90	19.34
2. Gross Domestic Capital Formation	47.14	49.48	65.04	69.66	65.77
Construction	26.03	26.18	36.91	41.09	39.86
Machinery & Equipment	19.91	23.77	27.58	28.96	26.03
Changes in Inventories	1.20	(0.47)	0.55	(0.39)	(0.12)
3. Net Export	(9.89)	(19.55)	(33.69)	(34.17)	(29.29)
Export of Goods & Services	51.31	45.28	40.94	37.16	37.09
Import of Goods & Services	61.19	64.83	74.64	71.33	66.38
GDP Expenditure	**100**	**100**	**100**	**100**	**100**

Source: National Accounts Statistics, NSB

CHAPTER 16
PRICE

Price statistics is an important macro-economic indicator to monitor the overall price movement in the economy. It provides information on inflationary trends in the economy which is essential for formulation of monetary and fiscal policies. It is also used in various other purposes like adjustment of income, deflator in economic series like GDP, business analysis, cost escalation, etc.

Bhutan currently compiles and publishes two price indices namely the Consumer Price Index (CPI) and the Producer Price Index (PPI). CPI is a measure of average price change over time in the prices of goods & services purchased by households whereas PPI is a measure of average price change over time in the prices of goods & services sold by domestic producers. CPI measures price change from a consumer's perspective while PPI measures price change from a producer's perspective.

Bhutan started the first compilation of CPI in 1979. CPI was published biannually from 1979 to 2003, and quarterly from third quarter of 2003 till fourth quarter of 2012. However, starting from January 2013 CPI is produced on a monthly basis. The index reference period is December 2012=100 based on which the relative index changes are compared. The current CPI is rebased using the recent BLSS 2012 data and reflects the latest expenditure pattern of the Bhutanese households.

The first PPI was published for 2nd quarter 2011. It is a quarterly publication, and provides monthly indices as well for monitoring price movements on a monthly basis. It includes sectors such as Logging, Mining & Quarrying, Manufacturing, Electricity & Water, Transport and Communication. PPI is compiled by economic activity using the International Standard Industrial Classification (ISIC rev. 4) and by Product group using the Central Product Classification (CPC ver. 2). The weight reference period for PPI is 2010 and the relative index changes are calculated based on September 2011=100 as the index reference period.

Table 16.1: Year on Year Inflation (2010 - 2013)

Group	Weights	2010		2011				2012				2013	
		Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Food	39.92	6.63	9.53	10.53	10.56	10.72	8.96	11.40	18.72	13.87	11.80	7.86	2.81
Non-Food	60.08	7.43	8.86	9.15	7.12	8.11	8.17	8.39	10.67	9.67	8.30	8.66	7.14
Total	**100**	**7.15**	**9.10**	**9.64**	**8.33**	**9.02**	**8.45**	**9.46**	**13.53**	**11.17**	**9.54**	**8.37**	**5.51**

Source: CPI Bulletin June 2013, National Accounts Division, NSB, Thimphu

Table 16.2: Year-on-Year Percent Change by Group Level (2010 - 2013)

12 Major Groups	Weights	2010		2011				2012				2013	
		Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Food and non-alcoholic Beverages	36.88	7.02	9.98	11.00	10.82	10.33	8.18	10.27	18.35	14.36	12.48	8.32	2.37
Alcoholic Beverages and Narcotics	3.03	1.57	3.62	4.19	7.00	16.08	19.92	27.73	24.07	7.48	3.21	1.99	8.14
Clothing and Footwear	9.20	4.91	5.36	10.21	12.24	16.39	16.55	13.83	21.11	17.83	15.25	16.20	10.68
Housing, Water, Electricity, Gas and other Fuels	21.70	12.72	14.06	9.78	2.98	3.39	4.77	5.78	6.91	7.36	5.76	6.82	7.11
Furnishing, Household Equipment and Routine Maintenance of the House.	2.22	4.84	6.44	9.15	3.96	8.85	8.01	18.69	27.23	19.46	18.76	8.66	14.24
Health	4.67	5.68	5.21	7.76	5.74	3.72	5.94	4.57	7.14	8.43	6.97	5.81	6.05
Transport	11.98	4.50	4.72	7.91	13.30	12.35	12.97	9.52	3.11	2.39	1.31	2.09	3.44
Communication	3.03	0.46	-0.95	-1.63	0.03	-4.35	-0.70	-0.58	-1.46	-4.16	-4.89	-4.22	-2.26
Recreational and Culture	2.35	2.87	14.73	31.98	38.40	38.49	23.29	9.76	13.83	12.87	11.53	9.68	7.77
Education	1.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.35
Restuarents and Hotels	1.24	6.28	14.09	11.45	10.57	11.57	3.82	7.10	6.21	9.39	10.27	23.24	14.23
Miscellaneous Goods and Services	2.06	4.10	4.10	0.71	1.50	3.20	3.53	7.58	18.93	17.19	16.52	17.61	11.48
Total	**100**	**7.15**	**9.10**	**9.64**	**8.33**	**9.02**	**8.45**	**9.46**	**13.53**	**11.17**	**9.54**	**8.37**	**5.51**

Source: CPI Bulletin June 2013, National Accounts Division, NSB, Thimphu

Table 16.3: Month-on-Month Index and Percent Change in the CPI by Overall Index

December 2012=100

Group	Weights	2012	2013							2013						
			Index							Change(%)						
		Dec	Jan	Feb	March	April	May	June	July	Jan	Feb	March	April	May	June	July
Food	39.92	100.00	101.31	102.35	102.46	104.16	104.27	106.14	107.97	1.31	1.02	0.11	1.65	0.11	1.79	1.72
Non-Food	60.08	100.00	102.59	103.12	104.03	104.49	104.97	106.23	108.87	2.59	0.51	0.88	0.45	0.46	1.20	2.49
Total	100	100.00	102.08	102.81	103.40	104.36	104.69	106.19	108.51	2.08	0.71	0.57	0.93	0.32	1.43	2.18
Purchasing Power of Ngultrum (Nu.)		**100**	**98**	**97**	**97**	**96**	**96**	**94**	**92**							

Source: CPI Bulletin June 2013, National Accounts Division, NSB, Thimphu

Table 16.4: Month-on-Month Index & Percent Change by Domestic

Group	Weights	2012	2013							2013						
			Index							Change(%)						
		Dec	Jan	Feb	March	April	May	June	July	Jan	Feb	March	April	May	June	July
Food	17.15	100.00	102.35	104.05	103.50	103.92	103.77	105.41	107.76	2.35	1.66	-0.52	0.40	-0.14	1.58	2.23
Non-Food	30.24	100.00	103.40	103.53	104.24	104.26	104.46	106.09	106.20	3.40	0.12	0.69	0.02	0.19	1.55	0.11
Total	**47.39**	**100.00**	**103.02**	**103.72**	**103.97**	**104.14**	**104.21**	**105.84**	**106.76**	**3.02**	**0.68**	**0.25**	**0.16**	**0.07**	**1.56**	**0.87**

Source: CPI Bulletin June 2013, National Accounts Division, NSB, Thimphu

Table 16.5: Month-on-Month Index & Percent Change by Imported

Group	Weights	2012	2013							2013						
			Index							Change (%)						
		Dec	Jan	Feb	March	April	May	June	July	Jan	Feb	March	April	May	June	July
Food	22.77	100.00	100.54	101.09	101.68	104.33	104.65	106.69	108.12	0.54	0.54	0.59	2.61	0.31	1.95	1.34
Non-Food	29.84	100.00	101.78	102.70	103.81	104.72	105.49	106.38	111.65	1.78	0.91	1.08	0.88	0.74	0.84	4.95
Total	**52.61**	**100.00**	**101.24**	**102.00**	**102.88**	**104.55**	**105.13**	**106.51**	**110.11**	**1.24**	**0.75**	**0.87**	**1.62**	**0.55**	**1.32**	**3.37**

Source: CPI Bulletin June 2013, National Accounts Division, NSB, Thimphu

Table 16.6: Month-on-Month Index and Percent Change by Group Level

12 Major Groups	Weights	2012	2013							2013						
			Index							Change(%)						
		Dec	Jan	Feb	March	April	May	June	July	Jan	Feb	March	April	May	June	July
Food and non-alcoholic Beverages	36.88	100.00	101.19	101.81	102.18	103.86	103.52	105.37	107.13	1.19	0.61	0.37	1.64	-0.33	1.78	1.67
Alcoholic Beverages and Narcotics	3.03	100.00	102.81	109.18	105.90	107.77	113.85	115.98	118.66	2.81	6.20	-3.00	1.77	5.64	1.87	2.31
Clothing and Footwear	9.20	100.00	102.02	104.38	105.46	106.52	107.58	109.16	109.40	2.02	2.31	1.04	1.00	0.99	1.48	0.22
Housing, Water, Electricity, Gas and other Fuels	21.70	100.00	103.29	103.28	103.73	103.80	104.02	106.33	113.08	3.29	-0.01	0.43	0.07	0.22	2.22	6.35
Furnishing, Household Equipment and Routine Maintenance of the House.	2.22	100.00	105.11	109.34	111.81	112.41	114.65	114.71	115.74	5.11	4.02	2.26	0.54	1.99	0.06	0.89

Table 16.6: contd...

Health	4.67	100.00	100.19	100.20	101.26	102.27	102.59	104.34	104.53	0.19	0.01	1.05	1.00	0.32	1.71	0.18
Transport	11.98	100.00	102.77	102.41	102.89	102.97	103.21	103.24	103.47	2.77	-0.35	0.46	0.08	0.23	0.03	0.22
Communication	3.03	100.00	100.06	100.16	100.17	100.20	100.52	100.18	100.22	0.06	0.10	0.01	0.03	0.32	-0.34	0.04
Recreational and Culture	2.35	100.00	104.15	105.16	106.12	107.66	107.43	107.87	108.01	4.15	0.97	0.91	1.46	-0.22	0.41	0.13
Education	1.64	100.00	100.00	100.00	108.35	108.35	108.35	108.35	109.63	0.00	0.00	8.35	0.00	0.00	0.00	1.18
Restuarents and Hotels	1.24	100.00	103.09	104.55	106.47	106.70	108.21	108.46	109.59	3.09	1.41	1.84	0.22	1.41	0.23	1.04
Miscellaneous Goods and Services	2.06	100.00	103.44	103.88	104.44	107.28	108.90	109.91	111.50	3.44	0.43	0.54	2.72	1.51	0.92	1.45

Source: CPI Bulletin June 2013, National Accounts Division, NSB, Thimphu

Table 16.7: Monthly Index Level by Industry (September 2011=100)

Sectors	Share (%)	2012												2013		
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Agriculture, Forestry and Logging	0.72	100.00	100.00	100.00	112.38	112.38	112.38	112.38	112.38	112.38	112.38	112.38	112.38	112.38	112.38	112.38
Mining and quarrying	5.81	103.29	103.38	103.40	103.73	103.93	104.37	106.09	106.84	106.80	107.12	107.30	107.27	111.67	111.33	111.86
Manufacturing	47.66	102.31	102.53	103.92	105.03	107.98	107.96	107.64	107.03	106.65	107.29	108.15	107.74	107.19	107.71	107.25
Electricity, gas, steam and air conditioning supply	35.35	104.54	104.54	104.54	104.54	104.54	104.54	104.75	104.75	104.75	104.75	104.75	104.75	104.75	104.75	104.75
Water supply; sewerage, waste management and remediation activities	0.08	104.59	104.59	104.59	104.59	104.59	104.59	104.59	104.59	104.59	104.59	104.59	104.59	104.59	104.59	104.59
Transport and Storage	5.91	109.62	107.16	108.54	110.29	113.36	115.17	114.61	114.62	114.05	113.11	114.14	113.56	114.08	113.76	114.13
Information and communication	4.47	99.68	99.68	99.68	99.68	99.50	99.50	99.50	99.50	99.50	99.50	99.50	99.50	99.50	96.50	96.50
All Industry	**100**	**103.43**	**103.41**	**104.15**	**104.89**	**106.46**	**106.57**	**106.57**	**106.32**	**106.11**	**106.38**	**106.85**	**106.63**	**106.64**	**106.71**	**106.54**

Source: PPI 2nd Qtr 2013, National Accounts Division, NSB, Thimphu.

Table 16.8: Annual Percentage Change by Industry

Sectors	Share (%)	2012				2013					
		Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Agriculture, Forestry and Logging	0.72	12.38	12.38	12.38	12.38	12.38	12.38	12.38	0.00	0.00	0.00
Mining and quarrying	5.81	6.80	5.69	4.89	4.55	8.12	7.69	8.18	7.78	7.78	7.61
Manufacturing	47.66	6.65	8.52	8.86	7.45	4.77	5.05	3.20	1.68	-0.75	-0.64
Electricity, gas, steam and air conditioning supply	35.35	4.75	4.75	4.75	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Water supply; sewerage, waste management and remediation activities	0.08	4.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transport and Storage	5.91	14.05	4.55	3.68	2.06	4.07	6.16	5.15	3.47	1.01	1.03
Information and communication	4.47	-0.50	-0.50	1.28	1.28	-0.18	-3.19	-3.19	-3.19	-3.02	-9.74
All Industry	**100**	**6.11**	**6.38**	**6.52**	**4.10**	**3.11**	**3.19**	**2.29**	**1.36**	**0.07**	**-0.21**

Source: PPI 2nd Qtr 2013, National Accounts Division, NSB, Thimphu.

Table 16.9: Monthly percentage change by Industry

Sectors	Share (%)	2012												2013					
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Agriculture, Forestry and Logging	0.72	0.00	0.00	0.00	12.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mining and quarrying	5.81	0.67	0.09	0.02	0.32	0.20	0.42	1.65	0.71	-0.04	0.30	0.17	-0.03	4.11	-0.31	0.48	-0.06	0.19	0.27
Manufac-turing	47.66	2.03	0.22	1.36	1.06	2.81	-0.02	-0.30	-0.56	-0.35	0.60	0.79	-0.38	-0.51	0.49	-0.43	-0.43	0.36	0.09
Electricity, gas, steam and air conditioning supply	35.35	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water supply; sewerage, waste management and remediation activities	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transport and Storage	5.91	-1.48	-2.25	1.29	1.61	2.78	1.60	-0.49	0.01	-0.50	-0.82	0.91	-0.51	0.46	-0.29	0.33	-0.01	0.33	1.62
Information and communi-cation	4.47	1.46	0.00	0.00	0.00	-0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-3.02	0.00	0.00	0.00	-6.93
All Industry	**100**	**0.98**	**-0.02**	**0.72**	**0.70**	**1.50**	**0.11**	**-0.00**	**-0.23**	**-0.20**	**0.25**	**0.44**	**-0.21**	**0.02**	**0.06**	**-0.16**	**-0.21**	**0.20**	**-0.17**

Source: PPI 2nd Qtr 2013, National Accounts Division, NSB, Thimphu.

Table 16.10: Monthly Index Level by Product

CPC Code	Description	Share (%)	2012												2013					
			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Section 0	Agriculture, Forestry and Fishery Products	0.72	100.00	100.00	100.00	112.38	112.38	112.38	112.38	112.38	112.38	112.38	112.38	112.38	112.38	112.38	112.38	112.38	112.38	112.38
Section 1	Ores and Minereals; Electricity, gas and water	5.81	103.29	103.38	103.40	103.73	103.93	104.37	106.09	106.84	106.80	107.12	107.30	107.27	111.67	111.33	111.86	111.80	112.01	112.32
Section 2	Food products, beverages and tobacco; textiles, apparel and leather products	3.56	103.62	103.00	104.05	105.25	105.81	105.11	105.05	105.79	107.16	106.80	106.94	108.66	108.41	110.44	109.05	107.78	107.26	107.15
Section 3	Other transportable goods, except metal products, machinery and equipment	15.36	105.31	106.22	106.28	109.65	112.15	112.23	112.08	112.05	111.95	112.96	113.31	113.02	113.72	113.88	113.93	113.85	113.97	113.94
Section 4	Metal products, machinery and equipment	28.75	100.58	100.56	102.67	102.61	106.08	106.09	105.65	104.59	103.87	104.44	105.63	104.91	103.71	104.23	103.63	103.08	103.69	103.87
Section 6	Distributive trade services; accommodation, food and beverage serving services; transport services; and electricity, gas and water distribution services	41.34	105.25	104.91	105.10	105.34	105.75	105.99	106.10	106.10	106.03	105.90	106.04	105.96	106.03	105.99	106.04	106.04	106.09	106.33
Section 8	Business and production services	4.47	99.68	99.68	99.68	99.68	99.50	99.50	99.50	99.50	99.50	99.50	99.50	99.50	99.50	96.50	96.50	96.50	96.50	89.81
All Product		**100**	**103.43**	**103.41**	**104.15**	**104.89**	**106.46**	**106.57**	**106.57**	**106.32**	**106.11**	**106.38**	**106.85**	**106.63**	**106.64**	**106.71**	**106.54**	**106.32**	**106.53**	**106.35**

Source: PPI 2nd Qtr 2013, National Accounts Division, NSB, Thimphu.

Table 16.11: Annual Percentage Change by Product

CPC Code	Description	Share (%)	2012				2013					
			Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Section 0	Agriculture, Forestry and Fishery Products	0.72	12.38	12.38	12.38	12.38	12.38	12.38	12.38	0.00	0.00	0.00
Section 1	Ores and Minereals; Electricity, gas and water	5.81	6.80	5.69	4.89	4.55	8.12	7.69	8.18	7.78	7.78	7.61
Section 2	Food products, beverages and tobacco; textiles, apparel and leather products	3.56	7.16	5.34	5.76	6.98	4.63	7.23	4.80	2.40	1.37	1.93
Section 3	Other transportable goods, except metal products, machinery and equipment	15.36	11.95	10.11	10.29	10.02	7.99	7.21	7.20	3.83	1.62	1.52
Section 4	Metal products, machinery and equipment	28.75	3.87	8.08	8.49	6.15	3.11	3.65	0.94	0.45	-2.25	-2.09
Section 6	Distributive trade services; accommodation, food and beverage serving services; transport services; and electricity, gas and water distribution services	41.34	6.03	4.71	4.58	0.47	0.75	1.03	0.89	0.66	0.32	0.32
Section 8	Business and production services	4.47	-0.50	-0.50	1.28	1.28	-0.18	-3.19	-3.19	-3.19	-3.02	-9.74
All Product		**100**	**6.11**	**6.38**	**6.52**	**4.10**	**3.11**	**3.19**	**2.29**	**1.36**	**0.07**	**-0.21**

Source: PPI 2nd Qtr 2013, National Accounts Division, NSB, Thimphu.

Table 16.12: Monthly Percentage Change by Product

CPC Code	Descrip-tion	Share (%)	2012												2013					
			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Section 0	Agriculture, Forestry and Fishery Products	0.72	0.00	0.00	0.00	12.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Section 1	Ores and Minereals; Electricity, gas and water	5.81	0.67	0.09	0.02	0.32	0.20	0.42	1.65	0.71	-0.04	0.30	0.17	-0.03	4.11	-0.31	0.48	-0.06	0.19	0.27
Section 2	Food products, beverages and tobacco; textiles, apparel and leather products	3.56	2.02	-0.60	1.02	1.15	0.53	-0.66	-0.06	0.70	1.29	-0.34	0.13	1.61	-0.23	1.87	-1.27	-1.16	-0.48	-0.11
Section 3	Other transportable goods, except metal products, machinery and equipment	15.36	2.51	0.87	0.06	3.17	2.28	0.07	-0.13	-0.03	-0.09	0.90	0.31	-0.26	0.62	0.15	0.04	-0.07	0.10	-0.03
Section 4	Metal products, machinery and equipment	28.75	1.77	-0.02	2.10	-0.06	3.38	0.01	-0.41	-1.00	-0.69	0.55	1.14	-0.68	-1.15	0.50	-0.57	-0.53	0.59	0.18
Section 6	Distributive trade services; accommodation, food and beverage serving services; transport services; and electricity, gas and water distribution services	41.34	-0.21	-0.32	0.18	0.23	0.39	0.23	0.10	0.00	-0.07	-0.12	0.13	-0.07	0.07	-0.04	0.05	-0.00	0.05	0.23
Section 8	Business and production services	4.47	1.46	0.00	0.00	0.00	-0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-3.02	0.00	0.00	0.00	-6.93
All Product		**100**	**0.98**	**-0.02**	**0.72**	**0.70**	**1.50**	**0.11**	**-0.00**	**-0.23**	**-0.20**	**0.25**	**0.44**	**-0.21**	**0.02**	**0.06**	**-0.16**	**-0.21**	**0.20**	**-0.17**

Source: PPI 2nd Qtr 2013, National Accounts Division, NSB, Thimphu.

CHAPTER 17
CRIMES

The data available in this chapter are from the cases reported and registered by Royal Bhutan Police. The statistics presented here are those compiled by the Crime and Operations Divisions, Royal Bhutan Police from various Police stations at the Dzongkhags. This sector presents the details of crime statistics by various categories by nature of crimes.

The over-all crime incidents of 2,360 in 2008 increased to 4,678 in 2012.

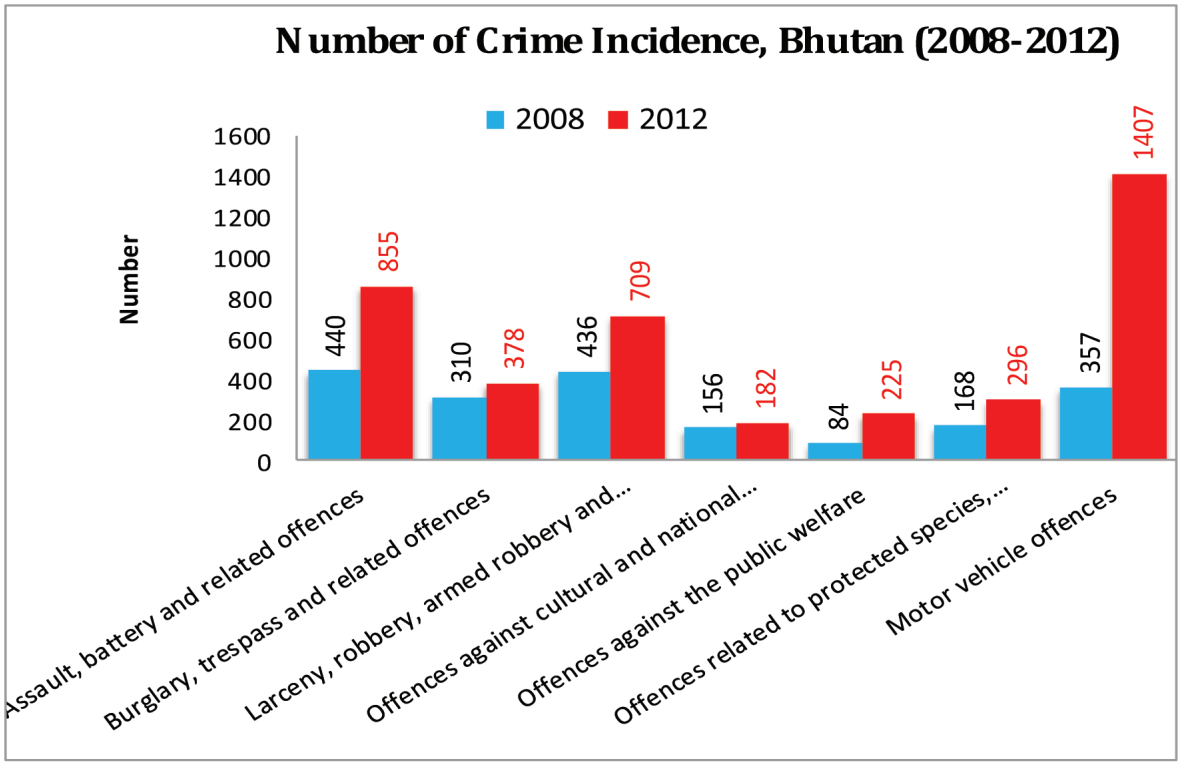


Table 17.1: Total Number of Crime Incidents and Type of Offences by Dzongkhag, Bhutan, 2012

(Number of Incidents)

Nature of Crime	Paro	Haa	Punakha	Gasa	Chhukha	Samtse	Sarpang	Zhemgang	Tsirang	Dagana	Trongsa	Bumthang	P/Gatshel	S/Jongkhar	Trashigang	T/Yangtse	Monggar	Lhuntse	Thimphu	W/Phodrang	Bhutan
Attempt,Aiding & Abetting,Solicitaion & Criminal Conspiracy	3	...	1	...	4	1	3	...	1	...	1	2	1	...	1	...	1	...	9	5	33
Homicide	2	...	1	1	...	2	2	...	...	2	3	...	3	...	3	1	1	...	8	4	33
Assault,Battery & Related Offences	101	5	25	5	57	31	38	10	21	14	28	25	10	15	19	12	19	16	363	41	855
Kidnapping & Related offences	2	...	...	...	1	4	2	1	...	1	...	...	...	...	...	...	...	1	...	...	12
Sexual Offences	3	1	1	...	3	9	3	...	2	5	4	1	...	1	1	1	6	1	19	3	64
Offences against Infant,Child,Mentally disabled & Incompetent person	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	3	...	5
Arson & Related Offences	2	2	...	...	6	5	5	2	1	...	1	...	3	3	3	2	2	4	7	1	49
Burglary,Trespass & Related Offences	25	6	8	2	46	7	20	5	4	10	5	9	3	2	8	4	7	5	179	23	378
Larceny,Robbery,Armed Robbery & Related Offences	35	3	16	2	131	17	26	1	6	8	15	8	10	5	9	2	6	8	370	31	709
Money Laundering & Smuggling	5	1	...	...	3	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	11
Embezzlement & Bribery	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	1	...	3
Forgery & Related Offences	2	...	...	...	10	15	5	...	1	...	...	1	3	1	1	1	...	...	26	1	67
Defamation & Related Offences	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...	...	1	1	4
Treason,Terrorism & Related Offences	...	...	...	...	2	1	3	...	...	1	...	...	...	...	...	...	...	...	...	2	9
Offences against Cultural & National Heritage	13	2	...	...	...	...	...	5	2	6	10	12	...	10	42	2	48	11	13	6	182

Table 17.1: contd...

Offences against Judicial Authority	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Prostitution & Related Offences	1	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3
Offences against the Public Welfare	13	1	5	3	18	3	3	2	1	3	4	4	4	3	12	1	1	...	139	5	225
Offences Related to Public & Civic Duties	1	...	...	...	1	...	1	...	2	...	...	...	...	...	1	...	...	...	2	1	9
Offences Related to Public Order & Tranquillity	5	...	...	...	9	1	2	...	2	...	...	2	1	...	1	...	1	...	15	1	40
Offences against Privacy	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Computer Offences	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	2
Offences Related to Fire Arms & Weapons	2	...	...	...	1	1	4	...	2	1	...	...	3	...	8	...	...	...	11	6	39
Offences Related to Protected Species,Controlled & Other Harmful Substances	5	...	4	1	86	10	16	...	...	2	...	...	13	...	5	1	...	...	143	10	296
Motor Vehicle Offences	85	5	14	2	317	17	10	7	10	8	34	2	13	9	16	7	9	2	808	32	1407
Others	16	2	5	...	53	32	31	7	3	13	5	1	14	6	12	12	4	...	18	9	243
Total	**321**	**28**	**80**	**16**	**752**	**158**	**174**	**40**	**58**	**74**	**110**	**68**	**82**	**56**	**142**	**46**	**106**	**48**	**2,137**	**182**	**4,678**

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

Table 17.2: Type of Crimes and Offences by Dzongkhag, Bhutan, 2012

(Number of Incidents)

Nature of Crime	Paro	Haa	Punakha	Gasa	Chhukha	Samtse	Sarpang	Zhemgang	Tsirang	Dagana	Trongsa	Bumthang	P/Gatshel	S/Jongkhar	Trashigang	T/Yangtse	Monggar	Lhuntse	Thimphu	W/Phodrang	Bhutan
Attempt, Aiding and Abetting, Solicitation and Criminal Conspiracy																					
Aiding & Abetting	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Solicitation	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Criminal Conspiracy	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Criminal Attempted Murder	...	...	...	...	...	1	...	...	...	...	...	...	1	...	...	...	...	...	...	...	2
Criminal Attempted Rape	...	...	1	...	1	...	1	...	1	...	1	1	...	...	1	...	1	...	4	...	12
Criminal Attempted Burglary	2	...	...	...	2	...	...	...	...	...	...	1	...	...	...	...	...	...	2	3	10
Criminal Attempted Larceny	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	6
Criminal Attempted Suicide	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	2
Total	3	...	1	...	4	1	3	...	1	...	1	2	1	...	1	...	1	...	9	5	33
Homicide																					
Murder	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	2	3
Voluntary Manslaughter	1	...	1	...	...	1	2	...	...	...	1	...	...	...	...	...	...	...	5	1	12
Involuntary Manslaughter	1	...	...	1	...	1	...	...	...	1	2	...	1	...	2	...	1	...	3	1	14
Negligent Homicide	...	...	...	...	...	...	...	...	...	1	...	...	2	...	1	...	...	...	...	...	4

Table 17.2: contd...

Illegal Abortion	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Custodial Death	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Complicity in Suicide	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Illegal Selling or Buying of Human Organs	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Trafficking a Person	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	2	...	1	1	...	2	2	...	...	2	3	...	3	...	3	1	1	...	8	4	33
Assault, Battery and Related Offences																					
Assault	5	1	2	1	3	...	2	...	...	1	9	1	...	1	2	...	1	4	10	2	45
Battery	96	4	23	4	53	31	36	10	21	13	19	24	10	13	17	12	18	12	353	39	808
Reckless Endangerment	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	2
Total	101	5	25	5	57	31	38	10	21	14	28	25	10	15	19	12	19	16	363	41	855
Kidnapping and Related Offences																					
Kidnapping	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	2
Abduction	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Criminal Elopement	1	...	...	...	...	4	...	...	...	1	...	...	...	...	...	...	...	1	...	...	7
Escape from Lawful Custody	1	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	3
Felonious Restraint	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Infringement of Movement	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	2	...	...	...	1	4	...	1	...	1	...	...	...	...	...	...	...	1	...	...	10
Sexual Offence																					
Rape	...	...	...	...	...	...	3	...	...	...	1	...	...	1	...	1	...	1	2	1	10

Table 17.2: contd...

Rape of a Married Person	...	...	...	...	1	...	...	...	1	...	1	...	...	...	...	...	4	...	...	...	7
Statutory Rape	...	...	...	...	...	2	...	...	...	1	...	1	...	...	1	...	1	...	...	2	8
Rape of a Child above twelve years of age	1	1	...	...	1	6	...	...	1	2	2	...	...	...	...	...	1	...	6	...	21
Rape of a Pregnant Women	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Gang Rape	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Gang Rape of a Married Person	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Gang Rape of a Child below Twelve years of age	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Gang Rape of a Child above Twelve years of age	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Gang Rape of a Pregnant Women	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Custodial Rape	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Marital Rape	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Child Molestation	...	...	1	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	2	...	5
Sexual Harassment	1	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	7	...	10
Incest	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Indecent Exposure	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

Table 17.2: contd...

Bestiality	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Un-Natural Sex	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Total	3	1	1	...	3	9	3	...	2	5	4	1	...	1	1	1	6	1	19	3	64
Offence against Infant, Child, Mentally Disabled and Incompetent Person																					
Abandonment of an Infant or a Child	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	3	...	5
Abandonment of a Dead Infant	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Child Abuse	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Endangerment of a Child	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pedophilia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Trafficking of a Child	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Endangerment of a Mentally Disabled or an Incompetent Person	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Arson and Related Offences																					
Arson	...	...	...	...	...	...	1	...	...	...	...	...	1	...	...	1	...	4	2	...	9
Negligent Burning or Exploding	2	2	...	...	6	5	4	2	1	...	1	...	2	3	3	1	2	...	5	1	40
Total	2	2	...	...	6	5	5	2	1	...	1	...	3	3	3	2	2	4	7	1	49
Burglary, Trespass and Related Offences																					
Burglary	20	5	8	2	46	7	20	4	3	10	5	9	3	2	8	4	7	4	179	22	368
Trespass	5	1	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	1	...	1	10
Total	25	6	8	2	46	7	20	5	4	10	5	9	3	2	8	4	7	5	179	23	378

Table 17.2: contd...

Larceny, Robbery, Armed Robbery and Related Offences																					
Larceny	30	3	11	2	61	15	23	1	3	8	7	3	7	3	9	2	5	6	267	28	494
Larceny by Deception	1	...	...	...	1	...	...	...	...	...	...	2	...	...	...	...	1	...	22	1	28
Robbery	2	...	1	...	6	...	1	...	...	...	...	...	...	...	...	...	...	...	14	1	25
Armed Robbery	...	...	1	...	1	1	1	...	...	...	...	...	...	...	...	...	...	...	4	...	8
Extortion	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Illegal Transfer of Immovable Property	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Larceny of Property Lost, Mislaid or Delivered by Mistake	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Possession of Stolen Property	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1
Theft of Service	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Un-Authorized use of Property	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	3	...	5
Breach of Trust	...	...	...	...	21	1	...	...	2	...	1	2	1	2	...	...	...	...	8	...	38
Criminal Misappropriation of Property	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Reckless Endangerment of Property	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Un-Lawful Posting of Advertisements	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

Table 17.2: contd...

Auto Striping	2	...	3	...	40	...	1	...	...	...	7	1	1	...	...	...	...	...	47	1	103
Pick Pocketing	...	...	...	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	2	...	4
Total	35	3	16	2	131	17	26	1	6	8	15	8	10	5	9	2	6	8	370	31	709
Money Laundering and Smuggling																					
Money Laundering	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Smuggling	4	1	...	...	3	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	10
Receiving of Smuggled Goods or Substances	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tax Evasion	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Breach of Contract	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	5	1	...	...	3	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	11
Embezzlement and Bribery																					
Embezzlement	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	1	...	3
Bribery	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Commercial Bribery	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Official Misconduct	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	1	...	3
Forgery and Related Offences																					
Forgery	...	...	...	...	1	...	3	...	...	...	...	1	1	...	...	...	...	...	3	...	9
Tampering with Public Records	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Tampering with Documents	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Execution of a Document by Deception	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

Table 17.2: contd...

Fraudulent Cheque Writing	...	...	...	...	2	...	1	...	...	...	...	...	1	...	...	...	...	...	11	...	15
Counterfeiting	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1
Deceptive Practice	2	...	...	...	7	15	1	...	...	...	...	...	1	1	1	1	...	...	11	...	40
Fraudulent Obtaining of Insurance	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fraudulent Insolvency	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fraud Involving a Security Interest	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	2	...	...	...	10	15	5	...	1	...	...	1	3	1	1	1	...	...	26	1	67
Defamation and Related Offences																					
Defamation	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...	...	1	1	4
Libel	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Black Mail	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
False Advertising	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...	...	1	1	4
Treason, Terrorism and Related Offences																					
Treason	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Terrorism	...	...	...	...	1	...	3	...	...	1	...	...	...	...	...	...	...	...	...	...	5
Sedition	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Espionage	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hijacking	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Abettor of Mutiny	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Harboring of Deserter	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

Table 17.2: contd...

Impersonation of Uniformed Personnel	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Impersonation of an Official	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	2	4
Total	...	...	...	...	2	1	3	...	...	1	...	...	...	...	...	...	...	...	...	2	9
Offences against Cultural and National Heritage																					
Illegal sale of Cultural and National Heritage Property	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Damage to Cultural or National Heritage Property and National Monuments	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Damage to Religious Objects	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Offence against the Ku, Sung, Thuk-Ten or Zungs	12	2	...	...	...	...	...	5	2	6	10	12	...	10	40	1	48	11	13	5	177
Illegal Purchase or Sale of Ku, Sung, Thuk-Ten or Zungs	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Illegal Gift of Ku, Sung, Thuk-Ten or Zung	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

Table 17.2: contd...

Caretaker's Negligence causing loss or Larceny of Ku, Sung, Thuk-Ten, Zung or Antique	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Larceny of Antique	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2
Illegal Purchase or Sale of an Antique	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	1	...	...	...	...	3
Illegal Gift of Antique	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	13	2	...	...	...	...	...	5	2	6	10	12	...	10	42	2	48	11	13	6	182
Offences against Judicial Authority																					
Un-Authorized Hearing	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Contempt of Court	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Perjury	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cantankerous Litigation	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Prostitution and Related Offences																					
Prostitution	1	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3
Promotion of Prostitution	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Patronizing a Prostitute	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Trafficking a Person for Prostitution	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

Table 17.2: contd...

Lewd and Lascivious Conduct	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	1	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3
Offences against the Public Welfare																					
Public Intoxication	...	...	...	...	1	...	...	...	...	...	...	...	...	...	5	...	...	...	2	...	8
Use of Tobacco or Health Hazard Substances	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Illegal Sale of Tobacco or other Health Hazard Substances	1	...	...	...	12	...	2	1	...	1	...	...	1	...	1	...	...	...	14	1	34
Illegal Sale of Alcohol	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Gambling	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	...	4
Malicious Mischief	12	1	5	3	5	3	...	1	1	2	4	4	2	3	6	1	1	...	119	3	176
Usury	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tampering with a Consumer Product	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1
Black-Marketing	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Anti-Trust	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Endangerment of a Public Water Source	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Environment Pollution	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

Table 17.2: contd...

Criminal Nuisance	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Total	13	1	5	3	18	3	3	2	1	3	4	4	4	3	12	1	1	...	139	5	225
Offences Related to Public and Civic Duties																					
Entrapment	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Torture	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Illegal Arrest	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hindering Prosecution	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Obstruction of Lawful Authority	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	3
Obstruction of Public Service	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Reporting of False Information	1	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	1	4
Failure to Assist Lawful Authority	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Failure to Report a Crime	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1
Tampering with a Dead Body	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Abandonment of a Person in Danger	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Malpractice	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Crime Against Public Election	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Illegal Immigration	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1

Table 17.2: contd...

Illegal Issue of Immigration Documents	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Illegal Transportation of Immigrant	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Drawing of Illegal Document	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	2
Offences Related To Public Order Tranquility																					
Breach of Public Order and Tranquility	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Unlawful Assembly	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Disruption of a Lawful meeting or Gathering	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Failure to Disperse	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Rioting	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Promotion of Civil Unrest	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Disorderly Conduct	1	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	4
Harassment	4	...	...	...	8	1	2	...	2	...	...	2	1	...	...	...	1	...	13	1	35
Prowling	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Obstruction of Through Fare	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	5	...	...	...	9	1	2	...	2	...	...	2	1	...	1	...	1	...	15	1	40
Miscellaneous Offences																					

Table 17.2: contd...

Offences against Privacy	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Eavesdropping	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Unauthorized opening of Mail or Parcel	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Computer Offences																					
Tampering with Computer Materials	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Unlawful Possession of Computer Materials	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Computer Pornography	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Total	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Offences Related To Firearms & Weapons																					
Illegal Manufacturing of a Firearms, Ammunition, Explosive or other Lethal Weapons	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Illegal Possession of Firearm, Ammunition ,Explosive or other Lethal weapons	...	...	...	...	...	...	4	...	...	...	...	...	...	...	...	...	...	...	...	1	5

Table 17.2: contd...

Illegal Sale or Purchase of a Firearm, Ammunition, Explosive or other Lethal Weapons	2	...	...	...	1	1	...	...	2	1	...	...	3	...	8	...	...	...	11	5	34
Illegal Pointing of a Firearm	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Display of Weapon	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
False Alarm	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	2	...	...	...	1	1	4	...	2	1	...	...	3	...	8	...	...	...	11	6	39
Offences Related To Protected Species, Controlled & Other Harmful Substances																					
Risking the Protected Species	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Illegal Hunting or Fishing	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1
Genetic Interference	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Illegal Cultivation, Production or Manufacturing	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Illegal Transaction of Controlled Substances	...	...	...	...	14	...	...	...	...	...	...	...	1	...	...	...	...	...	7	...	22
Possession of a Controlled Substances	5	...	4	1	72	10	15	...	...	2	...	...	12	...	4	1	...	...	136	10	272

Table 17.2: contd...

Adulteration of Drugs	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sale of a Prescription for a controlled Substances	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Illegal Sale and use of Harmful Chemical Substance	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	5	...	4	1	86	10	16	...	...	2	...	...	13	...	5	1	...	...	143	10	296
Motor Vehicle Offences																					
M.V Accident	68	5	6	...	291	15	10	7	10	5	29	2	11	9	13	7	9	2	644	20	1163
M.V Accident (Fatal)	5	...	8	2	9	...	...	...	...	3	...	...	1	...	3	...	...	...	7	8	46
Hit & Run	4	...	...	...	9	1	...	...	...	...	5	...	1	...	...	...	...	...	157	3	180
Cycle Accident	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pedestrian Accident	8	...	...	...	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	17
Traffic Violation	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Total	85	5	14	2	317	17	10	7	10	8	34	2	13	9	16	7	9	2	808	32	1407
Others																					
Accidental Death	1	...	...	...	2	2	3	5	...	3	2	...	2	2	3	3	2	...	1	3	34
Accidental Injury	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Absconding	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Black Magic	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Unlawful collection	2	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	3

Table 17.2: contd...

Copy right infringement	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Acquiring Citizenship ID Card of Foreign Country	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Drowning	1	...	1	...	...	5	7	1	...	...	...	...	...	1	1	1	...	...	...	1	19
Natural Calamities	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Missing of Person	5	2	3	...	25	7	10	...	...	...	3	1	3	...	...	1	...	...	13	...	73
Un-Natural Death	3	...	...	...	18	...	2	...	2	3	...	...	2	...	1	3	...	...	2	2	38
Suicide	4	...	1	...	8	18	9	1	1	7	...	...	6	3	7	4	2	...	2	3	76
Total	16	2	5	...	53	32	31	7	3	13	5	1	14	6	12	12	4	...	18	9	243
Grand Total	**321**	**28**	**80**	**16**	**752**	**158**	**174**	**40**	**58**	**74**	**110**	**68**	**82**	**56**	**142**	**46**	**106**	**48**	**2137**	**182**	**4,678**

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

Table 17.3: Monthly Motor Vehicle Accident by Dzongkhag, Bhutan, 2012

(Number of Incidents)

Dzongkhag	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Paro	1	2	4	14	11	11	16	3	14	6	2	1	85
Haa	1	...	...	...	1	...	...	1	...	1	1	...	5
Punakha	1	3	...	1	...	1	2	2	2	...	2	...	14
Gasa	...	...	...	...	...	1	...	...	...	...	...	1	2
Chhukha	22	16	23	23	22	29	31	37	37	30	20	27	317
Samtse	...	3	1	3	1	1	3	4	...	...	1	...	17
Sarpang	3	...	1	1	2	2	...	1	...	...	...	...	10
Zhemgang	2	2	...	1	...	...	...	...	...	1	1	...	7
Tsirang	...	...	...	4	2	1	...	...	...	1	...	2	10
Dagana	...	1	1	1	1	1	...	...	...	1	1	1	8
Trongsa	...	...	...	...	2	3	9	8	2	3	5	2	34
Bumthang	...	...	...	...	...	...	1	1	...	...	...	...	2
Samdrup Jongkhar	1	2	1	...	2	1	1	1	2	1	1	...	13
Pema Gatshel	...	1	2	4	...	1	...	1	...	...	...	...	9
Trashigang	...	...	1	1	2	3	4	1	...	3	...	1	16
Trashi Yangtse	3	...	...	...	...	...	1	...	2	...	1	...	7
Monggar	...	1	1	1	...	2	...	...	1	...	1	2	9
Lhuntse	...	...	...	...	...	...	...	...	...	...	2	...	2
Thimphu	83	86	77	88	78	59	71	60	53	56	48	49	808
Wangdue Phodrang	...	4	1	2	2	2	2	6	4	3	3	3	32
Total	**117**	**121**	**113**	**144**	**126**	**118**	**141**	**126**	**117**	**106**	**89**	**89**	**1,407**

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

Table 17.4: Causes of Motor Vehicle Accident by Dzongkhag, Bhutan, 2012

(Number of Incidents)

Traffic Division	Type of Vehicle	Mechanical fault	Drunk driving	Bad weather	Without license	Unknown cause	Others
Paro	Truck	1	2	2	2	2	1
	Buses	1	1	2	1	4	3
	Light Vehicle	4	23	7	6	16	4
	Two Wheeler	...	1	...	...	2	...
	Total	6	27	11	9	24	8
Haa	Truck	1	...	...	...	...	...
	Buses	...	...	...	...	...	...
	Light Vehicle	...	2	...	...	...	1
	Two Wheeler	...	...	...	1	...	...
	Total	1	2	...	1	...	1
Punakha	Truck	1	1	...	...	1	3
	Buses	...	...	1	...	1	...
	Light Vehicle	...	...	...	5	...	...
	Two Wheeler	...	...	...	1	...	...
	Total	1	1	1	6	2	3
Gasa	Truck	...	...	2	...	...	...
	Buses	...	...	...	...	...	...
	Light Vehicle	...	...	...	...	...	...
	Two Wheeler	...	...	...	...	...	...
	Total	...	...	2	...	...	...
Chhukha	Truck	5	6	7	6	1	38
	Buses	1	4	15	4	2	4
	Light Vehicle	7	25	35	28	4	52
	Two Wheeler	10	10	10	42	1	...
	Total	23	45	67	80	8	94
Samtse	Truck	1	...	...	...	...	...
	Buses	...	1	...	...	...	...
	Light Vehicle	...	8	...	2	...	1
	Two Wheeler	...	2	...	1	...	1
	Total	1	11	...	3	...	2
Sarpang	Truck	1	...	...	...	...	3
	Buses	...	...	...	...	...	1
	Light Vehicle	...	...	1	...	1	1
	Two Wheeler	...	...	...	1	...	1
	Total	1	...	1	1	1	6

Table 17.4: contd...

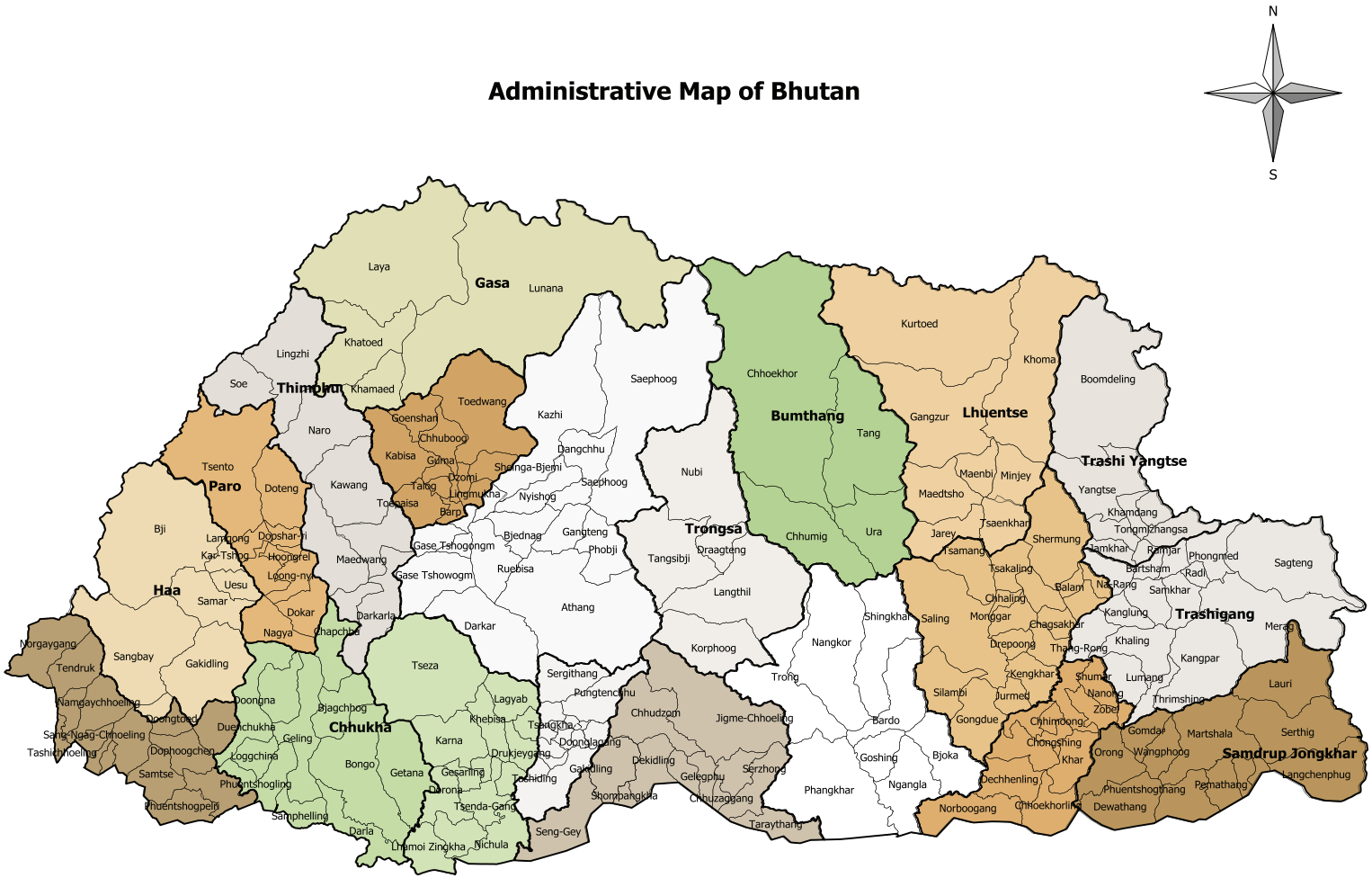
Zhemgang	Truck	1	...	1	...	...	...
	Buses	1	...	1	...	...	...
	Light Vehicle	1	1	...	1	...	...
	Two Wheeler	...	...	...	...	...	...
	Total	3	1	2	1	...	...
Tsirang	Truck	1	...	1	...	...	...
	Buses	...	...	...	...	...	1
	Light Vehicle	2	2	...	1	...	...
	Two Wheeler	1	...	...	1	...	...
	Total	4	2	1	2	...	1
Dagana	Truck	...	...	1	...	1	...
	Buses	...	...	1	...	1	...
	Light Vehicle	...	1	...	1	...	1
	Two Wheeler	...	1	...	...	...	...
	Total	...	2	2	1	2	1
Trongsa	Truck	5	3	2	...	1	1
	Buses	3	1	1	...	1	...
	Light Vehicle	5	4	...	1	...	2
	Two Wheeler	2	...	...	1	...	1
	Total	15	8	3	2	2	4
Bumthang	Truck	1	...	1	...	...	...
	Buses	...	...	...	...	...	...
	Light Vehicle	...	...	...	...	...	...
	Two Wheeler	...	...	...	...	...	...
	Total	1	...	1	...	...	...
Samdrup Jongkhar	Truck	1	...	...	...	...	2
	Buses	...	1	...	...	...	1
	Light Vehicle	1	...	3	...	...	3
	Two Wheeler	...	...	...	1	...	...
	Total	2	1	3	1	...	6
Pema Gatshel	Truck	...	...	...	...	...	...
	Buses	...	...	...	...	...	4
	Light Vehicle	...	...	...	...	...	4
	Two Wheeler	...	...	...	...	...	1
	Total	...	...	...	...	...	9

Table 17.4: contd...

Trashigang	Truck	1	...	1	...	...	1
	Buses	1	...	...	...	1	...
	Light Vehicle	2	2	1	1	...	4
	Two Wheeler	...	1	...	...	...	...
	Total	4	3	2	1	1	5
Trashi Yangtse	Truck	...	...	...	...	...	2
	Buses	...	...	...	...	...	...
	Light Vehicle	...	2	...	...	1	...
	Two Wheeler	...	1	...	1	...	...
	Total	...	3	...	1	1	2
Monggar	Truck	1	...	1	...	...	...
	Buses	...	...	...	...	...	...
	Light Vehicle	...	5	...	2	...	...
	Two Wheeler	...	...	...	...	...	...
	Total	1	5	1	2	...	...
Lhuntse	Truck	...	1	...	1	...	...
	Buses	...	...	...	...	...	...
	Light Vehicle	...	...	...	...	...	...
	Two Wheeler	...	...	...	...	...	...
	Total	...	1	...	1	...	...
Thimphu	Truck	15	26	10	10	70	40
	Buses	5	5	4	2	10	1
	Light Vehicle	42	98	2	60	270	100
	Two Wheeler	5	10	4	3	6	10
	Total	67	139	20	75	356	151
Wangdue Phodrang	Truck	...	...	1	1	5	...
	Buses	1	...	...	...	...	...
	Light Vehicle	2	3	2	10	4	...
	Two Wheeler	1	...	...	1	1	...
	Total	4	3	3	12	10	...
Grand Total		**134**	**254**	**120**	**199**	**407**	**293**

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

Administrative Map of Bhutan



List of Dzongkhag, Gewog and Chiwog, Bhutan 2013.

Dzongkhag	Gewog	Chiwog
1. Bumthang	1. Chhoekhor	1. Nangisphel Zangling Zhabjethang 2. Dhur Lusibee 3. Kharsa Thangbi 4. Dawathang Dorjibi Kashingtsawa 5. Pedtsheling Tamshin
	2. Chhumig	1. Gyaltsa 2. Domkhar 3. Phurjoen 4. Zungngae 5. Choongphel
	3. Tang	1. Tadingang 2. Khangrab 3. Kidzom Nyimalung 4. Dazur 5. Bezur Kuenzargdrag
	4. Ura	1. Beteng Pangkhar Soomthrang 2. Shing-Nyer 3. Singkhar 4. Tangsibi 5. Ura-Dozhi
2. Chhukha	1. Bjagchhog	1. Bjagchhog 2. Mebisa 3. Tashi Gatshel 4. Tsimakha Tsimasham 5. Wangkha
	2. Bongo	1. Baeyuel Kunzang 2. Bongo Phasooma 3. Choongkha Chhasilakha 4. Gedu Miritsemo 5. Ketogkha 6. Togtokha Togtogongm

Dzongkhag	Gewog	Chiwog
2. Chhukha	3. Chapchha	1. Bunakha 2. Dokharchhu Rimtekha 3. Gangkha Shelyuel 4. Lang Nyelsa 5. Pagga 6. Tshamdrag
	4. Darla	1. Gamanang Kalzangri 2. Gengu Yagang 3. Nyimgang Tabji 4. Samarchen Sinchula 5. Sharphug 6. Tagp-thang-boog
	5. Doongna	1. Babana Papaling 2. Chhulakha Mangdokha 3. Damchekha Uezhi 4. Doongna Pagsellhakha 5. Drukdingsa Khori
	6. Geling	1. Dagpa Sorchhen 2. Dilibkha Lamjokha 3. Geling Geygoen 4. Gelingkha Tsanglina 5. Kamji Nayekha
	7. Getana	1. Bachhu Getana 2. Chiyuel Getag 3. Darga Tshebji 4. Janamo Phootsha 5. Tashigang
	8. Loggchina	1. Aamleg Dofam 2. Chagdokha Damchekha 3. Dolepchen Bjagchhu 4. Dzedokha 5. Mongna Lhasarp
	9. Maedtabkha	1. Gumina Tenchhukha 2. Jozhingkha Maedtab Toed 3. Maedtab Maed 4. Pangu 5. Uekha

Dzongkhag	Gewog	Chiwog
2. Chhukha	10. Phuentshogling	1. Chonggeykha Dophulakha 2. Deling Marpji 3. Dophugchen Wangduegatshel 4. Lingdaen 5. Pachhu
	11. Samphelling (Bhalujora)	1. Gorgboogang Pangna 2. Khenpaithang Soramthang 3. Pedtshelnang 4. Pekarling Rigzingling 5. Sengyagang Tshochhoongna
3. Dagana	1. Dorona	1. Dorona Chhewa 2. Dorona Chhongwa 3. Maamedthang 4. Nyimtola 5. Tshalamji
	2. Drukjegang	1. Ambithang Pangserpo 2. Budepang Pangna 3. Pangna Patala 4. Pangserpo 5. Thangna
	3. Gesarling	1. Gesarling 2. Phuensoomgang 3. Samtengang 4. Tajoog 5. Tashithang
	4. Gozhi	1. Baleggang 2. Dogaag 3. Gozhi 4. Gozhi Maed 5. Gozhi Toed
	5. Karmaling (Deorali)	1. Jemathang 2. Karmaling 3. Labtsakha 4. Omchhu 5. Senchumthang

Dzongkhag	Gewog	Chiwog
3. Dagana	6. Karna	1. Bartsha Namgyalgang 2. Dalithang Gangjab Khagochen 3. Jurugang 4. Lhaling 5. Purgzhi
	7. Khebisa	1. Akhochen 2. Gibsa 3. Pagser 4. Pogtog 5. Thomgang
	8. Largyab	1. Baloong 2. Barna 3. Kompa 4. Sidpa 5. Thasa
	9. Lhamoi-Dzingkha	1. Chongsamling 2. Kuendrelthang 3. Lhamoidzingkha 4. Loongilsa 5. Tshaemzhigosa
	10. Nichula	1. Damchhunang 2. Dangreyboog 3. Dramzekesa 4. Gangtogkha 5. Yarpheling
	11. Tashiding	1. Gangyab 2. Namchagla 3. Norbuling 4. Shamdolay 5. Tashiding
	12. Tsangkha	1. Gelegchhu 2. Goongpa Soomchu 3. Pateykha 4. Tsangkha 5. Zinchila

Dzongkhag	Gewog	Chiwog
3. Dagana	13. Tsenda-Gang	1. Gangzur Maed 2. Gangzur Toed 3. Norbuzingkha 4. Samarchu 5. Tsendagang
	14. Tseza	1. Karlingzingkha 2. Pelling 3. Samaed 4. Tashigang 5. Tsangleykha
4. Gasa	1. Khamaed	1. Barsha Panikong 2. Damji 3. Gayza Zomina 4. Jabisa 5. Khailog Tashithang
	2. Khatoed	1. Baychhu Tshedpgang 2. Chhogley Phulakha 3. Mani 4. Rimi 5. Tsheringkha
	3. Laya	1. Chongra Loobcha 2. Gayza Lunggo 3. Neylug 4. Pazhi 5. Toedkor
	4. Lunana	1. Lhedi 2. Raminang Uesana 3. Shang Threlga Wachey 4. Thangza Toenchoe 5. Tshozhong
5. Haa	1. Bji	1. Chenpa Geychhukha 2. Choompa Jamgoen 3. Gyensa Tokey 4. Tsenka Taloong 5. Yangthang

Dzongkhag	Gewog	Chiwog
5. Haa	2. Gakidling	1. Dorithasa Kowkha Yangtse 2. Fentena Sertena 3. Phootsena Ngatse 4. Rangtse Tanga Yokha 5. Saidzong Thangdokha
	3. Kar-tshog	1. Bali Mombitshokha 2. Dragding Karjena 3. Ingo Pharikha 4. Kargoen Hatam 5. Wangtsa
	4. Samar	1. Balamnang 2. Dorikha Langjogang 3. Jenkanang Pudunang 4. Langpa Norbugang 5. Sharri
	5. Sangbay	1. Anakha Shepji 2. Mochhu 3. Nakha Tashigang 4. Sangbay Ama 5. Shema Yaba
	6. Uesu	1. Betso Doomchhog 2. Geyruna Karnag 3. Kipri Tagchhu 4. Pajekha Sangkiri 5. Tshaphel Tsiloongkha
6. Lhuentse	1. Gangzur	1. Ney 2. Jang Ngar 3. Kyidloong Somshing 4. Nyimzhong Tongling 5. Thrima Shawa Zhamling
	2. Jarey	1. Artobi Ngangngae 2. Kharchung 3. Ladrong 4. Yabi Zangkhar 5. Yumchhe

Dzongkhag	Gewog	Chiwog
6. Lhuentse	3. Khoma	1. Babtong Dragteng 2. Berpa Khoma 3. Gangla Kholma 4. Pangkhar 5. Rolmateng Tsangngo
	4. Kurtoed	1. Chagdzom Chhusa 2. Dungkar 3. Jasabi Ugyenphoog 4. Tabi 5. Tangroong Wawel
	5. Maedtsho	1. Bamdhir Yurung 2. Gortshom Tshangthromaed 3. Obi Tongthrong 4. Oonggar 5. Zhongmaed
	6. Maenbi	Kamdhar Moormo Maenjabi Nyaibi Zhungkhar Phagidoong Tagmochhu Gorgan
	7. Minjey	1. Amdrangchhu Zham 2. Boodur Kupinyalsa 3. Chusa Legshogang 4. Draaggong Jalang 5. Minjey Wangzhing
	8. Tsaenkhar	1. Artobadeb Guendrang 2. Autsho Chharbi 3. Dekaling Tshochhen 4. Domkhar Umling 5. Gonyid Wambur
7. Monggar	1. Balam	1. Bahkaphai 2. Balam Morphu 3. Doongmanma Selkhar 4. Jadoong Yangbari 5. Khebishing

Dzongkhag	Gewog	Chiwog
7. Monggar	2. Chagsakhar	1. Borphai Chagsakhar 2. Doongsingma Pam 3. Kharnang Kheshingra 4. Yangrapoongshing 5. Yetong Jarshingpogtor
	3. Chhaling	1. Chhaling Dopang 2. Chulabi 3. Pangthang Thempang 4. Shebchi Yangthang 5. Wangmakhar Khalangji
	4. Dramedtse	1. Baging Shadang 2. Bikhar Thoongdari 3. Dramedtse Shaphangma 4. Serkhagphoog Yengkhartshing 5. Zangkhar
	5. Drepoong	1. Bainangri Nyamla 2. Boompazor Drepoong 3. Chhagsuzor Tsangkhar 4. Labtsa Shinggar 5. Zunglen
	6. Gongdue	1. Baagla Dengkaling 2. Daagsa Kumadzong 3. Damkhar Weringla 4. Phadzong 5. Pikari Yangbari
	7. Jurmed	1. Bilam Dangkila 2. Kognala Yaragla 3. Moodoongkhar Tselam 4. Moogtangkhar Tsangkhazor 5. Ngamphoog Sangkama
	8. Kengkhar	1. Dogtang Mooroong 2. Kyidpari Yuldarig 3. Neykolog Warongborang 4. Olokid Tsalabi 5. Phosothong Shingchongri 6. Tongla Zitsibi

Dzongkhag	Gewog	Chiwog
7. Monggar	9. Monggar	1. Gyalpoizhing Wangling 2. Kidekhar 3. Koenbar Tagchhu 4. Phosorong 5. Themnangbi Kentongri 6. Wengkhar Yagpoogang
	10. Na-Rang	1. Dongshoom Pangkhang 2. Gomchhu 3. Khalong 4. Narang Pangthang 5. Thrinangphu
	11. Ngatshang	1. Ngatshaang 2. Nyingala Phanasi 3. Phelshoob 4. Thoombari Zangdari 5. Yadi Yekhar
	12. Saling	1. Drogsar 2. Kalapang Resa 3. Saling 4. Senggor 5. Thridangbi 6. Tsenzabi Masangdaza
	13. Shermuhoong	1. Gangmoong 2. Jabang Thueling 3. Malang Serzhong 4. Muhoong Shiling 5. Soenakhar Yarab
	14. Silambi	1. Daag 2. Gyalong 3. Kadag Silambi 4. Pang Nagor 5. Wama
	15. Thang-Rong	1. Atola 2. Bauchhoeling Panglen 3. Changshing 4. Lingkhar 5. Ngaru Pongtang

Dzongkhag	Gewog	Chiwog
7. Monggar	16. Tsakaling	1. Drengling Horong 2. Drongtoed Tormazhong 3. Kaling Thoomling 4. Nyartsi Tsakaling 5. Tagkhambi
	17. Tsamang	1. Baanjar 2. Drangmaling Nanggor 3. Ganglapong Maed 4. Ganglapong Toed 5. Thuenmong Tokari
8. Paro	1. Dokar	1. Dawakha Tshongkha 2. Goensakha Phuchhekha 3. Khamdraag Sali 4. Mendrel Uesuna 5. Tenchhekha Tsiphoog
	2. Dopshar-ri	1. Duezhi Jipa 2. Jangsa Jooka 3. Jizhigang 4. Kempa Kuduphoog 5. Rinchhending Sharri
	3. Doteng	1. Aatsho Phunoob 2. Chhubar 3. Jabji Loogchhoed 4. Joogar Pachhu 5. Phooshar
	4. Hungrel	1. Chhubjagkha 2. Gaupel 3. Goenkha 4. Hoongrelkha Jangsarbu 5. Loongchhungna
	5. Lamgong	1. Chhukha 2. Ngopa Shomo 3. Tsendonang 4. Gangjoog Kyidchhu 5. Jagarthang

Dzongkhag	Gewog	Chiwog
8. Paro	6. Loong-nyi	1. Baangdey 2. Dzongdraag Gadraag 3. Jieu Woochhu 4. Naemjog 5. Pangbisa
	7. NaJa	1. Bemphu Lingzhi Nagu 2. Bueltikha Jagoen 3. Jazhina Tsuengoen 4. Rangzhingang Tshebji 5. Wanakha Zursuna
	8. Sharpa	1. Bara Zhunggar 2. Bjizhikha Phubarna 3. Chhukha Gangjoogkha 4. Dochhoeten Neyphu 5. Drugyaldingkha Zhelngo
	9. Tsento	1. Chhungjey Zamsar 2. Mitshig Shana 3. Nyamjey Phangdo 4. Nyechhu Shari 5. Soe Yagsa
	10. Wangchang	1. Changkhar Jangteyina 2. Changmedthangka Khangkhu 3. Dungkhar Namkhar 4. Gebtoed Olathang Tajoog 5. Mendrel Nakha
9. Pemagatshel	1. Chhimoong	1. Chhimoong 2. Chhiphoong 3. Loongkholom 4. Nyasikhar 5. Pangthang Redingla
	2. Chhoekhorling	1. Arden 2. Chhoekhorling Gazawong 3. Dizama Shoguri 4. Kerong 5. Yargyewoong

Dzongkhag	Gewog	Chiwog
9. Pemagatshel	3. Chongshing	1. Chongshing Jorphoong 2. Guyoom Lanangzor 3. Kamri Yomzor 4. Maendi 5. Thongsa
	4. Dechhenling	1. Bidoongri Yangmalashing 2. Dechhenling Goenpawoong 3. Doongchhilo Kholomri 4. Doongphu Shingchongri 5. Goishing Ridzommo 6. Namdagling
	5. Dungmaed	1. Bangyuel 2. Dungmaed Zimzor 3. Lanyiri Thrumchoong 4. Serduwa 5. Woongborang
	6. Khar	1. Bongmaan 2. Khar Yagyur 3. Khengzor Labar 4. Nagtseri Shemshem Tsebar 5. Shinangri
	7. Nanong	1. Gashigkhar Tshatshi 2. Nanong 3. Raling 4. Terphug Woongchhiloo 5. Tokari
	8. Norboogang	1. Gashari 2. Maenchhu Nganglam 3. Norboogang Rinchhenzor 4. Nyingshingborang 5. Tshaelshingzor
	9. Shumar	1. Bartseri 2. Chongmashing Dagor 3. Goenpoong Shali 4. Khothagpa Yalang 5. Nangkor

Dzongkhag	Gewog	Chiwog
9. Pemagatshel	10. Yurung	1. Bangdala 2. Doongsingma Thoongkhar 3. Khangma 4. Khominang Yangkhar 5. Wanglakho Thoonggo
	11. Zobel	1. Choongkhar Pangthangdaza 2. Maan Tshelinggor 3. Ngangmalang Zorjoog 4. Raysinang 5. Zobel
10. Punakha	1. Barp	1. Chagsa 2. Gamakha Sebtokha 3. Sobsokha Yuwakha Zhikha 4. Tshogkorna 5. Usakha
	2. Chhuboog	1. Bali 2. Bumtakha Tenpakha 3. Jangwakha Sewala 4. Ngoedroobchhu 5. Yebisa
	3. Dzomi	1. Dzomisa Mendagang 2. Gubji Tseykakha 3. Jimithang 4. Khilikhar Loongkha 5. Tanag Uesa
	4. Goenshari	1. Draagchhukha 2. Goomgang 3. Sechaednang 4. Yorbo 5. Zhelngoesa
	5. Guma	1. Baymenang Phulingsoom Wangwakha 2. Changyuel Loongsilgang Tashijong 3. Dochhukha Dzomlingthang Ritsa 4. Guma Wolakha 5. Lakhu Tshowogm

Dzongkhag	Gewog	Chiwog
10. Punakha	6. Kabisa	1. Agonang Zarbisa 2. Chhoetennyingpo Uesarkha 3. Heyloog Tongzhoognang 4. Peltari 5. Sirang Wakoodamchh
	7. Lingmukha	1. Dompala 2. Goomkarmo 3. Lingmukha 4. Nabchhed 5. Oomtekha
	8. Shelnga-Bjemi	1. Chongzhi Jarigang Jazhikha 2. Datong 3. Gangkha 4. Khubji Tshosa 5. Thongbji
	9. Talog	1. Dongkokhar Yonggu 2. Gangthramo Labtsakha Soelwadrangsa 3. Loongnangkha 4. Norbugang 5. Talog
	10. Toedwang	1. Dawakha 2. Jibjo Yuesakha 3. Kewanang Tsachhuphu 4. Tamigdamchhu Thangbji 5. Tsephug Khawakha
	11. Toepaisa	1. Bichhekha Yuelhamo 2. Damkhyi Rinakha 3. Dochogla Maenchhuna 4. Goenmkha Mendrelgang 5. Lemjakha Thinleygang
11. Samdrup Jongkhar	1. Dewathang	1. Bangtsho 2. Chhenangri Rishor 3. Domphoog Dungkharchhoeling 4. Martang 5. Rikhey

Dzongkhag	Gewog	Chiwog
11. Samdrup Jongkhar	2. Gomdar	1. Broomi Chidoongkhar 2. Denchhi 3. Gomdar Richhanglu 4. Khoyarpangthang Palroong 5. Narphoong
	3. Langchenphu	1. Agoorthang 2. Jampani 3. Jangsa 4. Langchenphu 5. Rongchhuthang
	4. Lauri	1. Betseling Doongmanma 2. Gonong Zangthig 3. Lauri 4. Momring Rolnang 5. Tshothang
	5. Martshala	1. Chhoedoong Kakani 2. Galingkhar Wangphoog 3. Kaeptang Tsholingkhar 4. Martshala 5. Sarjoong 6. Suzor Tshotsalu
	6. Orong	1. Bilam Orong Suzoong 2. Jangchhubling 3. Morong 4. Nabar Philooma 5. Nagzor Wooling 6. Rimoong
	7. Pemathang	1. Chirtshosa Loongminang 2. Kathoobdrang Shilinggye 3. Pemathang 4. Raling 5. Uesarna Warong
	8. Phuentshogthang	1. Baylamsharang 2. Doongkarling 3. Khamaedthang 4. Minjigang 5. Phuentshogthang 6. Samdrupchhoeling

Dzongkhag	Gewog	Chiwog
11. Samdrup Jongkhar	9. Samrang	1. Damsagang Maed 2. Damsagang Toed 3. Ngangtshothang Maed 4. Ngangtshothang Toed 5. Tshoduen
	10. Serthig	1. Dangtsho Serthig 2. Drenphoog 3. Khandophoog Maenjiwoong 4. Monmola Tashithanggyed 5. Phagchhog Suskar
	11. Wangphoog	1. Bayuel Pangthang 2. Benporong Yarphoog 3. Sacchilo 4. Serchhenmo Wangphoog 5. Shogshi
12. Samtse	1. Doongtoed (Dumtoe)	1. Doongtoed Chhewa 2. Doongtoed Chhungwa Jarikha 3. Doongtoed Khaling 4. Gebji Kuzhuggang 5. Maedgang
	2. Dophoogchen(Dorokha)	1. Aringgang Midzomsa 2. Dangreyboog Ngagang 3. Manigang Thingyersa 4. Melonggang Thuloonggang 5. Sangloong Senteng 6. Singye
	3. Duenchhukha	1. Biloong Pongthra 2. Dhuenchhukha Gabji 3. Domchhukha Shitakha 4. Gawaling Karzhing 5. Gesarling Yomdeling
	4. Namgaychoeling (Lahireni)	1. Chhunaggang Chhoedleling 2. Gyalposhing Satsangsa 3. Namgaychhoeling 4. Pagshingkha Tshachhugang 5. Sernyagang Tsholingkhar

Dzongkhag	Gewog	Chiwog
12. Samtse	5. Norboogang (Chengmari)	1. Damzhagsa Tsaphelthang 2. Dawaling Yangphelthang 3. Dramzedgang Maedgang 4. Khangduzhi Kyidsa 5. Lambi Lamjosa
	6. Norgaygang (Bara)	1. Chhugoo Phendegang 2. Chongzhu Tshachhu 3. Dangreyboog Patshaling 4. Joenpang Lingarnang 5. Khabaabgang Noryog 6. Miphelgang Samphelgang
	7. Pemaling (Biru)	1. Chhusilgang Dramedsa 2. Dizanggang Nakeyling 3. Manigang Tashithang 4. Norgeyling Singdregang 5. Thangchhennang Damtshangna
	8. Phuentshogpelri (Pugli)	1. Chhunag Doomshinggang 2. Gashingma Ketshaelgang Thongjabi 3. Jangchhogling Lachhungthang 4. Nyoenpaling Tingtingma 5. Tashilakha Uelgyalling
	9. Samtse	1. Damtshangma Khandothang 2. Dewathang Lamaithang 3. Lingmaithang Taserpo 4. Nyimaling Chhirlogsa 5. Satshamchhu Tshongdzonm
	10. Sa-Ngag-Chhoeling (Chargharey)	1. Chhuchhungsa Karseling 2. Dephellingmaed Khangzangling 3. Dephellingtoed Namseling 4. Joenlegsa Sangngangchhoeling 5. Ngoedroobling
	11. Tading	1. Dangreyboong Nyindooglakha 2. Khempagang Panzhing 3. Norjangsa Zochhaling 4. Tading Tenpaling 5. Thongsa Tobchhenthang

Dzongkhag	Gewog	Chiwog
12. Samtse	12. Tashichhoeling (Sipsu)	1. Baepoteng Kangdoongphug 2. Daaling Gangjoog 3. Dewachen Zhiwaling 4. Norjangsa Peljorling 5. Tashichhoeling
	13. Tendruk	1. Dawathang Kuengaling 2. Kachhen Kuchhen 3. Khengtong Targothang 4. Miglamthang Thagpzosa 5. Nyizergang Tendruk
	14. Ugyentse (Nainital)	1. Dangkarling Dechhengang 2. Dangreyboog Rigpailing 3. Jarithang 4. Kardog 5. Nyimalung Tharpaling
	15. Yoeseltse (Ghumauney)	1. Dungkar 2. Koenchhogling Soenakha 3. Pelkithang Rangjoongling 4. Rinchhenphoog Samtenchhu 5. Zurigang Jigmedthang
13. Sarpang	1. Chhudzom	1. Dragchhu 2. Gaalegthang 3. Jangchhubling 4. Lhayuel 5. Sherabling
	2. Chhuzaggang	1. Barthang 2. Chagsakhar 3. Nyimaling Shawapong 4. Pangzor 5. Thongjabi Yueling
	3. Dekidling	1. Chhoekhorling 2. Dekidling 3. Gawaithang 4. Jigmedling 5. Nubgang

Dzongkhag	Gewog	Chiwog
13. Sarpang	4. Gakidling	1. Gakidling 2. Getemkha 3. Maenchhulam 4. Rilangthang 5. Sangkha
	5. Gelegphu	1. Dzamlingthang 2. Lekidthang 3. Pelrithangkha Maed 4. Pelrithangkha Toed 5. Pemathang
	6. Jigme-Chhoeling	1. Chhoetenkhar 2. Gongduegang 3. Gongtsekha 4. Khamaed 5. Khatoed 6. Samkhar
	7. Samtenling	1. Chhoekhorling Dechhenpelri 2. Dechhenpelri 3. Khenpagang 4. Samteling 5. Samthenthang
	8. Seng-Gey	1. Labtsakha 2. Nyenyul 3. Rishong 4. Sangyethang 5. Yarpheling
	9. Serzhon	1. Barshong 2. Norbuling 3. Pemayoedling 4. Sherzhong 5. Tashiphoog
	10. Shompangkha	1. Dargyethang 2. Gomchola 3. Koenchhogling 4. Risoomgang 5. Shompangkha

Dzongkhag	Gewog	Chiwog
13. Sarpang	11. Tareythang	1. Dorjitse 2. Pemahhoeling 3. Tashichhoeling 4. Woongchhiloo 5. Yoedzergang
	12. Umling	1. Daangling 2. Doongmin 3. Gaden 4. Rijoog 5. Tashithang
14. Thimphu	1. Chang	1. Changyokha Debsid 2. Gangchhe Talakha 3. Lhoongtsho Tashigang 4. Ramtogtog Tsangrina 5. Yoedselpang
	2. Darkarla	1. Chamgang Maed 2. Chamgang Toed 3. Doongdrog 4. Gyaltala 5. Wangdrog
	3. Genyen	1. Chizhi 2. Genyenkha 3. Tshochhenkha Zamtog 4. Wangbama 5. Zhanglegkha
	4. Kawang	1. Boegarna Dodennang 2. Chhagminang Chhoekhor 3. Chhandagang Chhoekortse Phajoding 4. Dashi Zhoshuel 5. Kuzhugchen
	5. Lingzhi	1. Chagphu 2. Chhuzarkha 3. Gangyuel 4. Khangkidyuel 5. Shayuel

Dzongkhag	Gewog	Chiwog
14. Thimphu	6. Maedwang	1. Danglo Namsaeling 2. Jiminang 3. Khasdrapchu 4. Sisinang 5. Tshaloongna
	7. Naro	1. Barshong Nango 2. Moentsiphoog 3. Pagoed 4. Tagsidthang 5. Zhomthang
	8. Soe	1. Damgochong 2. Dotaapaithang 3. Jangothang 4. Jomphu 5. Tozotoen
15. Trashigang	1. Bartsham	1. Bainangkhar Nangkhar 2. Dzongthong Menchhari 3. Jamoong Kumoong 4. Moogtangkhar 5. Trashang
	2. Bidoong	1. Kakaniwog 2. Khairi Saling 3. Lemphang 4. Tsekhar 5. Tsigtoom
	3. Kanglung	1. Maanthong 2. Mertsham Thragom 3. Pangthang Ritsangdoong 4. Rongthoong Shingchen 5. Yonphoogla
	4. Kangpar	1. Bedengphoog Merdag 2. Kangpar Lamyong 3. Passaphoog Peydoong 4. Threlphoog 5. Zordoong

Dzongkhag	Gewog	Chiwog
15. Trashigang	5. Khaling	1. Barshong 2. Bayphoog Togkaphu 3. Brekha Meringzor 4. Gomchhu Kholdoong 5. Jiri Lemi 6. Khaling
	6. Lumang	1. Chhengri Doongmanma 2. Drubkhang Lumang 3. Kharphoog Kurchhilo 4. Moochhu Wakhar 5. Riserboo Tsangpo 6. Tshogoenpa
	7. Merag	1. Gyengo 2. Khashateng 3. Khiliphoo 4. Merag Maed 5. Merag Toed
	8. Phongmed	1. Lem 2. Phimshong 3. Phongmed 4. Thongrong 5. Yabrang
	9. Radi	1. Dekidling Tsenkhar 2. Kadam 3. Nagtshang Togshingmang 4. Pakaling 5. Tonglingpam
	10. Sagten	1. Borangmang Borangtse 2. Joenkhar Moorbi 3. Pusa Tenmang 4. Sagteng 5. Thagthri
	11. Samkhar	1. Bikhar Domkhar 2. Chagzam Pam 3. Kapang Yenangdrangsa 4. Khabti Lungtenzampa 5. Maelphel Samkhar 6. Rangzhikhar Serdrang

Dzongkhag	Gewog	Chiwog
15. Trashigang	12. Shongphoog	1. Chaling 2. Chhangmi Rangjoong 3. Dramin Shongphoog 4. Galing 5. Gongtsephangma Yobinang
	13. Thrimshing	1. Berdoongma Thoongkhar 2. Bongzor Phegpari 3. Doongsingma Tsangpo 4. Ramchongma Yemkhar 5. Thrimshing
	14. Udzorong	1. Baepam 2. Barkazor Maenkhar 3. Benshingmo Jomtsang 4. Chhiya 5. Rizor Yerchhilo
	15. Yangnyer	1. Daliphang Ragshigo 2. Dargyeling Kharthoong 3. Duroong Ngambinlang 4. Khardza Leyphoog 5. Shokang Tagtagpa
16. Trashiyangtse	1. Boomdeling	1. Betsamang 2. Bomdir Wogmanang 3. Gangkhardoong Tshaling 4. Ngalimang Phanteng 5. Pangkhar Taphel
	2. Jamkhar	1. Chhema Tagchhema 2. Laishoom Largyab 3. Neydrag Pachhu 4. Rijoong Yoob 5. Shingkhar Tongla
	3. Khamdang	1. Domtshang Karmazom 2. Dungtse Lengkhar 3. Khamdang Manla 4. Nombaring Shazam 5. Serpang Shalli

Dzongkhag	Gewog	Chiwog
16. Trashiyangtse	4. Ramjar	1. Bainangreb Romang 2. Bawoong 3. Domtshang Doongmaen 4. Khalapangthang Tsangrong 5. Lengbartang Woongkhar
	5. Toedtsho	1. Chhemkhar Manam 2. Jangphoogtse Thangdoong 3. Khinyel Togshing 4. Maeldoong 5. Nangkhar Seb 6. Sertsho
	6. Tongmizhangsa	1. Bagpa Kuenzangling 2. Bainangkhar Gomkor 3. Changmadoong Shoganang 4. Maenchu Tsangdoong 5. Pang Lhauzhing
	7. Yalang	1. Chhema Melongkhar 2. Doogti Gashing 3. Namthi Yarphel 4. Phugyang Yalang 5. Rolam Thragom
	8. Yangtse	1. Baney Bimkhar 2. Bayling 3. Gangkhar 4. Lichen 5. Rabti
17. Trongsa	1. Draagteng	1. Kuenga Rabten 2. Samlingkha Maed 3. Samlingkha Toed 4. Tagtse Tashidingkha 5. Uesar
	2. Korphoog	1. Korphoog Maed 2. Korphoog Toed 3. Nabi 4. Nyimzhong Maed 5. Nyimzhong Toed

Dzongkhag	Gewog	Chiwog
17. Trongsa	3. Langthil	1. Baling 2. Dangdoong 3. Jangbi 4. Langthil 5. Yuendroongchhoeling
	4. Nubi	1. Bagochen Boolingpang Ueling 2. Bemji Chela 3. Bji Saengbji 4. Darbab Sinphoog 5. Gagar Karzhong
	5. Tangsibji	1. Chendenbji 2. Kela 3. Nyala Drangla 4. Tangsbji 5. Tshangkha
18. Tsirang	1. Barshong	1. Barshong Maed 2. Barshong Toed 3. Chunyikhang 4. Gangtogkha 5. Toedsang
	2. Doonglagang	1. Dangreyboog Maed 2. Dangreyboog Toed 3. Dingrigang Lhamoiloongm 4. Khirithang 5. Norjangsa
	3. Gosarling	1. Dzamlingthang 2. Dzamlingzor 3. Pelrithang 4. Pemathang 5. Phuensoomgang
	4. Kilkhorthang	1. Dekidling 2. Maenchhana 3. Nyizergang 4. Satsangma 5. Tashiyangjong

Dzongkhag	Gewog	Chiwog
18. Tsirang	5. Mendrelgang	1. Dzamlingzor 2. Mendrelgang 3. Pemashong Samshinggaden 4. Riserboo 5. Tashipang
	6. Patshaling (Beteni)	1. Chhuzomsa 2. Pangthang 3. Pantshaling Maed Tsakaling 4. Pantshaling Toed 5. Thakorling
	7. Pungtenchhu	1. Goentegkha Tongshinggang 2. Norboothang 3. Peljorling 4. Serzhong 5. Tashichhoeling
	8. Rangthangling	1. Chringma Rangthangling 2. Darchhargang 3. Gagaling Nyimazor 4. Neymedsa 5. Soonkosh
	9. Semjong	1. Dangreygang 2. Dekidling 3. Dzomling 4. Tashiling Maed 5. Tashiling Toed
	10. Sergithang (Patala)	1. Norboogang 2. Semdenjong 3. Sergithang Maed 4. Sergithang Toed 5. Tashithang
	11. Tsholingkhar	1. Droobchhugang 2. Gomsoom 3. Kapazhing 4. Tsholingkhar Maed 5. Tsholingkhar Toed

Dzongkhag	Gewog	Chiwog
18. Tsirang	12. Tsirang Toed	1. Kabelzhing 2. Soentabsa 3. Tagthang Wangphoo 4. Tongshingnang 5. Tsirang Toed
19. Wangdue Phodrang	1. Athang	1. Jaroggang Dzawa 2. Lawa Lamga 3. Lomtshokha 4. Lophokha Pagtakha 5. Rookha
	2. Bjednag	1. Bjednagloongpa Thingmakha 2. Garzhikha Omchheygang 3. Ngawang Tongchennang 4. Tashitokha 5. Wachhey
	3. Dangchhu	1. Doongdoongnyelsa Norbooding 2. Godraang Taagsar 3. Tashidingkha Zimi 4. Tokaling Tomla 5. Uesagang
	4. Darkar	1. Gyapakha 2. Kamichhu Umakha Maed 3. Kamina Wogyal 4. Sili Taagsha 5. Umakha Toed
	5. Gangteng	1. Jangchen Koomboo 2. Gorgoen 3. Gangteng 4. Tapaiteng Uega 5. Yaekorwog
	6. Gase Tsho-Gongm	1. Changche Matshigpogto 2. Changkha 3. Dabchhaykha Matshigkha 4. Khamaedna 5. Khatoedkha

Dzongkhag	Gewog	Chiwog
19. Wangdue Phodrang	7. Gase Tsho-Woom	1. Haebisa 2. Haetshokha 3. Medpaisa Taabchhaekha 4. Shingkheykha Toed 5. Singkheykha Maed
	8. Kazhi	1. Baedrog 2. Chegidp 3. Kazhi 4. Komathrang 5. Lengbi
	9. Nahi	1. Haebisa 2. Halued Uesawogm 3. Khoorjoongla Langmizi 4. Nagbisa 5. Uesagongm Thabji
	10. Nyishog	1. Chhaebhakha 2. Chitokha Pangkha 3. Gangjab 4. Geylegkha Kuenzangling 5. Goensar Rajawog 6. Samtengang
	11. Phangyuel	1. Chhunggoen 2. Chhungserkha Domkha 3. Goenkhar 4. Koomchhi Phangyuel 5. Uesargang Wampoekhar
	12. Phobji	1. Damchhoe Gangphel 2. Dogsenang Gorphoog 3. Drangpa Pangsar 4. Khemdro Nemphel 5. Talachen Tawa Taphoog
	13. Ruebisa	1. Bangtoedkha 2. Bjagphug 3. Gyala 4. Oola 5. Zamding

Dzongkhag	Gewog	Chiwog
19. Wangdue Phodrang	14. Saephoog	1. Boommilog 2. Booso Zeri 3. Longtoed 4. Nakha 5. Rukoobji
	15. Thedtsho	1. Jang Rinchhengang 2. Lho Rinchhengang 3. Martaloongchu 4. Thanggoo 5. Wangjokha
20. Zhemgang	1. Bardo	1. Bardo 2. Digala 3. Khomshar 4. Langdorbi 5. Phulabi
	2. Bjoka	1. Bjokar 2. Chabdenba Dzarkabla 3. Dali 4. Kamati 5. Sarpong Namirgang
	3. Goshing	1. Budhashi 2. Lamthang 3. Lichibi 4. Lingmapong Samchhoeling 5. Mewangang
	4. Nangkor	1. Buli 2. Dakphel Tali 3. Duenmang 4. Goleng 5. Nyakha
	5. Ngangla	1. Kagtong 2. Marangduet 3. Ngangla Trong 4. Panbang Sonamthang 5. Ribati

Dzongkhag	Gewog	Chiwog
20. Zhemgang	6. Phangkhar	1. Chargngarzam 2. Mamong Trong Pantang 3. Panabi 4. Rongchola Dadijong 5. Shalingtoed Tashibi
	7. Shingkhar	1. Nyimzong Thajong 2. Radi 3. Singkhar 4. Thrisa 5. Wamling
	8. Trong	1. Berti Tagma 2. Dangkhar Trong 3. Gongphu 4. Soobdrang 5. Tshanglajong Zurphel

Source: Election Commission of Bhutan (ECB)