National Statistics Bureau
ROYAL GOVERNMENT OF BHUTAN

P.O. Box No. 338, Thimphu
Telephone No. +975-2-322753/ 333296/ 325402
Fax: +975-2-323069
www.nsb.gov.bt

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National Statistics Bureau
ROYAL GOVERNMENT OF BHUTAN

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National Statistics Bureau
Royal Government of Bhutan

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2010

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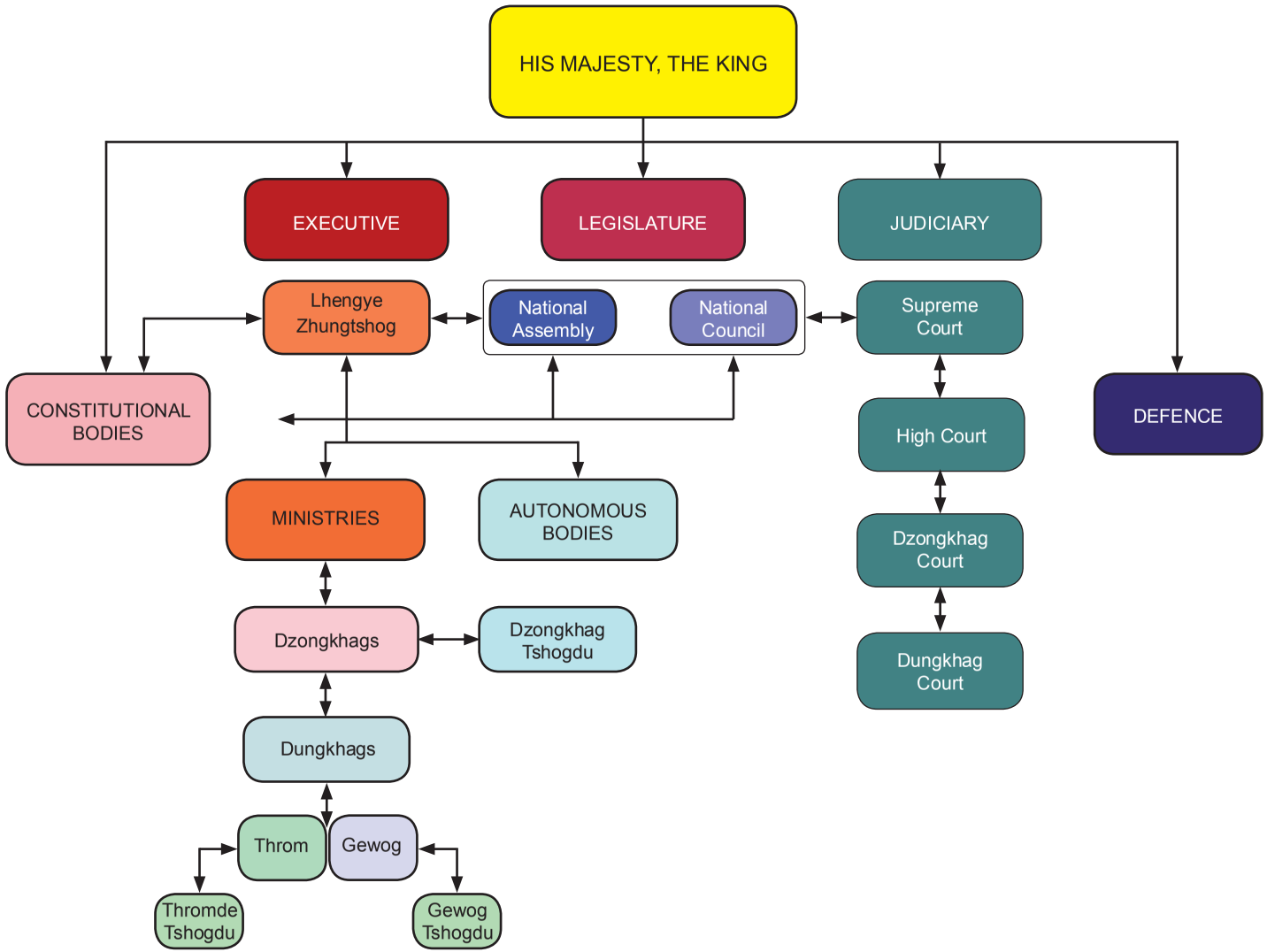
ORGANOGRAM OF THE ROYAL GOVERNMENT OF BHUTAN
POST CONSTITUTIONAL ENACTMENT 2009



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FOREWORD

This Statistical Yearbook publication is the 28th edition in series. It is a comprehensive and systematic compendium of basic statistical information on Bhutan illustrating time series data about the Country's economy and social conditions.

The statistics collected are based on information gathered from statistical censuses and surveys, as well as from administrative data, by various ministries and agencies.

For the benefit of the users, efforts have been made to provide brief explanatory notes, coverage and data sources. The data in yearbook will serve as the principal source of information for planners, policy makers, research workers and academicians. It is intended to serve the quest for information by clients in the global community.

This 28th issue of statistical yearbook of Bhutan features the detailed information on the population parameters based on the PHCB 2005 and it has 16 different chapters of general interest to meet the need of a wide range of data users.

Effort has been made to ensure that this publication meets acceptable statistical standards. Data maintenance, its validation, compilation and updating has been done in close collaboration with all the data disseminating/providing agencies, until the compilation was finalized for publication.

However, it was not always possible for us to undertake the detailed assessment of all the data available, albeit the need to place strong reliance on the existing data has been felt very much. Therefore, some shortcomings are inevitable as a result.

We value the contribution of different ministries and agencies that provided data and information for SYB 2010. In our desire to be more effective in serving the needs of the users for statistical information, we view our readers as key partners in publishing the SYB annually. We solicit comments and suggestions from the users of this yearbook, in order to improve the quality of the forthcoming issues.

Director
National Statistics Bureau
Royal Government of Bhutan

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NOTES FOR USERS

1. Unless otherwise indicated, the present issue of the Yearbook contains those statistics available as of December 2009
2. At the beginning of each chapter, general description of the statistics contained therein is given.
3. For every table, there is footnote indicating information specific to each figure in the table.
4. Unless otherwise indicated, "Year" refers to the calendar year, and "fiscal year" refers to the 12 months begining from July to June.

n.a	not available
..	rounded to zero
*	sampling error too high for accurate estimation or estimates less than one percent.
()	negative numbers
CY	calendar year (period from January to December)
FY	fiscal year (period from April to March until 1985/86 and from July to June since then, unless otherwise indicated).

5. In some cases, minor discrepancies may occur between sums of component items and totals because of rounding.
6. Dzongkhags given in some tables differ from those given in Annex I. This is because of changes, following the creation of new Dzongkhags.
7. Names of the Ministries/Agencies both in tables and footnotes may differ. This is because of changes, following the creation of new Ministries/agencies.
8. Detail figures in the tables may not add up to the totals because of rounding.
9. Singular term is most often used to represent plural terms, example: agency for agencies etc.
10. When contents of this book are to be quoted or copied in other publication/ report, please give a due credit by referring the title of this yearbook (Example) Source: Bhutan Statistical Yearbook 2010, National Statistics Bureau
11. For additional information on data or for any other queries, please refer to the original source or National Statistics Bureau.

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SOME UNITS OF MEASUREMENT

Numbering and Scientific notations (US & scientific Community)

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

A. Length Measurement

1. Metric equivalents

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

Abbreviations

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

2. British units

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

3. Conversion from British to metric units (lengths)

1 inch	= 2.539998 cm
1 m	= 39.3370113 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

1. British units

144 square inches	= 1 square foot
9 square feet	= 1 square yard
30 1/4 yards	= 1 square rod, pole

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40 square rod	= 1 rood
4 roods	= 1 acre
640 acres	= 1 square miles

2. Metric units

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

3. Conversion from British to Metric units (Area)

1 square yard	= 0.836 square m
1 square feet	= 0.093 square m
1 square inch	= 6.452 square cm
1 square m	= 1.196 square yard
1 square m	= 10.764
1 square cm	= 0.155 square inch
1 square mile	= 2.590 square km
1 square km	= 0.386 square mile

C. Weight measurements

1. British units

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

2. Metric units

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

3. Conversion from British to metric units

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

D. Conversion of air temperatures

1. Degree Celsius to degree Fahrenheit.

(9 x T)/5 + 32, where T is temperature in degree Celsius.

2. 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	72.5%
Population, 2009 (projected)	683,407
Population Growth Rate (PHCB 2005)	1.3%
Average Household size, (BLSS, 2007)	5.0
National Language	Dzongkha
National Currency	Ngultrum (Nu.)
Hospitals, 2009	31
Doctors, 2009	176
Civil servants, 2009	21,113
Schools, Institutes, Daycare & NFE centers, 2009	1,651
Teachers (including in institutes & NFE), 2009	8,395
Students (including in institutes & NFE), 2009	197,832
Labour Force Participation rate, (BLSS 2007)	67.3
Unemployment rate, (BLSS 2007)	3.7
Fixed line Telephone subscribers, 2009	26,348
Cellular Mobile subscriber, 2009	262,052
Postal infrastructure, 2009	112
Total road length, (as of June 30, 2010)	6,920.1 km
Number of registered vehicles, 2009	49,300
Electricity generation, 2008/09	6,960.6 MU
Electricity exports, 2008/09	5,609.4 MU
Tourist arrivals, 2009	23,480
Revenue earned from tourism, 2009	31.9 Mn US $
Total establishments, 2009	30,317
Balance of trade, 2008/2009	(6,911.1) Mn. Nu.
Exchange rate (calendar year), Nu. Per US $, 2009	48.4
Gross international money reserves, 2006/07	599.0 Mn US $
Total Tenth Plan budgetary outlay (2008-2013)	146,252.2 Mn Nu.
GDP (Current Price), 2009	61,223.5 Mn. Nu.
Average inflation rate, 2009	4.05 %
Purchasing Power of Nu., 2009 (base year =2003)	0.72 Nu.

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BHUTAN

Bhutan is one of the Asia's smallest nations, landlocked between the extensive borders of the two great populous nations of China and India. Only 38,394 square kilometers in extent, the kingdom's longest east-west dimension, stretches around 300 kilometers and measures 170 kilometers at its maximum north-south dimension. Bhutan is situated in the eastern Himalayas and is mostly mountainous and heavily forested. It has 470 kilometers long bordered by Tibet (China's Xizang Autonomous Region) to the north and northwest and 605 kilometers with Indian state of Sikkim to the west, West Bengal to the southwest, Assam to the south and southeast, and Arunachal Pradesh to the east. Indian state of Sikkim, which measures eighty-eight-kilometer-wide territory, separates Bhutan from Nepal, while West Bengal separates Bhutan from Bangladesh by only sixty kilometers. The border with Tibet is traditional following the watershed of the Chumbi Valley in the northwest and the crest of the Himalayas in the north while, the southern border with India was established by treaty with the British in the nineteenth century and basically follows the line made by the Himalayan foothills with the plains.

72.5 percent of the Kingdom is covered with forests; 10 percent with year-round snow and glaciers; nearly 8 percent is permanently cultivated or used for human habitation; another 2 percent was used for shifting cultivation (tsheri), a practice banned by the government; and 3.9 percent as meadows and pastures, while rest of the land is either barren, rocky or scrubland

II. The Geologic Setting*

The Himalayas of Bhutan consist of, from south to north, the Indian shield, the lower Himalayas, the Higher Himalayan Crystallines, and the Tibetan series. The Indian shield and its cover of sediments are separated from the lower Himalayas by the Main Boundary Thrust (MBT), which is the active thrust fault along which the rocks are being pushed up and over the Indian shield by the collision of India with Asia. The Main Central Thrust (MCT) separates the lower Himalayas from the Higher Himalayan Crystallines (HHC).

This Thrust, now "dead" is the surface along which substantial displacement took place about 20 Ma ago, leading to initial thickening of the continental crust. It can be thought of as an ancient equivalent of the MBT. Above the MCT is the Kakhtang thrust, discovered by Lincoln Hollister and the 1996 expedition to Bhutan and named for the army base through which it passes; it appears to be later than the MCT and brings to the surface deep portions of the crust, which may represent deeper section of the HHC. The South Tibetan Detachment System (STD) separates the HHC from the Tibetan series. The STD is a series of normal faults, all giving a sense of movement of the Tibetan series down to the north relative to the HHC.

The HHC appears to have been expelled out to the south in two pulses: one with the HHC carried south over the lesser Himalayas along the MCT, and the second producing a doubling of the HHC by further thrusting south along the Kakhtang thrust.

** By Lincoln Hollister and the 1996 expedition to Bhutan*

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Most of the recent uplift of the Himalayas has occurred by thrusting along the MBT; movements associated with this fault causes the earthquakes occasionally felt in the Trashigang district. The uplift across the MBT set the stage for the erosion, which exhumed the deep portions of the HHC and its bounding structures, the MCT and the STD.

The MCT is slightly warped plane dipping northwards and separating the cover rocks of the underlying Indian shield from the highly deformed and thermally altered (metamorphosed) overlying wedge of the HHC. The plane intersects the rough topographic surface of the Himalayas, forming a line of intersection that can be followed across the ground surface. This line of intersection crosses the road several times near Barshong, crosses at the pass between Kanglung and Barshong, goes below the road from Kanglung to Trashigang and crosses the Gamrichu about 2km below Rolong. From there it goes along the east side of the Kurichu valley until it crosses the river, about 10 km below Lhuentse; from there it crosses back along the west side to Trashigang and crosses the Gamrichu about 2km below Rolong. From there it goes along the east side of the Kurichu valley until it crosses the river, about 10 km below Lhuntse; from there it crosses back along the west side of the Kurichu valley and recrosses the road between Monggar and Sengor. It continues northwesterly through Bhutan, Sikkim, Nepal, Ladakh, and Kashmir and into Pakistan. To the east it continues through the Northern Frontier of India

III. Relief and Surface features

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

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

The Inner Himalayas are southward spurs of the Great 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.

IV. Climate and Vegetation

The country can be divided into three distinct climatic zones corresponding to the three main geographical divisions. Bhutan's climate is as varied as its altitudes and, like most of Asia; it is affected by the monsoons. Western Bhutan is particularly affected by monsoons that bring between 60 and 90 percent of the region's rainfall. The climate is humid and subtropical in the

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southern plains and foothills, temperate in the inner Himalayan valleys of the southern and central regions, and cold in the north, with year-round snow on the main Himalayan summits.

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

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

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

There is a pronounced difference in the vegetation cover in three different zones of the country and it is mostly due to the prevalence of varied climatic conditions across the kingdom. The southern foothills are mostly covered by the dense and thick deciduous trees while the inner regions are dotted by an infinite variety of plants, flowers and trees including birch, pine, chestnut, oak, apples, peaches and plums are also grown in the fertile valleys. The northern part with the tundra type of climate allows the growth of coniferous trees and other 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.

V. 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

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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.

VI. Government

On 17 December 1907, the civil and monastic representatives unanimously crowned Ugyen Wangchuck as the first hereditary monarch of Bhutan. It was as a result of the influence of the strength and the farsightedness of Ugyen Wangchuck that for the first time Bhutan was united under a central authority, which provided the country with stability and opportunity for development. In 1926 his son Jigme Wangchuck, who ruled until his death in 1952, succeeded Ugyen Wangchuck. The third Druk Gyalpo, Jigme Dorji Wangchuck began a campaign of modernization and expansion of Bhutan's government and society based on the accomplishments of his two predecessors in uniting the country under a strong central authority. Hence, the National Assembly consisting of representatives of the people, the Monastic order and civil administration was reestablished in 1953. The present Druk Gyalpo, His Majesty King Jigme Singye Wangchuck acceded to the throne in 1972. His Majesty the king is the head of state. The head of government is nominated from among the Cabinet Ministers. There has been steady decentralization of decision-making and institute building since His Majesty the King was enthroned. 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 change set off a process of adaptation in the relationship between the various branches of the government, as shown in chart 1 it reflects the logical delineation in the separation of powers along with the establishment of elected Council of Ministers with full executive powers. It shows the apparatus of all the important aspects of the Bhutanese system of governance like the executive, legislative and judiciary going down from the central to the district levels.

Under the unity and farsighted leadership provided by His Majesty the King, the nation will be governed primarily through the Cabinet. The Cabinet Ministers are the heads of ministries, who will oversee that policies are formulated and programmes are carried out. The autonomous bodies have interactions primarily with the ministers, and this is denoted as such in the organogram.

VII. The National Assembly

The Nationwal Assembly (Gyelyoung Tshogdu) consists of 47 members who are representatives from the 47 Constituencies directly elected by the people of their respective constituencies. The main functions of the National Assembly are to enact, amend or repeal laws, endorse appointments of senior government officials and approve the national budget. The National Assembly also approves the Five Year Plans which are formulated by the government in consultation with the people of every district, initially through the Block Development Committee and District Development Committee, and finally in large public meetings with the king and sectoral heads

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of the government. It also deliberates on issues that affect the security and well-being of the country and promote the welfare and happiness of the people. The National Assembly meets twice a year. However, if an important and emergency matter demands, special sessions of the National Assembly may be convened by the speaker. The duration of the National Assembly is governed by the nature and scope of the points for discussion received from the people. A session normally lasts about three weeks. The speaker is the presiding officer of the House. He is assisted by the Deputy Speaker in the conduct and smooth functioning of the house. The day to day administrative functions of the National Assembly rest with the secretariat which is headed by a secretary.

VIII. The National Council

The National Council is established in 2008 under Article 11 of the constitution of Bhutan. There are 25 members; 20 are directly elected by the people from 20 Dzongkhags and the other 5 are nominated by His Majesty, the Druk Gyalpo. Their tenure is five years which commences from the date of the National Council 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; special sessions may also be convened depending on the needs. The duration of the session is fixed according to the length and issues of the agenda. The chairperson, elected from 25 members of the National Council is the Presiding Officer of the House. The chairperson is assisted by a Deputy Chairperson in the conduct and smooth function of the *House. The Nation Council has seven standing committees; namely the House Committee, the Legislative Committee,* the Good Governance Committee, the Social & Cultural Affairs Committee, and the International Relation & Security Committee. Each committee has a minimum of seven members headed by a chairperson who is elected from the seven members. The National Council is assisted in the discharge of its parliamentary functions by a secretariat which is headed by a secretary general

IX. The Monastic Body

The Monastic Body comprises the Central Monastic Body and the Rabdeys (District Monastic Bodies). The current strength of the Monastic Body is over 5,000 registered gelongs (monks) and is financed by an annual subsidy from the Royal Government. Punakha and Thimphu Dratshang having strength of 1,600 constitute the Central Monastic Body. The Monastic Body is the sole arbiter on religious matters. The Je Khempo who is chosen from among high-ranking gelongs is the head of the Body. He is assisted by four high-ranking Lopens of the Central Monastic Body.

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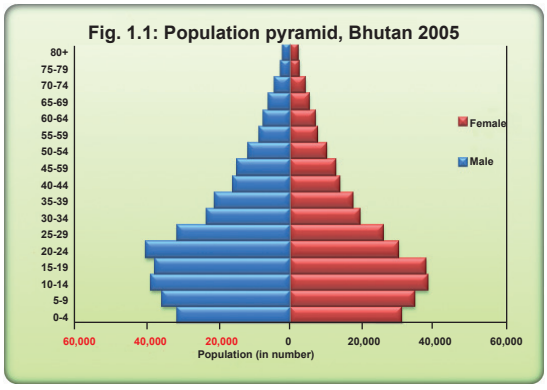
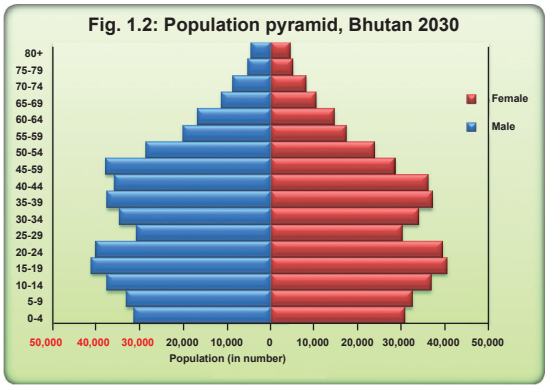
CHAPTER 1
POPULATION

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





The second major element of population statistics relates to the demographic characteristics of the population. The most common source of information on demography is the vital registration system (which usually covers the registration of births and deaths and sometimes marriages and divorces). In Bhutan, the vital registration system does not currently provide the full coverage of births and deaths and it has been necessary to undertake special sample surveys, (the first one in 1984, and second one in 1994 and 2000) to obtain important demographic information. The Statistics presented in this chapter are purely of the Population and Housing Census

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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 population growth rate of 1.3% derived from PHCB 2005, the population for 2009 was calculated at 683,407.

The interpretations of Demographic indicators are as follows:

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

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

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

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

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

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

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

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

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

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

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TABLE 1.1 PROJECTED POPULATION BY SEX, BHUTAN 2005 - 2030

(in numbers)

Year	Persons			Percent		
	Total	Male	Female	Total	Male	Female
2005	634,982	333,595	301,387	100.0	52.5	47.5
2006	646,851	339,403	307,448	100.0	52.5	47.5
2007	658,888	345,298	313,590	100.0	52.4	47.6
2008	671,083	351,269	319,814	100.0	52.3	47.7
2009	683,407	357,305	326,102	100.0	52.3	47.7
2010	695,822	363,383	332,439	100.0	52.2	47.8
2011	708,265	369,476	338,789	100.0	52.2	47.8
2012	720,679	375,554	345,125	100.0	52.1	47.9
2013	733,004	381,582	351,422	100.0	52.1	47.9
2014	745,153	387,520	357,633	100.0	52.0	48.0
2015	757,042	393,324	363,718	100.0	52.0	48.0
2016	768,577	398,948	369,629	100.0	51.9	48.1
2017	779,666	404,347	375,319	100.0	51.9	48.1
2018	790,215	409,474	380,741	100.0	51.8	48.2
2019	800,154	414,293	385,861	100.0	51.8	48.2
2020	809,397	418,760	390,637	100.0	51.7	48.3
2021	818,370	423,085	395,285	100.0	51.7	48.3
2022	827,038	427,250	399,788	100.0	51.7	48.3
2023	835,379	431,247	404,132	100.0	51.6	48.4
2024	843,363	435,058	408,305	100.0	51.6	48.4
2025	850,976	438,679	412,297	100.0	51.6	48.4
2026	858,410	442,200	416,210	100.0	51.5	48.5
2027	865,662	445,626	420,036	100.0	51.5	48.5
2028	872,759	448,965	423,794	100.0	51.4	48.6
2029	879,707	452,224	427,483	100.0	51.4	48.6
2030	886,523	455,409	431,114	100.0	51.4	48.6

Source: Population Projections Bhutan, 2005-2030, NSB

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TABLE 1.2 PROJECTED POPULATION BY AGE GROUP AND SEX, BHUTAN 2005 - 2007

(in numbers)

Age group	2005 (observed)			2006			2007		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
0-4	62,553	31,489	31,064	65,100	32,702	32,398	68,180	34,183	33,997
5-9	70,399	35,547	34,852	68,780	34,808	33,972	67,205	34,102	33,103
10-14	77,007	38,728	38,279	76,190	38,420	37,770	74,948	37,823	37,125
15-19	75,236	37,504	37,732	75,810	37,404	38,406	76,381	37,672	38,709
20-24	70,574	40,254	30,320	72,016	40,330	31,686	73,004	39,722	33,282
25-29	57,358	31,386	25,972	60,311	33,428	26,883	63,148	35,554	27,594
30-34	42,806	23,208	19,598	44,844	24,282	20,562	47,480	25,672	21,808
35-39	38,729	21,124	17,605	39,547	21,568	17,979	39,956	21,764	18,192
40-44	29,900	16,022	13,878	31,182	16,759	14,423	32,929	17,777	15,152
45-49	27,662	14,895	12,767	27,970	15,037	12,933	28,039	15,037	13,002
50-54	22,047	11,779	10,268	23,088	12,340	10,748	24,140	12,919	11,221
55-59	16,392	8,764	7,628	16,973	9,074	7,899	17,764	9,479	8,285
60-64	14,574	7,564	7,010	14,593	7,582	7,011	14,525	7,579	6,946
65-69	11,361	5,999	5,362	11,581	6,079	5,502	11,870	6,178	5,692
70-74	8,742	4,493	4,249	8,865	4,567	4,298	8,913	4,611	4,302
75-79	5,245	2,677	2,568	5,469	2,794	2,675	5,712	2,908	2,804
80+	4,397	2,162	2,235	4,532	2,229	2,303	4,694	2,318	2,376
Total	**634,982**	**333,595**	**301,387**	**646,851**	**339,403**	**307,448**	**658,888**	**345,298**	**313,590**

Source: Population Projections Bhutan, 2005-2030, NSB

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TABLE 1.3 PROJECTED POPULATION BY AGE GROUP AND SEX, BHUTAN 2008 - 2010

(in numbers)

Age group	2008			2009			2010		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
0-4	71,833	35,985	35,848	76,103	38,177	37,926	81,063	40,853	40,210
5-9	65,610	33,346	32,264	63,888	32,424	31,464	61,901	31,204	30,697
10-14	73,412	37,037	36,375	71,756	36,199	35,557	70,108	35,404	34,704
15-19	76,824	38,125	38,699	76,949	38,479	38,470	76,636	38,536	38,100
20-24	73,669	38,736	34,933	74,201	37,806	36,395	74,730	37,240	37,490
25-29	65,769	37,527	28,242	68,070	39,045	29,025	69,980	39,907	30,073
30-34	50,524	27,324	23,200	53,693	29,149	24,544	56,767	31,061	25,706
35-39	40,269	21,893	18,376	40,924	22,208	18,716	42,226	22,888	19,338
40-44	34,875	18,913	15,962	36,647	19,940	16,707	38,000	20,708	17,292
45-49	28,074	15,018	13,056	28,362	15,153	13,209	29,087	15,553	13,534
50-54	25,122	13,464	11,658	25,937	13,912	12,025	26,535	14,229	12,306
55-59	18,704	9,953	8,751	19,704	10,463	9,241	20,697	10,980	9,717
60-64	14,470	7,594	6,876	14,558	7,679	6,879	14,873	7,867	7,006
65-69	12,171	6,280	5,891	12,416	6,366	6,050	12,566	6,425	6,141
70-74	8,936	4,641	4,295	8,992	4,677	4,315	9,113	4,729	4,384
75-79	5,942	3,013	2,929	6,126	3,099	3,027	6,253	3,163	3,090
80+	4,879	2,420	2,459	5,081	2,529	2,552	5,287	2,636	2,651
Total	**671,083**	**351,269**	**319,814**	**683,407**	**357,305**	**326,102**	**695,822**	**363,383**	**332,439**

Source: Population Projections Bhutan, 2005-2030, NSB

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TABLE 1.4 PROJECTED POPULATION BY AGE GROUP AND SEX, BHUTAN 2011 - 2013

(in numbers)

Age group	2011			2012			2013		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
0-4	81,918	41,285	40,633	82,559	41,610	40,949	82,936	41,801	41,135
5-9	64,406	32,399	32,007	67,467	33,872	33,595	71,111	35,670	35,441
10-14	68,504	34,672	33,832	66,946	33,974	32,972	65,365	33,224	32,141
15-19	75,834	38,234	37,600	74,607	37,645	36,962	73,090	36,868	36,222
20-24	75,316	37,149	38,167	75,899	37,422	38,477	76,354	37,879	38,475
25-29	71,427	39,991	31,436	72,426	39,398	33,028	73,105	38,429	34,676
30-34	59,707	33,091	26,616	62,533	35,205	27,328	65,147	37,169	27,978
35-39	44,255	23,957	20,298	46,873	25,337	21,536	49,896	26,978	22,918
40-44	38,818	21,152	17,666	39,237	21,354	17,883	39,561	21,490	18,071
45-49	30,353	16,280	14,073	32,072	17,280	14,792	33,987	18,396	15,591
50-54	26,848	14,375	12,473	26,931	14,384	12,547	26,987	14,379	12,608
55-59	21,696	11,516	10,180	22,705	12,068	10,637	23,651	12,590	11,061
60-64	15,424	8,158	7,266	16,167	8,535	7,632	17,044	8,974	8,070
65-69	12,600	6,451	6,149	12,560	6,460	6,100	12,534	6,485	6,049
70-74	9,314	4,804	4,510	9,570	4,894	4,676	9,836	4,986	4,850
75-79	6,350	3,221	3,129	6,397	3,259	3,138	6,430	3,289	3,141
80+	5,495	2,741	2,754	5,730	2,857	2,873	5,970	2,975	2,995
Total	**708,265**	**369,476**	**338,789**	**720,679**	**375,554**	**345,125**	**733,004**	**381,582**	**351,422**

Source: Population Projections Bhutan, 2005-2030, NSB

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TABLE 1.5 PROJECTED POPULATION BY AGE GROUP AND SEX, BHUTAN 2014 - 2016

(in numbers)

Age group	2014			2015			2016		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
0-4	83,001	41,835	41,166	82,716	41,693	41,023	82,041	41,354	40,687
5-9	75,377	37,859	37,518	80,336	40,533	39,803	81,213	40,975	40,238
10-14	63,657	32,309	31,348	61,685	31,097	30,588	64,190	32,292	31,898
15-19	71,452	36,039	35,413	69,822	35,253	34,569	68,236	34,530	33,706
20-24	76,495	38,239	38,256	76,199	38,303	37,896	75,416	38,010	37,406
25-29	73,652	37,516	36,136	74,196	36,963	37,233	74,797	36,881	37,916
30-34	67,446	38,683	28,763	69,358	39,547	29,811	70,813	39,641	31,172
35-39	53,044	28,790	24,254	56,100	30,689	25,411	59,026	32,706	26,320
40-44	40,225	21,811	18,414	41,526	22,491	19,035	43,542	23,553	19,989
45-49	35,732	19,405	16,327	37,069	20,163	16,906	37,885	20,606	17,279
50-54	27,287	14,522	12,765	28,007	14,919	13,088	29,253	15,633	13,620
55-59	24,440	13,021	11,419	25,023	13,329	11,694	25,338	13,477	11,861
60-64	17,978	9,447	8,531	18,908	9,927	8,981	19,844	10,425	9,419
65-69	12,636	6,572	6,064	12,936	6,747	6,189	13,443	7,012	6,431
70-74	10,054	5,065	4,989	10,192	5,122	5,070	10,238	5,153	5,085
75-79	6,488	3,323	3,165	6,594	3,368	3,226	6,759	3,430	3,329
80+	6,189	3,084	3,105	6,375	3,180	3,195	6,543	3,270	3,273
Total	**745,153**	**387,520**	**357,633**	**757,042**	**393,324**	**363,718**	**768,577**	**398,948**	**369,629**

Source: Population Projections Bhutan, 2005-2030, NSB

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TABLE 1.6 PROJECTED POPULATION BY AGE GROUP AND SEX, BHUTAN 2017 - 2019

(in numbers)

Age group	2017			2018			2019		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
0-4	80,944	40,804	40,140	79,405	40,032	39,373	77,429	39,040	38,389
5-9	81,877	41,310	40,567	82,279	41,513	40,766	82,373	41,561	40,812
10-14	67,250	33,765	33,485	70,890	35,561	35,329	75,152	37,749	37,403
15-19	66,693	33,839	32,854	65,126	33,096	32,030	63,434	32,190	31,244
20-24	74,212	37,432	36,780	72,716	36,666	36,050	71,100	35,849	35,251
25-29	75,395	37,162	38,233	75,864	37,625	38,239	76,021	37,991	38,030
30-34	71,824	39,063	32,761	72,518	38,113	34,405	73,081	37,219	35,862
35-39	61,841	34,808	27,033	64,448	36,763	27,685	66,743	38,272	28,471
40-44	46,139	24,922	21,217	49,135	26,548	22,587	52,257	28,344	23,913
45-49	38,313	20,814	17,499	38,653	20,960	17,693	39,326	21,288	18,038
50-54	30,933	16,607	14,326	32,802	17,693	15,109	34,508	18,677	15,831
55-59	25,441	13,499	11,942	25,520	13,509	12,011	25,832	13,660	12,172
60-64	20,794	10,940	9,854	21,686	11,428	10,258	22,435	11,834	10,601
65-69	14,118	7,351	6,767	14,911	7,743	7,168	15,754	8,165	7,589
70-74	10,226	5,171	5,055	10,229	5,205	5,024	10,339	5,289	5,050
75-79	6,966	3,504	3,462	7,178	3,579	3,599	7,352	3,643	3,709
80+	6,700	3,356	3,344	6,855	3,440	3,415	7,018	3,522	3,496
Total	**779,666**	**404,347**	**375,319**	**790,215**	**409,474**	**380,741**	**800,154**	**414,293**	**385,861**

Source: Population Projections Bhutan, 2005-2030, NSB

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TABLE 1.7 PROJECTED POPULATION BY AGE GROUP AND SEX, BHUTAN 2020 - 2022

(in numbers)

Age group	2020			2021			2022		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
0-4	75,031	37,835	37,196	72,746	36,686	36,060	70,635	35,623	35,012
5-9	82,115	41,432	40,683	81,469	41,108	40,361	80,400	40,571	39,829
10-14	80,105	40,419	39,686	80,987	40,864	40,123	81,657	41,202	40,455
15-19	61,477	30,987	30,490	63,982	32,183	31,799	67,039	33,654	33,385
20-24	69,490	35,074	34,416	67,921	34,360	33,561	66,394	33,677	32,717
25-29	75,742	38,063	37,679	74,979	37,780	37,199	73,794	37,212	36,582
30-34	73,640	36,681	36,959	74,253	36,609	37,644	74,862	36,896	37,966
35-39	68,657	39,140	29,517	70,118	39,244	30,874	71,137	38,682	32,455
40-44	55,288	30,227	25,061	58,193	32,228	25,965	60,988	34,311	26,677
45-49	40,622	21,967	18,655	42,617	23,018	19,599	45,181	24,369	20,812
50-54	35,820	19,419	16,401	36,628	19,857	16,771	37,063	20,070	16,993
55-59	26,546	14,053	12,493	27,754	14,742	13,012	29,376	15,678	13,698
60-64	22,994	12,127	10,867	23,309	12,275	11,034	23,427	12,308	11,119
65-69	16,596	8,595	8,001	17,446	9,042	8,404	18,308	9,504	8,804
70-74	10,615	5,445	5,170	11,060	5,673	5,387	11,642	5,961	5,681
75-79	7,466	3,691	3,775	7,512	3,721	3,791	7,517	3,742	3,775
80+	7,193	3,605	3,588	7,396	3,695	3,701	7,618	3,790	3,828
Total	**809,397**	**418,760**	**390,637**	**818,370**	**423,085**	**395,285**	**827,038**	**427,250**	**399,788**

Source: Population Projections Bhutan, 2005-2030, NSB

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TABLE 1.8 PROJECTED POPULATION BY AGE GROUP AND SEX, BHUTAN 2023 - 2025

(in numbers)

Age group	2023			2024			2025		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
0-4	68,763	34,679	34,084	67,192	33,887	33,305	65,982	33,276	32,706
5-9	78,894	39,814	39,080	76,946	38,834	38,112	74,575	37,641	36,934
10-14	82,065	41,408	40,657	82,163	41,458	40,705	81,911	41,331	40,580
15-19	70,676	35,449	35,227	74,929	37,632	37,297	79,870	40,295	39,575
20-24	64,843	32,943	31,900	63,165	32,044	31,121	61,222	30,849	30,373
25-29	72,317	36,457	35,860	70,720	35,649	35,071	69,126	34,882	34,244
30-34	75,343	37,363	37,980	75,511	37,733	37,778	75,244	37,809	37,435
35-39	71,841	37,750	34,091	72,414	36,872	35,542	72,983	36,347	36,636
40-44	63,577	36,249	27,328	65,858	37,747	28,111	67,761	38,610	29,151
45-49	48,135	25,971	22,164	51,211	27,739	23,472	54,197	29,592	24,605
50-54	37,414	20,224	17,190	38,087	20,553	17,534	39,366	21,222	18,144
55-59	31,172	16,716	14,456	32,810	17,655	15,155	34,072	18,365	15,707
60-64	23,525	12,331	11,194	23,841	12,485	11,356	24,529	12,862	11,667
65-69	19,117	9,941	9,176	19,799	10,306	9,493	20,311	10,572	9,739
70-74	12,320	6,292	6,028	13,038	6,646	6,392	13,756	7,008	6,748
75-79	7,538	3,776	3,762	7,642	3,848	3,794	7,869	3,973	3,896
80+	7,839	3,884	3,955	8,037	3,970	4,067	8,202	4,045	4,157
Total	**835,379**	**431,247**	**404,132**	**843,363**	**435,058**	**408,305**	**850,976**	**438,679**	**412,297**

Source: Population Projections Bhutan, 2005-2030, NSB

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TABLE 1.9 PROJECTED POPULATION BY AGE GROUP AND SEX, BHUTAN 2026 - 2028

(in numbers)

Age group	2026			2027			2028		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
0-4	64,877	32,718	32,159	63,920	32,235	31,685	63,154	31,848	31,306
5-9	72,314	36,501	35,813	70,225	35,448	34,777	68,372	34,512	33,860
10-14	81,271	41,010	40,261	80,209	40,476	39,733	78,710	39,722	38,988
15-19	80,757	40,742	40,015	81,430	41,081	40,349	81,842	41,289	40,553
20-24	63,725	32,044	31,681	66,778	33,513	33,265	70,408	35,304	35,104
25-29	67,574	34,176	33,398	66,063	33,501	32,562	64,527	32,774	31,753
30-34	74,496	37,533	36,963	73,329	36,974	36,355	71,872	36,228	35,644
35-39	73,604	36,283	37,321	74,222	36,575	37,647	74,711	37,044	37,667
40-44	69,219	38,720	30,499	70,241	38,173	32,068	70,955	37,263	33,692
45-49	57,062	31,562	25,500	59,819	33,614	26,205	62,376	35,523	26,853
50-54	41,323	22,252	19,071	43,831	23,571	20,260	46,717	25,132	21,585
55-59	34,858	18,789	16,069	35,291	19,001	16,290	35,649	19,161	16,488
60-64	25,676	13,511	12,165	27,201	14,384	12,817	28,887	15,350	13,537
65-69	20,607	10,710	9,897	20,734	10,751	9,983	20,849	10,787	10,062
70-74	14,482	7,384	7,098	15,221	7,775	7,446	15,918	8,146	7,772
75-79	8,224	4,151	4,073	8,678	4,372	4,306	9,201	4,624	4,577
80+	8,341	4,114	4,227	8,470	4,182	4,288	8,611	4,258	4,353
Total	**858,410**	**442,200**	**416,210**	**865,662**	**445,626**	**420,036**	**872,759**	**448,965**	**423,794**

Source: Population Projections Bhutan, 2005-2030, NSB

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TABLE 1.10 PROJECTED POPULATION BY AGE GROUP AND SEX, BHUTAN 2029 - 2030

(in numbers)

Age group	2029			2030		
	Total	Male	Female	Total	Male	Female
0-4	62,612	31,574	31,038	62,326	31,429	30,897
5-9	66,819	33,727	33,092	65,627	33,124	32,503
10-14	76,772	38,747	38,025	74,410	37,558	36,852
15-19	81,945	41,341	40,604	81,700	41,218	40,482
20-24	74,651	37,481	37,170	79,580	40,136	39,444
25-29	62,864	31,883	30,981	60,938	30,698	30,240
30-34	70,295	35,431	34,864	68,722	34,674	34,048
35-39	74,890	37,417	37,473	74,640	37,499	37,141
40-44	71,540	36,406	35,134	72,121	35,898	36,223
45-49	64,633	37,001	27,632	66,521	37,857	28,664
50-54	49,722	26,856	22,866	52,644	28,665	23,979
55-59	36,320	19,490	16,830	37,570	20,143	17,427
60-64	30,426	16,225	14,201	31,614	16,887	14,727
65-69	21,161	10,940	10,221	21,807	11,290	10,517
70-74	16,506	8,456	8,050	16,954	8,685	8,269
75-79	9,754	4,893	4,861	10,306	5,168	5,138
80+	8,797	4,356	4,441	9,043	4,480	4,563
Total	**879,707**	**452,224**	**427,483**	**886,523**	**455,409**	**431,114**

Source: Population Projections Bhutan, 2005-2030, NSB

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TABLE 1.11: PROJECTED POPULATION BY SEX AND SINGLE YEAR OF AGE, BHUTAN 2010

(in numbers)

Age	Male	Female	Both sex	Age	Male	Female	Both sex	Age	Male	Female	Both sex
0	9,781	9,623	19,404	**27**	8,212	5,915	14127	**54**	2,639	2294	4,933
1	8,846	8,704	17,550	**28**	7,973	5,718	13691	**55**	2,480	2174	4,654
2	8,037	7,911	15,948	**29**	7,541	5,600	13141	**56**	2,336	2064	4,400
3	7,363	7,249	14,612	**30**	7,055	5,513	12568	**57**	2,192	1948	4,140
4	6,826	6,723	13,549	**31**	6,606	5,391	11997	**58**	2,053	1827	3,880
5	6,433	6,337	12,770	**32**	6,173	5,214	11387	**59**	1,919	1704	3,623
6	6,190	6,097	12,287	**33**	5,785	4,953	10738	**60**	1,782	1575	3,357
7	6,098	6,001	12,099	**34**	5,442	4,635	10077	**61**	1,649	1452	3,101
8	6,152	6,047	12,199	**35**	5,078	4,296	9374	**62**	1,543	1363	2,906
9	6,331	6,215	12,546	**36**	4,717	3,995	8712	**63**	1,470	1316	2,786
10	6,595	6,465	13,060	**37**	4,458	3,772	8230	**64**	1,423	1300	2,723
11	6,889	6,747	13,636	**38**	4,333	3,656	7989	**65**	1,387	1298	2,685
12	7,147	6,999	14,146	**39**	4,302	3,619	7921	**66**	1,347	1286	2,633
13	7,328	7,183	14,511	**40**	4,325	3,618	7943	**67**	1,299	1256	2,555
14	7,445	7,310	14,755	**41**	4,323	3,594	7917	**68**	1,234	1193	2,427
15	7,582	7,429	15,011	**42**	4,244	3,524	7768	**69**	1,158	1108	2,266
16	7,731	7,557	15,288	**43**	4,047	3,377	7424	**70**	1,079	1016	2,095
17	7,802	7,655	15,457	**44**	3,769	3,179	6948	**71**	1,005	931	1,936
18	7,765	7,718	15,483	**45**	3,464	2,966	6430	**72**	938	862	1,800
19	7,656	7,741	15,397	**46**	3,204	2,781	5985	**73**	880	808	1,688
20	7,481	7,758	15,239	**47**	3,018	2,646	5664	**74**	827	767	1,594
21	7,329	7,740	15,069	**48**	2,936	2,579	5515	**75**	774	730	1,504
22	7,297	7,616	14,913	**49**	2,931	2,562	5493	**76**	715	690	1,405
23	7,440	7,361	14,801	**50**	2,952	2,561	5513	**77**	648	638	1,286
24	7,693	7,015	14,708	**51**	2,945	2,542	5487	**78**	565	566	1,131
25	7,988	6,612	14,600	**52**	2,901	2,498	5399	**79**	461	466	927
26	8,193	6,228	14,421	**53**	2,792	2,411	5,203	**80 +**	2,636	2651	5,287
Total									**363,383**	**332,439**	**695,822**

Source: Population Projections Bhutan, 2005-2030, NSB

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TABLE 1.12 PROJECTED POPULATION BY SEX AND SINGLE YEAR OF AGE, BHUTAN 2015

(in numbers)

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

Source: Population Projections Bhutan, 2005-2030, NSB

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TABLE 1.13 PROJECTED POPULATION BY SEX AND SINGLE YEAR OF AGE, BHUTAN 2020

(in numbers)

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

Source: Population Projections Bhutan, 2005-2030, NSB

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TABLE 1.14 PROJECTED POPULATION BY SEX AND SINGLE YEAR OF AGE, BHUTAN 2025

(in numbers)

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

Source: Population Projections Bhutan, 2005-2030, NSB

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TABLE 1.15 PROJECTED POPULATION BY SEX AND SINGLE YEAR OF AGE, BHUTAN 2030

(in numbers)

Age	Male	Female	Both sex	Age	Male	Female	Both sex	Age	Male	Female	Both sex
0	6,413	6,313	12,726	**27**	5,851	5,769	11,620	**54**	4,944	4,277	9,221
1	6,292	6,189	12,481	**28**	5,875	5,788	11,663	**55**	4,575	3,939	8,514
2	6,232	6,125	12,357	**29**	6,140	6,040	12,180	**56**	4,207	3,634	7,841
3	6,225	6,116	12,341	**30**	6,474	6,358	12,832	**57**	3,925	3,399	7,324
4	6,267	6,154	12,421	**31**	6,755	6,628	13,383	**58**	3,760	3,262	7,022
5	6,348	6,231	12,579	**32**	7,000	6,867	13,867	**59**	3,676	3,193	6,869
6	6,462	6,342	12,804	**33**	7,170	7,039	14,209	**60**	3,638	3,156	6,794
7	6,605	6,480	13,085	**34**	7,275	7,156	14,431	**61**	3,581	3,100	6,681
8	6,766	6,639	13,405	**35**	7,399	7,263	14,662	**62**	3,461	3,002	6,463
9	6,943	6,811	13,754	**36**	7,534	7,379	14,913	**63**	3,244	2,838	6,082
10	7,130	6,994	14,124	**37**	7,592	7,463	15,055	**64**	2,963	2,631	5,594
11	7,322	7,183	14,505	**38**	7,545	7,513	15,058	**65**	2,662	2,410	5,072
12	7,515	7,374	14,889	**39**	7,429	7,523	14,952	**66**	2,397	2,215	4,612
13	7,706	7,562	15,268	**40**	7,247	7,525	14,772	**67**	2,188	2,056	4,244
14	7,885	7,739	15,624	**41**	7,086	7,493	14,579	**68**	2,058	1,951	4,009
15	8,046	7,900	15,946	**42**	7,038	7,358	14,396	**69**	1,985	1,885	3,870
16	8,182	8,034	16,216	**43**	7,154	7,099	14,253	**70**	1,932	1,830	3,762
17	8,283	8,136	16,419	**44**	7,373	6,748	14,121	**71**	1,867	1,767	3,634
18	8,345	8,198	16,543	**45**	7,631	6,344	13,975	**72**	1,770	1,678	3,448
19	8,362	8,214	16,576	**46**	7,802	5,957	13,759	**73**	1,638	1,564	3,202
20	8,398	8,249	16,647	**47**	7,794	5,638	13,432	**74**	1,478	1,430	2,908
21	8,394	8,247	16,641	**48**	7,536	5,429	12,965	**75**	1,307	1,284	2,591
22	8,221	8,077	16,298	**49**	7,094	5,296	12,390	**76**	1,139	1,138	2,277
23	7,828	7,696	15,524	**50**	6,598	5,190	11,788	**77**	995	1,004	1,999
24	7,295	7,175	14,470	**51**	6,135	5,053	11,188	**78**	888	894	1,782
25	6,681	6,579	13,260	**52**	5,692	4,863	10,555	**79**	839	818	1,657
26	6,151	6,064	12,215	**53**	5,296	4,596	9,892	**80 +**	4,480	4,563	9,043
Grand total									**455,409**	**431,114**	**886,523**

Source: Population Projections Bhutan, 2005-2030, NSB

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CHAPTER 2
HEALTH

Since the time when the health care facilities in Bhutan were first established in 1962, there has been continuous efforts in improving the modern medical facilities. The Ministry of Health has now a wide spread network of Health Facilities, covering around 90% of the total population. Institutional health facilities were earlier concentrated in the urban centres, but today the emphasis has shifted to the rural areas where the majority of the population live.

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

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

As of 2009, there were 31 hospitals, 181 BHUs and over 518 ORCs spread over 205 Gewogs providing primary health care services. Besides the allopathic system, there exists a well established network of Indigenous Medical Facilities under the Institute of Traditional Medical Services that has basically three functions; medical services for out patients; collection and manufacturing of indigenous medicines; and research and training of the Physicians (Drungtso) and Compounders (Menpas).

The main indicators of the health status of the population are morbidity and mortality. Morbidity refers to the type of illness people suffer from, while mortality relates to death rates and causes of death. The Population and Housing Census of Bhutan (PHCB) 2005 is the source for mortality statistics. Over all the Infant mortality rate per 1000 live birth is 40.1 estimated from the PHCB 2005, but causes of death data have not yet become available. Efforts are under way to improve the vital registration system. Morbidity data are obtained from the patients' records in hospitals and BHUs whose data are presented in the annual publication "Annual Health Bulletin 2010", published by Ministry of Health. The available morbidity statistics are based on patients treated by hospitals, BHUs and ORCs.

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TABLE 2.1 SUMMARY OF THE HEALTH FACILITIES AND PERSONNEL, BHUTAN, 2005 TO 2009

Facilities	2005	2006	2007	2008	2009
Number of hospitals	29	29	29	31	31
Number of basic health units	176	176	178	178	181
Number of dispensaries/outreach clinic	485	514	519	519	518
Number of indigenous hospitals	1	1	1	1	1
Number of indigenous dispensaries	21	21	26	35	37
Persons per doctor*	4,379	4,312	4,197	3,924	3,883
Number of hospital beds	1,078	1,133	1,159	1,166	1,186
Persons per hospital bed	589	571	568	576	576
Doctors per 10,000 persons	2.3	2.3	2.4	2.5	2.6
Hospital bed per 10,000 persons	17	17.5	17.6	17.4	17.4
Population covered by health care (%)	90.0	90.0	90.0	90.0	90.0
Population access to safe drinking water (%)	84.0	81.4	82.3	83.2	83.0
Women attended by trained personnel during child birth (%)	52.3	57.1	53.6	66.3	66.0

Source: Information Section, Department of Health, MoH, Thimphu.

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TABLE 2.2 TYPE OF HEALTH FACILITIES IN DZONGKHAG, BHUTAN, 2009

(Number)

Dzongkhag	Hospitals	Basic health unit	Indigenous unit	Outreach clinic
Bumthang	1	4	2	14
Chukha	3	9	2	47
Dagana	1	8	3	16
Gasa	0	4	1	13
Haa	1	4	1	15
Lhuentse	1	11	1	33
Mongar	1	24	4	57
Paro	1	3	1	27
Pemagatshel	1	12	2	33
Punakha	1	6	1	9
Samdrup Jongkhar	2	8	3	36
Samtse	3	9	2	18
Sarpang	2	10	1	11
Thimphu	5*	9**	0	19
Trashigang	3	19	4	57
Trashiyangtse	1	7	1	23
Trongsa	1	6	2	19
Tsirang	1	4	1	13
Wangdue	1	10	2	23
Zhemgang	1	14	3	38
Bhutan	26	172	37	521

Source: Annual Health Bulletin 2010, MoH, Thimphu.
*Note: *Indigenous hospital included under hospital*
***Satellite Clinic included under BHU II*

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TABLE 2.3 HEALTH PERSONNEL BY CATEGORY, BHUTAN, 2005 TO 2009

(Number)

Health personnel	2005	2006	2007	2008	2009
Doctors*	145	150	154	171	176
DHOs/ ADHOs (DHO)	22	22	37	38	35
Health Worker (HA/BHW/PMW)**	171	229	232	425	505
Nurses	538	587	559	567	556
Nurse's Assistant	174	174	176	99	92
Assistant Clinical Officers (ACO)	32	31	n.a	43	45
Pharmancists	10	10	n.a	14	12
Pharmancists Assistants/ Technicians	73	77	n.a	75	79
Technicians / Assistants	438	420	510	453	549
Lab. Technologists	8	8	n.a	10	13
Drungtshos	30	30	n.a	36	41
Indigenous Compounders/Menpas	36	42	43	54	52
Malaria Workers	48	48	48	48	48
Village Health Workers (VHW)	1,200	1,087	1,200	1,200	1,200

Source: Annual Health Bulletin 2010, MoH, Thimphu.
*Note: *Includes doctors in adminstrative services, non-nationals and attachments.*
***Health workers for 2008 has been combined of HA/BHW/PMW*

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TABLE 2.4 TOP TEN MORBIDITY, BHUTAN, 2009

Priority health problem/ Disease	Number
Common cold	302,035
Skin Infections	90,375
Acute Pharyngitis/Tonsilitis	70,999
Peptic Ulcer Syndrome	68,036
Musculo-Skeletal Disorders	65,842
Diarrhoea	65,495
Other Disorders of Skin & Subcutaneous-tissues	60,923
Other Diseases of the Digestive System	60,101
Other Respiratory and Nose Diseases	54,156
Conjunctivitis	372,046

Source: Annual Health Bulletin 2010, MoH, Thimphu.

TABLE 2.5 TOP TEN INPATIENT HOSPITAL MORTALITY, BHUTAN, 2009

Priority health problem/Disease	Number
Alcohol Liver Diseases	128
Neonatal Death	74
Other Circulatory Diseases	68
Other Cancers	53
Pneumonia	52
Other Respiratory & Nose Diseases	52
Other Diseases of the Digestive System	46
Foetal Death & Stillbirth	37
Other Kidney, UT / Genital Disorders	36
Tuberculosis	31

Source: Annual Health Bulletin 2010, MoH, Thimphu.

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TABLE 2.6 MORBIDITY CASES REPORTED FROM BASIC HEALTH UNITS, BHUTAN, 2009

(Number)

Disease Name/Infections	Under 5 years		5 years & older		Total
	Male	Female	Male	Female	
Cholera	1	0	0	0	1
Typhoid	5	8	95	112	220
Diarrhoea	4,914	4,709	11,825	11,370	32,818
Dysentery	2,097	1,976	5,824	5,193	15,090
Tetanus	2	6	10	5	23
Diphtheria	0	0	0	0	0
Pertussis	0	0	0	0	0
Early Syphilis	0	0	14	6	20
Sexually Transmitted Disease, excluding HIV/ AIDS	0	3	390	275	668
Polio	0	0	0	0	0
Rabies	0	0	0	0	0
Viral, Protozoal & Helminthic disease					
Measels	0	0	0	0	0
Viral Hepatitis	9	16	49	39	113
Plasmodium falciparum malaria	3	1	100	74	178
Other malaria	6	9	97	56	168
Intestinal Worms	741	836	2,608	3,085	7,270
Scabies	322	300	2,340	1,588	4,550
Other Infections (excluding ear, brain, STI)	275	280	1,328	1,401	3,284
Blood diseases					
Nutritional Anaemia	119	155	1,646	4,476	6,396
Blood & Immune Disorders	28	28	279	398	733
Endocrine, Metabolic & Nutritional					
Malnutrition (exclude child clinic attendence)	51	58	157	195	461
Mental disorders					
Other Mental Disorders	1	0	83	79	163
Disease of Nervous syatem					
Meningitis/Encephalitis	0	0	30	50	80
Other Nervous including Peripheral Disorders	188	220	8,314	14,061	22,783

(Contd..)

TABLE 2.6 (contd..): MORBIDITY CASES REPORTED FROM BASIC HEALTH UNITS, BHUTAN, 2009

(Number)

Disease Name/Infections	Under 5 years		5 years & older		Total
	Male	Female	Male	Female	
Eye & Ear Diseses					
Conjunctivities	1,346	1,411	6,873	9,483	19,113
Cataract	493	547	6,434	9,435	16,909
Other Eye Disorders	1,064	1,026	2,748	2,833	7,671
Otitis Media	273	272	1,703	1,909	4,157
Disease of Circulatory System					
Hypertension	0	0	2,291	3,456	5,747
Other Circulatory Diseases	44	55	1,103	1,615	2,817
Respiratory diseases					
Common Cold	13,410	13,786	58,590	71,660	157,446
Acute Pharyngitis/Tonsilitis	1,061	1,196	12,669	16,492	31,418
Pneumonia	1,686	1,551	461	489	4,187
Other Respiratory & Nose Disesses	1,595	1,608	8,689	10,685	22,577
Disease of the Digestive system					
Dental Caries	198	226	3,797	4,820	9,041
Diseases of Teeth & Gums	191	202	2,877	3,533	6,803
Peptic Ulcer Syndrome	80	121	11,833	17,478	29,512
Alcohol Liver Diseases	0	0	118	133	251
Other Diseases of the Digestive System	1,192	1,345	9,813	12,398	24,748
Skin Diseases					
Skin Infections	3,982	4,100	19,701	17,319	45,102
Other Disorders of Skin & Subcutaneous	1,918	1,913	11,816	11,124	26,771
Diseases of Musculo-skeletal system & Cogenital deformities					
Arthritis & Arthrosis	20	15	2,576	2,807	5,418
Other Musculo-skeletal disorders	145	170	14,702	16,282	31,299
Genito-Urinary diseases					
Infection of Breasts including Puerperium	0	0	47	275	322
Other Disease of the Breast	0	0	4	675	679
Menstrual Distrubances	0	0	0	2,156	2,156
Other Kidney, UT/ Genital Disorders	277	245	3,015	7,948	11,485
Pregnancy, Childbirth and Puerperium					
Abortions	0	0	0	80	80
Pregnancy Included Hypertension	0	0	0	24	24

(Contd..)

TABLE 2.6 (contd..): MORBIDITY CASES REPORTED FROM BASIC HEALTH UNITS, BHUTAN, 2009

(Number)

Disease Name/Infections	Under 5 years		5 years & older		Total
	Male	Female	Male	Female	
Ante-Partum Haemorrhage & Placenta Previa	0	0	0	30	30
Malpresentation	0	0	0	10	10
Prolonged Labour	0	0	0	44	44
Obstructed Labour	0	0	0	11	11
Post Partum Haemorrhage	0	0	0	42	42
Retained Placenta	0	0	0	59	59
Puerperal Sepsis	0	0	0	27	27
Other complications of pregnancy	0	0	0	211	211
Perinatal Conditions					
Low Birth Weight	8	8	0	0	16
Foetal Death & Stillbirth	6	7	0	0	13
Noenatal Death	8	1	0	0	9
Conditions Orginating in the Perinatal Period	6	2	0	0	8
Malformations					
Malformations	0	2	1	1	4
Injuries & Trauma					
Burns & Corrosions	348	330	815	619	2,112
Injuries & Poisoning	387	364	7,441	3,411	11,603
Transport Accidents	15	9	315	99	438
Bites & Stings	185	166	1,593	1,249	3,193
Other External cause of Injury	228	172	4,261	2,320	6,981
Work related injuries	72	71	4,849	1,824	6,816
Complications of Health Care	3	9	70	119	201
ANC, Immunisation & Other counselling	3,086	2,697	3,095	9,819	18,697
Total	**42,089**	**42,232**	**239,489**	**287,470**	**611,280**

Source: Annual Health Bulletin 2010, MoH, Thimphu.

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TABLE 2.7 HOSPITAL MORBIDITY CASES REPORTED, BHUTAN, 2009

(Number)

Disease Name/Infections	Under 5 years		5 years & older		Total
	Male	Female	Male	Female	
Cholera	6	2	5	9	22
Typhoid	68	64	756	923	1,811
Diarrhoea	11,419	10,589	22,667	20,820	65,495
Dysentery	4,247	3,942	10,167	8,909	27,265
Tuberclosis	38	38	528	412	1,016
Tetanus	2	6	10	5	23
Diphtheria	0	0	0	0	0
Pertussis	0	0	0	0	0
Early Syphilis	2	2	37	18	59
Sexually Transmitted Disease, excluding HIV/ AIDS	10	8	1,012	715	1,745
Polio	0	0	0	0	0
Rabies	0	0	2	1	3
Viral, Protozoal & Helminthic disease					
Measels	1	3	0	1	5
Viral Hepatitis	164	134	297	226	821
Plasmodium falciparum malaria	28	21	409	255	713
Other malaria	23	17	300	179	519
Intestinal Worms	1,414	1,606	4,132	4,479	11,631
Scabies	730	704	4,325	2,943	8,702
Other Infections (excluding ear, brain, STI)	758	795	3,343	3,449	8,345
Neoplasm					
Cervical Cancer	0	0	0	90	90
Other Cancers	4	32	417	240	693
Neoplasm (benign + CIS)	17	7	156	184	364

(Contd..)

TABLE 2.7 (contd..): HOSPITAL MORBIDITY CASES REPORTED, BHUTAN, 2009

(Number)

Disease Name/Infections	Under 5 years		5 years & older		Total
	Male	Female	Male	Female	
Blood diseases					
Nutritional Anaemia	249	276	3,029	8,299	11,853
Blood & Immune Disorders	47	50	378	520	995
Endocrine, Metabolic & Nutritional					
Diabetes	4	1	1,326	1,274	2,605
Malnutrition (exclude child clinic attendance)	106	131	199	283	719
Other Nutritional & Metabolic Disorders	138	154	690	886	1,868
Mental Disorders					
Psychosis	0	0	47	40	87
Depression	0	2	280	339	621
Anxiety	2	6	182	323	513
Other Mental Disorders	1	2	378	351	732
Disease of Nervous system					
Meningitis/Encephalitis	36	24	81	97	238
Epilepsy	38	14	588	464	1,104
Other Nervous including Peripheral Disorders	286	365	11,305	18,512	30,468
Eye & Ear Diseases					
Conjunctivities	2,899	2,872	14,340	16,935	37,046
Cataract	15	9	390	354	768
Other Eye Disorders	1,069	1,172	12,787	16,437	31,465
Otitis Media	1,933	1,884	5,341	5,106	14,264
Other Ear Disorders	776	800	5,141	5,194	11,911

(Contd..)

TABLE 2.7 (contd..): HOSPITAL MORBIDITY CASES REPORTED, BHUTAN, 2009

(Number)

Disease Name/Infections	Under 5 years		5 years & older		Total
	Male	Female	Male	Female	
Diseases of Circulatory System					
Rheumatic Heart Diseases	39	28	627	800	1,494
Hypertension	0	0	9,255	11,922	21,177
Ischaemic Heart Diseases	0	0	108	107	215
Cerebro-vascular Diseases	5	3	147	129	284
Other Circulatory Diseases	147	159	2,154	2,801	5,261
Respiratory diseases					
Common Cold	32,917	32,747	112,171	124,200	302,035
Acute Pharyngitis/Tonsilitis	3,501	3,797	29,078	34,623	70,999
Pneumonia	4,200	3,650	1,863	1,835	11,548
Other Respiratory & Nose Disesses	5,275	5,623	20,304	22,954	54,156
Disease of the Digestive system					
Dental Caries	879	887	13,325	15,265	30,356
Diseases of Teeth & Gums	481	501	6,663	7,639	15,284
Peptic Ulcer Syndrome	273	334	28,594	38,835	68,036
Acute Appendicitis	6	4	262	299	571
Alcohol Liver Diseases	0	0	839	763	1,602
Gall Bladder Diseases	10	13	233	663	919
Other Diseases of the Digestive system	3,523	3,715	24,445	28,418	60,101
Skin Diseases					
Skin Infections	8,831	8,742	39,930	32,872	90,375
Other Disorders of Skin & Subcutaneous	5,143	4,832	26,741	24,207	60,923

(Contd..)

TABLE 2.7 (contd..): HOSPITAL MORBIDITY CASES REPORTED, BHUTAN, 2009

(Number)

Disease Name/Infections	Under 5 years		5 years & older		Total
	Male	Female	Male	Female	
Diseases of Musculo-skeletal system & Cogenital Deformities					
Arthritis & Arthrosis	74	74	6,198	6,063	12,409
Other Musculo-skeletal disorders	478	624	32,354	32,386	65,842
Genito-Urinary Diseases					
Cystitis	30	47	471	1,240	1,788
Infection of Breasts, including Puerperium	0	2	57	699	758
Other Disease of the Breast	1	6	25	1,505	1,537
Pelvic Inflammatory Disease	0	0	0	1,501	1,501
Menstrual Disturbances	0	0	0	5,304	5,304
Other Kidney, UT/Genital Disorders	663	737	7,945	20,043	29,388
Pregnancy, Childbirth and Puerperium					
Abortions	0	0	0	1,057	1,057
Pregnancy Included Hypertension	0	0	0	458	458
Ante-Partum Haemorrhage & Placenta Previa	0	0	0	147	147
Malpresentation	0	0	0	165	165
Prolonged Labour	0	0	0	635	635
Obstructed Labour	0	0	0	275	275
Post Partum Haemorrhage	0	0	0	133	133
Retained Placenta	0	0	0	168	168

(Contd..)

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TABLE 2.7 (contd.): HOSPITAL MORBIDITY CASES REPORTED, BHUTAN, 2009

(Number)

Disease Name/Infections	Under 5 years		5 years & older		Total
	Male	Female	Male	Female	
Obstructed Labour	0	0	0	275	275
Post Partum Haemorrhage	0	0	0	133	133
Retained Placenta	0	0	0	168	168
Puerperal Sepsis	0	0	0	125	125
Other complications of pregnancy	0	0	0	5,296	5,296
Perinatal Conditions					
Low Birth Weight	136	111	0	0	247
Foetal Death & Stillbirth	26	25	0	0	51
Noenatal Death	44	39	0	0	83
Conditions Orginating in the Perinatal Period	543	422	0	0	965
Malformations					
Malformations	60	49	78	49	236
Injuries & Trauma					
Burns & Corrosions	639	557	1,489	1,139	3,824
Injuries & Poisoning	1,163	844	18,255	8,247	28,509
Transport Accidents	60	44	1,134	435	1,673
Bites & Stings	449	395	3,637	2,631	7,112
Other External cause of Injury	566	404	8,577	4,609	14,156
Work related injuries	95	89	7,294	3,099	10,577
Complications of Health Care	7	10	161	350	528
ANC, Immunisation & Other counselling	4,915	4,464	9,597	20,407	39,383
Total	**101,709**	**99,710**	**519,056**	**585,770**	**1,306,245**

Source: Annual Health Bulletin 2010, MoH, Thimphu.
Note: Data from outpatient of JDWNR hospoital is not included

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TABLE 2.8 HOSPITAL INPATIENT MORBIDITY REPORT, BHUTAN, 2009

(Number)

Disease Name/Infections	Under 5 years		Under 5 years		Total	Deaths
	Male	Female	Male	Female		
Cholera	0	0	0	1	1	0
Typhoid	18	12	260	334	624	1
Diarrhoea	302	227	338	385	1,252	5
Dysentery	79	105	198	200	582	1
Tuberculosis	18	17	427	321	783	31
Tetanus	0	0	0	0	0	0
Diphtheria	0	0	0	0	0	0
Pertussis	0	0	0	0	0	0
Early Syphilis	1	0	0	0	1	0
Sexually Transmitted Disease, excluding HIV/AIDS	9	4	40	55	108	1
Polio	0	0	0	0	0	0
Rabies	0	0	2	1	3	3
Viral, Protozoal & Helminthic disease						
Measels	1	3	0	1	5	0
Viral Hepatitis	65	51	105	65	286	5
Plasmodium falciparum malaria	19	18	214	121	372	5
Other malaria	11	5	117	66	199	2
Intestinal Worms	5	4	14	17	40	0
Scabies	3	14	26	16	59	0
Other Infections (excluding ear, brain, STI)	114	108	214	203	639	28
Neoplasm						
Cervical Cancer	0	0	0	67	67	5
Other Cancers	4	32	417	240	693	53
Neoplasm (benign+CIS)	6	5	120	84	215	6
Blood diseases						
Nutritional Anaemia	29	18	171	335	553	6
Blood & Immune Disorders	15	14	60	68	157	7
Endocrine, Metabolic & Nutritional						
Diabetes	0	1	182	173	356	22
Malnutrition (exclude child clinic attendance)	23	23	4	8	58	2
Other Nutritional & Metabolic Disorders	12	4	56	71	143	3
Mental Disorders						
Psychosis	0	0	29	23	52	0
Depression	0	0	40	69	109	0
Anxiety	0	1	55	91	147	0
Other Mental Disorders	0	1	153	115	269	0

(Contd..)

TABLE 2.8 (contd..): HOSPITAL INPATIENT MORBIDITY REPORT, BHUTAN, 2009

(Number)

Disease Name/Infections	Under 5 years		Under 5 years		Total	Deaths
	Male	Female	Male	Female		
Disease of Nervous system						
Meningitis/Encephalitis	33	22	26	29	110	21
Epilepsy	18	7	97	55	177	5
Other Nervous including Peripheral Disorders	37	43	190	164	434	11
Eye & Ear Diseses						
Conjunctivities	10	7	37	53	107	0
Cataract	1	3	194	170	368	0
Other Eye Disorders	21	17	244	233	515	0
Otitis Media	21	21	74	69	185	0
Other Ear Disorders	15	9	72	74	170	0
Diseases of Circulatory System						
Rheumatic Heart Diseases	7	4	70	108	189	10
Hypertension	0	0	670	664	1,334	15
Ischaemic Heart Diseases	0	0	42	30	72	6
Cerebro-vascular Diseases	4	3	109	90	206	29
Other Circulatory Diseases	50	56	466	422	994	68
Respiratory diseases						
Common Cold	314	336	748	746	2,144	0
Acute Pharyngitis/Tonsilitis	42	52	261	363	718	0
Pneumonia	1,011	739	342	330	2,422	52
Other Respiratory & Nose Disesses	541	337	975	1,052	2,905	52
Disease of the Digestive system						
Dental Caries	7	4	87	135	233	0
Diseases of Teeth & Gums	1	4	28	22	55	0
Peptic Ulcer Syndrome	10	3	665	998	1,676	5
Acute Appendicitis	3	2	185	181	371	5
Alcohol Liver Diseases	0	0	498	425	923	128
Gall Bladder Diseases	3	6	156	512	677	1
Other Diseases of the Digestive system	214	135	1,263	1,139	2,751	46
Skin Diseases						
Skin Infections	132	124	372	308	936	1
Other Disorders of Skin & Subcutaneous	145	126	705	523	1,499	2
Diseases of Musculo-skeletal system & Cogenital deformities						
Arthritis & Arthrosis	6	6	161	81	254	0
Other Musculo-skeletal disorders	33	21	625	472	1,151	4

(Contd.)

TABLE 2.8 (contd..): HOSPITAL INDOOR MORBIDITY REPORT, BHUTAN, 2009

(Number)

Disease Name/Infections	Under 5 years		Under 5 years		Total	Deaths
	Male	Female	Male	Female		
Genito-Urinary Diseases						
Cystitis	8	11	81	200	300	1
Infection of Breasts, including Puerperium	0	0	2	82	84	0
Other Disease of the Breast	0	0	5	73	78	0
Pelvic Inflammatory Disease	0	0	0	120	120	0
Menstrual Disturbances	0	0	0	175	175	21
Other Kidney, UT/Genital Disorders	82	42	880	1,623	2,627	36
Pregnancy, Childbirth and Puerperium						
Abortions	0	0	0	917	917	1
Pregnancy Included Hypertension	0	0	0	309	309	1
Ante-Partum Haemorrhage & Placenta Previa	0	0	0	111	111	0
Malpresentation	0	0	0	127	127	0
Prolonged Labour	0	0	0	579	579	0
Obstructed Labour	0	0	0	263	263	0
Post Partum Haemorrhage	0	0	0	78	78	2
Retained Placenta	0	0	0	102	102	1
Puerperal Sepsis	0	0	0	88	88	0
Other complications of pregnancy	0	0	0	4,872	4,872	1
Perinatal Conditions						
Low Birth Weight	120	96	0	0	216	11
Foetal Death & Stillbirth	20	17	0	0	37	37
Noenatal Death	36	38	0	0	74	74
Conditions Orginating in the Perinatal Period	534	415	0	0	949	13
Malformations						
Malformations	60	47	77	47	231	8
Injuries & Trauma						
Burns & Corrosions	38	30	81	67	216	1
Injuries & Poisoning	99	57	1,304	603	2,063	24
Transport Accidents	7	5	348	138	498	7
Bites & Stings	11	5	110	59	185	2
Other External cause of Injury	40	20	519	231	810	14
Work related injuries	2	1	156	65	224	3
Complications of Health Care	2	0	4	25	31	1
ANC, Immunisation & Other counselling	148	152	173	1,120	1,593	1
Total	**4,620**	**3,690**	**16,344**	**24,652**	**49,306**	**907**

Source: Annual Health Bulletin 2010, MoH, Thimphu.

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TABLE 2.9 NUMBER OF PATIENTS ADMISSION & AVERAGE LENGTH OF STAY IN DIFFERENT DZONGKHAG HOSPITALS, BHUTAN, 2008 AND 2009

Dzongkhag	2008		2009	
	Total patient	Patient days	Total patient	Patient days
Bumthang	167	501	767	2,178
Chukha	6,040	14,276	5,763	10,350
Dagana	389	245	169	449
Gasa	-	-	-	-
Haa	598	1,362	540	1,290
Lhuntse	1,063	3,409	813	4,011
Mongar	2,834	18,417	3,392	23,253
Paro	3,916	9,030	2,932	8,098
Pemagatshel	1,298	3,458	999	3,389
Punakha	1,969	7,686	2,036	8,034
Samdrup Jongkhar	1,912	9,785	1,915	11,159
Samtse	3,359	15,834	3,213	16,076
Sarpang	3,662	14,131	4,208	17,853
Thimphu	11,772	67,506	12,522	88,269
Trashigang	2,989	13,508	3,524	15,232
Trashiyangtse	806	4,735	664	3,572
Trongsa	408	762	526	1,728
Tsirang	885	2,781	873	2,434
Wangdue	1,428	4,095	1,344	4,640
Zhemgang	1,190	4,885	1,350	5,273
Total	**46,685**	**196,406**	**47,550**	**227,288**

Source: Annual Health Bulletin 2010, MoH, Thimphu.

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TABLE 2.10 VACCINE ADMINISTERED IN NUMBERS BY DZONGKHAG, BHUTAN, 2009

Dzongkhag	BCG	MEASLES	OPV 3	DPT/ HEP B	OPV 0
Bumthang	263	337	361	361	204
Chukha	1,374	1,392	1,479	1,479	1,199
Dagana	332	483	444	444	278
Gasa	28	73	63	63	13
Haa	135	222	204	211	155
Lhuentse	233	335	323	309	230
Mongar	1,039	877	845	848	934
Paro	643	717	691	691	625
Pemagatshel	380	424	406	407	287
Punakha	374	478	466	480	355
Samdrup Jongkhar	715	879	687	690	563
Samtse	938	1,187	1,189	1,204	824
Sarpang	865	736	739	739	801
Thimphu	3,736	2,378	2,416	2,414	3,767
Trashigang	884	915	904	904	715
Trashiyangtse	327	390	378	378	311
Trongsa	190	272	265	267	180
Tsirang	288	403	373	409	263
Wangdue	489	702	707	709	407
Zhemgang	286	381	379	375	210
Bhutan	**13,519**	**13,581**	**13,319**	**13,382**	**12,321**

Source: Annual Health Bulletin 2010, MoH, Thimphu.

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TABLE 2.11 DETAILS OF CHILD GROWTH MONITORING IN IMMUNIZATION CLINICS, BHUTAN, 2005 TO 2009

Details	2005	2006	2007	2008	2009
Child attendances weighed (nos)	161,004	174,149	172,955	187,342	205,752
Under weight	29,081	39,926	38,032	17,342	16,156
Over weight	29,081	39,926	38,032	28,905	15,149

TABLE 2.12 DETAILS OF MATERNAL HEALTH CARE ACTIVITIES BY DZONGKHAG, BHUTAN, 2005 TO 2009

Type of care	2005	2006	2007	2008	2009
Maternal health care attendence(a)	54,142	48,859	49,004	53,352	55,586
Antenatal	54,142	48,859	49,004	53,352	55,586
Deliveries attended	6,957	7,675	7,422	8,621	9,011
Home	1,629	1,317	1,064	927	878
Hospital/Basic Health Units	5,328	6,358	6,358	7,694	8,133
Child health care attendance	161,004	171,135	172,955	187,342	205,752
First visit	15,090	14,589	13,285	14,575	15,555
Re-visit	145,914	156,546	159,670	172,767	190,197
Malnourished children (b)	15,095	16,788	55,529	n.a	n.a
All malnourished*	15,095	16,788	55,050	46,247	31,305
Third degree	n.a	428	479	n.a	n.a

Source: Information Section, Department of Health, MoH, Thimphu.
*Notes: *All malnourished included over weight and under weight after 2008*

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TABLE 2.13 DETAILS OF MATERNAL HEALTH CARE ACTIVITIES BY DZONGKHAG, BHUTAN, 2005 TO 2009

(Number)

Dzongkhag	2005	2006	2007	2008	2009
Bumthang					
Antenatal	1,289	1,141	345	1,352	1,274
Reported deliveries	281	233	345	298	298
Trained deliveries	169	154	131	147	172
Chukha					
Antenatal	6,651	5,508	1,076	7,669	7,048
Reported deliveries	1,701	1,330	1,076	825	898
Trained deliveries	477	539	542	1,048	1,089
Dagana					
Antenatal	971	1,003	1,209	1,452	1,386
Reported deliveries	411	396	555	537	450
Trained deliveries	82	58	111	132	254
Gasa					
Antenatal	134	188	200	175	192
Reported deliveries	50	47	51	43	67
Trained deliveries	21	28	30	35	16
Ha					
Antenatal	502	579	562	759	896
Reported deliveries	178	189	196	182	215
Trained deliveries	52	46	47	66	136
Lhuentse					
Antenatal	1,154	1,098	1,079	1,189	968
Reported deliveries	347	403	366	320	380
Trained deliveries	138	178	202	171	194
Mongar					
Antenatal	2,395	3,021	3,269	3,401	3,307
Reported deliveries	935	886	897	797	880
Trained deliveries	452	553	574	763	768

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TABLE 2.13 (contd..): DETAILS OF MATERNAL HEALTH CARE ACTIVITIES BY DZONGKHAG, BHUTAN, 2005 TO 2009

(Number)

Dzongkhag	2005	2006	2007	2008	2009
Paro					
Antenatal	3,184	2,653	2,517	2,701	3,384
Reported deliveries	592	567	678	531	588
Trained deliveries	418	376	501	543	521
Pemagatshel					
Antenatal	767	791	1,484	1,364	1,597
Reported deliveries	274	255	392	402	365
Trained deliveries	43	51	255	144	164
Punakha					
Antenatal	1,687	1,528	1,165	1,393	2,442
Reported deliveries	356	354	347	339	343
Trained deliveries	182	299	300	299	358
Samdrup Jongkhar					
Antenatal	3,529	3,344	2,618	2,532	2,514
Reported deliveries	909	990	679	710	465
Trained deliveries	453	489	381	330	428
Samtse					
Antenatal	5,078	4,760	4,827	4,950	5,218
Reported deliveries	898	1,238	1,267	1,208	1,154
Trained deliveries	763	758	565	495	438
Sarpang					
Antenatal	3,793	3,411	2,700	3,359	3,399
Reported deliveries	915	1,099	808	833	658
Trained deliveries	747	696	489	632	714
Thimphu					
Antenatal	12,689	10,068	10,112	10,708	11,738
Reported deliveries	1,989	2,594	3,122	3,324	3,791
Trained deliveries	1,584	2,202	2,131	2,549	2,659

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TABLE 2.13 (contd.): DETAILS OF MATERNAL HEALTH CARE ACTIVITIES BY DZONGKHAG, BHUTAN, 2005 TO 2009

(Number)

Dzongkhag	2005	2006	2007	2008	2009
Trashigang					
Antenatal	3,275	3,082	4,103	3,725	3,145
Reported deliveries	1,181	1,008	987	776	869
Trained deliveries	490	481	462	591	498
Trashiyangtse					
Antenatal	949	1,093	1,102	1,240	1,437
Reported deliveries	399	431	438	404	399
Trained deliveries	107	111	108	118	107
Trongsa					
Antenatal	824	937	720	771	886
Reported deliveries	299	243	255	226	244
Trained deliveries	140	106	34	68	87
Tsirang					
Antenatal	1,441	1,192	1,230	1,213	1,107
Reported deliveries	449	352	448	323	268
Trained deliveries	295	227	191	104	229
Wangdue					
Antenatal	2,559	2,296	1,913	2,148	2,263
Reported deliveries	737	429	551	509	653
Trained deliveries	161	161	182	230	309
Zhemgang					
Antenatal	1,251	1,166	1,253	1,251	1,284
Reported deliveries	401	405	393	409	377
Trained deliveries	183	162	216	156	145

Source: Annual Health Bulletin 2010, MoH, Thimphu.
Note: Trained delivery refers to deliveries attended by trained health personnels in hospitals/BHUs and at home Reported deliveries refers to total reported deliveries during household survey 2009

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TABLE 2.14 DETAILS OF COMPLICATIONS DURING PREGNANCY AND DURING LABOUR/DELIVERIES, BHUTAN, 2005 TO 2009

Complications	2005		2006		2007		2008		2009	
	Numbers	Percent	Numbers	Percent	Numbers	Percent	Numbers	Percent	Numbers	Percent
Pregnancy of mothers	5,022	100.0	5,851	100.0	5,885	100.0	6,149	100.0	6,209	100.0
Abortions	657	13.1	811	13.9	913	15.5	928	15.1	917	14.8
Antepartum haemorrhage	125	2.5	131	2.2	97	1.7	163	2.7	111	1.8
P.I.H	514	10.2	453	7.7	392	6.7	451	7.3	309	5.0
Others	3,726	74.2	4,456	76.2	4,483	76.2	4,607	74.9	4,872	78.5
Labour/delivery	983	100.0	977	100.0	1,019	100.0	1,359	100.0	1,237	84.6
Obstructed labour	155	15.8	78	8.0	149	14.6	156	11.5	263	21.3
Mal presentation	148	15.1	120	12.3	105	10.3	133	9.8	127	10.3
Prolonged labour/Ruptured uterus	235	23.9	257	26.3	289	28.4	381	28.0	579	46.8
Post partum haemorrhage	197	20.0	168	17.2	142	14.0	154	11.3	78	6.3
Retained Placenta	248	25.2	248	25.4	218	21.4	439	32.3	102	8.2
Puerperal Sepsis	..	..	106	10.9	116	11.4	96	7.1	88	7.1
All complications	6,005	..	6,828	..	6,904	..	7,508	..	7,446	..

Source: Annual Health Bulletin 2010, MoH, Thimphu.

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TABLE 2.15 FAMILY PLANNING ACCEPTORS BY TYPE OF METHOD, BHUTAN, 2005 TO 2009

(Number)

Method	2005	2006	2007	2008	2009
Female Sterilisation	1,364	1,844	2,808	2,733	3,219
Male Sterilisation	4,919	7,202	8,927	9,433	9,730
Intra uterine device (IUD) inserted	1,305	1,598	2,610	1,970	2,343
Pills (OCP)	20,210	32,074	34,688	40,274	44,643
Condoms	1,163,234	1,517,705	1,607,790	1,462,467	1,426,426
Injection DMPA	41,005	57,985	67,965	71,738	75,999
All methods	**1,232,037**	**1,618,408**	**1,724,788**	**1,588,615**	**1,562,360**

Source: Annual Health Bulletin 2010, MoH, Thimphu.
Note: IUD = No. inserted, Pills = No. of cycles, DMPA = No. of Injections and Condoms = No. of pieces distributed
Minilap=merged into tubectomy after 2004*

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TABLE 2.16 NUMBER OF USERS OF FAMILY PLANNING METHODS BY TYPE, BY DZONGKHAG, BHUTAN, 2009

Dzongkhag	Family planning methods					
	Male Sterilisation	Female Sterilisation	Condom***	New IUD Inserted	DMPA*	Oral Pills**
Bumthang	89	45	73,846	17	2,317	1,934
Chukha	825	274	144,403	216	7,967	4,425
Dagana	682	128	56,930	3	3,662	2,884
Gasa	21	14	10,026	11	476	206
Haa	246	192	28,346	6	1,604	784
Lhuentse	362	60	62,363	43	2,342	949
Mongar	745	323	251,912	92	6,765	1,912
Paro	611	527	70,412	53	3,385	1,757
Pemagatshel	190	21	33,656	34	1,812	1,111
Punakha	181	126	43,503	75	2,589	2,198
Samdrup Jongkhar	169	36	41,674	32	4,052	2,977
Samtse	2,299	472	75,704	27	6,207	6,444
Sarpang	572	239	65,020	49	6,261	3,677
Thimphu	259	244	157,934	1,508	8,875	3,566
Trashigang	839	104	88,649	83	6,121	2,760
Trashiyangtse	335	55	64,804	31	1,565	525
Trongsa	150	44	29,899	9	1,716	909
Tsirang	395	94	23,655	10	4,085	2,766
Wangdue	599	156	52,501	26	1,400	860
Zhemgang	161	65	51,189	18	2,798	1,999
Bhutan	**9,730**	**3,219**	**1,426,426**	**2,343**	**75,999**	**44,643**

Source: Annual Health Bulletin 2010, MoH, Thimphu.
*Note: *DMPA-injected, **Pills-Cycles, ***Condom-Pieces*

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TABLE 2.17 NUMBER OF BLOOD SLIDE EXAMINATIONS FOR MALARIA AND MALARIOMATRIC INDICES, BHUTAN, 2005 TO 2009

Details	2005	2006	2007	2008	2009
Total blood films examined (numbers)	n.a	66,079	51,446	n.a	n.a
Blood film detected negative	n.a	64,210	50,653	n.a	n.a
Blood films detected positive	n.a	1,869	793	n.a	n.a
Plasmodium vivax	n.a	963	414	n.a	n.a
Plasmodium falciparum	n.a	761	379	n.a	n.a
Mixed infections	n.a	144	n.a	n.a	n.a
Deaths due to malaria (numbers)	n.a	6	2	n.a	n.a

Source: Annual Health Bulletin 2010, MoH, Thimphu.

TABLE 2.18: NUMBER OF TUBERCULOSIS CASES BY TYPE, BHUTAN, 2004 TO 2009

(Person)

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

Source: Annual Health Bulletin 2010, MoH, Thimphu.

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TABLE 2.19 WATER AND SANITATION FACILITY TYPE BY DZONGKHAG, BHUTAN, 2009

Dzongkhag	Percentage Coverage				
	Sanitary Facility	Safe Water Supply	Drainage & Toot Path	HH with Vegetable Garden	HH with Garbage Pit
Bumthang	99.8	99.8	61.2	88.6	92.9
Chukha	88.6	77.9	58.6	60.5	74.6
Dagana	90.4	73.8	42.8	79.0	79.0
Gasa	89.0	48.4	37.1	90.9	83.9
Haa	93.8	93.9	79.6	72.9	84.9
Lhuentse	99.8	92.6	67.1	93.3	79.0
Mongar	95.1	91.4	60.1	77.2	86.6
Paro	94.6	91.0	67.1	64.1	55.5
Pemagatshel	93.2	87.4	40.5	87.6	70.7
Punakha	94.6	92.8	53.3	75.0	91.6
Samdrup Jongkhar	92.7	91.0	49.1	86.9	79.4
Samtse	91.2	76.3	46.4	74.1	76.2
Sarpang	91.8	85.1	51.4	69.2	68.1
Thimphu	96.5	96.0	84.7	72.5	38.0
Trashigang	77.0	72.9	41.0	69.1	56.7
Trashiyangtse	89.8	96.0	57.0	86.9	73.5
Trongsa	90.9	90.0	59.8	63.7	61.3
Tsirang	90.6	89.9	36.4	93.5	79.7
Wangdue	93.8	80.0	67.8	79.3	87.5
Zhemgang	94.3	92.1	64.2	80.3	66.4
Total % coverage	**87.4**	**85.9**	**56.3**	**78.2**	**74.3**

Source: Annual Health Bulletin 2010, MoH, Thimphu.

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CHAPTER 3
EDUCATION

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

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

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

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

The summaries of the data are presented through this chapter. For the academic session 2009, there were 174,698 students enrolled in 541 schools and 23 Institutes. Of 541 schools 27 are privately run while the government runs the rest.

In 2009, there were 268 Community Primary Schools (CPS) catering to small and far-flung remote areas. CPS is the basic level for the primary school system, which caters to the specific community, a village or a cluster of defined villages.

Number of NFE centers expanded from 6 in 1992 with 300 learners to 688 centers with 13,160 learners in 2009. The NFE centers provide only basic literacy courses of reading and writing.

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The size of enrolment till Higher Secondary Schools was highest in Thimphu Dzongkhag with 23,971 students followed by Chukha with 16,452 & Samtse with 13,728 and least was Gasa with 641.

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

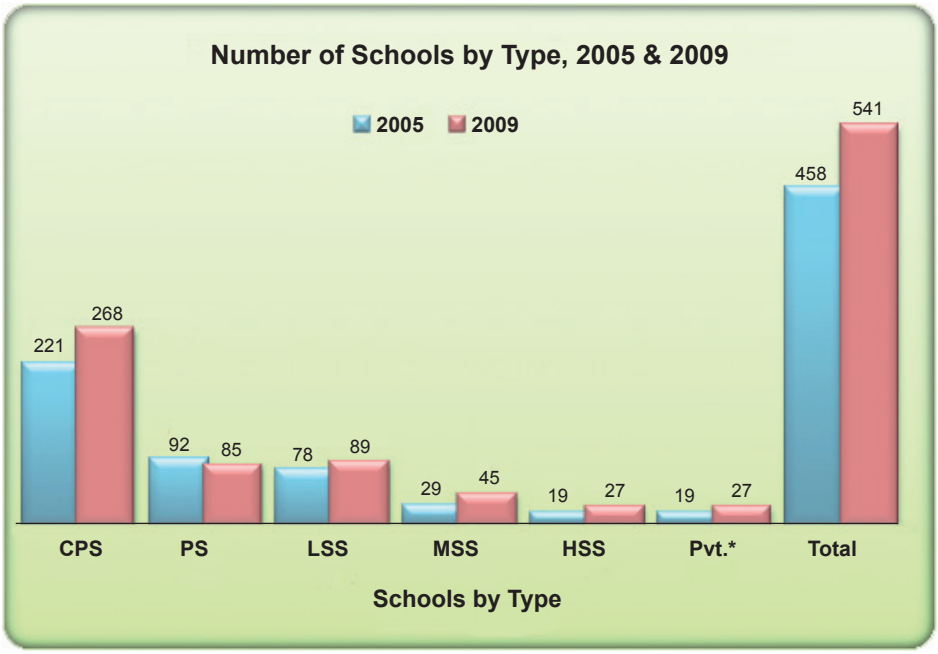

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TABLE 3.1 NUMBER OF SCHOOLS AND INSTITUTIONS, STAFF AND STUDENTS, BHUTAN, 2009

Details	CPS	PS	LSS	MSS	HSS	Pvt.***	Other Inst.*	Monastic Education**	NFE Centres	Daycare Centres	Total
Number of school and Institutions	268	85	89	45	27	27	23	388	688	11	1,651
Teaching staff	1,281	931	1,785	1,274	912	485	934	n.a	756	37	8,395
Bhutanese	1,278	924	1,696	1,096	666	355	841	n.a	756	37	7,649
Non-Bhutanese	3	7	89	178	246	130	93	n.a	0	0	746
Number of students	31,090	23,565	48,153	33,891	18,880	8,975	10,144	9,611	13,160	363	197,832
Male	15,753	11,802	23,837	17,241	9,783	4,566	6,457	9,544	3,999	195	103,177
Female	15,337	11,763	24,316	16,650	9,097	4,409	3,687	67	9,161	168	94,655
Student to teacher ratio	24	25	27	27	21	19	11	n.a	17	10	24

Source: Annual Education Statistics 2009, PPD, MoE, Thimphu.
Note: CPS-Community Primary School, PS-Primary School, LSS-Lower Secondary School, MSS-Middle Secondary School, HSS-Higher Secondary School, Pvt-Private School.
** Other institute: Includes tertiary education, vocational institutes, Special Institutes with Government Scholarship Students Studying abroad*
** *Monastic Education: Includes Lobdra, Shredra etc. & Enrolment from 2004 in private, 2009 Public*
****Private Students: Includes students studying incountry & Ex country*

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TABLE 3.2 NUMBER OF EDUCATIONAL INSTITUTIONS, TEACHERS AND STUDENTS, BHUTAN,2005 TO 2009

Year	Infrastructure			Teacher			Student		
	School	Other Inst.*	Total	School	Inst.*	Total	School	Other Inst.*	Total
2005	458	18	476	4,604	566	5,170	141,388	4,429	145,817
2006	489	18	507	4,963	449	5,412	146,524	4,433	150,957
2007	502	19	521	5,372	457	5,829	152,194	4,739	156,933
2008	523	19	542	5,655	814	6,469	157,112	5,542	162,654
2009	541	23	564	6,668	934	7,602	164,262	19,862	184,124

Source: Annual Education Statistics 2009, PPD, MoE, Thimphu.
*Note:*Excludes NFE, Day Care Center & Monastic Education*
** Other institute: Includes tertiary education, vocational institutes, Special Institutes with Government Scholarship Students Studying abroad*

TABLE 3.3 NUMBER OF ENROLMENT AND TEACHING STAFF IN SCHOOLS, INSTITUTES, NFE CENTRES AND DAY CARE CENTRES, 2009

Type of Schools, Centres & Institutes	Enrolment			Teachers		
	Male	Female	Total	Bht	N/Bht	Total
School Education						
Community Primary Schools	15,753	15,337	31,090	1,278	3	1,281
Pvt. Community Primary Schools	41	23	64	7	0	7
Primary Schools	11,802	11,763	23,565	924	7	931
Pvt.Primary Schools	796	803	1,599	109	13	122
Lower Secondary Schools	23,837	24,316	48,153	1,696	89	1,785
Pvt. Lower Seconodary School	338	321	659	40	10	50
Middle Secondary Schools	17,241	16,650	33,891	1,096	178	1,274
Pvt. Middle Secondary Schools	198	165	363	22	5	27
Higher Secondary Schools	9,783	9,097	18,880	666	246	912
Pvt.Higher Secondary Schools	3,005	2,993	5,998	177	102	279
Sub-Total	**82,794**	**81,468**	**164,262**	**6,015**	**653**	**6,668**
Institutes						
Sherubtse College	510	262	772	112	44	156
Institute for Language & Cultural Studies	215	124	339	46	1	47
College of Education, Samtse	580	386	966	81	8	89

(Contd..)

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TABLE 3.3 (contd..): NUMBER OF ENROLMENT AND TEACHING STAFF IN SCHOOLS, INSTITUTES, NFE CENTRES AND DAY CARE CENTRES, 2009

Type of Schools, Centres & Institutes	Enrolment			Teachers		
	Male	Female	Total	Bht	N/Bht	Total
Paro College of Education, Paro	719	343	1,062	82	1	83
Jigme Namgyal Polytechnic, Dewathang	268	77	345	59	2	61
College of Science and Technology, Rinchending	213	79	292	66	15	81
Royal Institute of Health Sciences	131	126	257	41	0	41
National Institute of Traditional Medicine	31	9	40	15	0	15
College of Natural Resources, Lobesa	121	26	147	70	2	72
Royal Institute of Management	193	143	336	76	3	79
Geddug College of Business Studies	315	180	495	52	17	69
Sub-Total	**3,296**	**1,755**	**5,051**	**700**	**93**	**793**
Vocational Institute						
Vocational Training Institute, Khuruthang	116	50	166	15	0	15
Vocational Training Institute, Samthang	95	10	105	12	0	12
Vocational Training Institute, Chumey	147	91	238	21	0	21
Vocational Training Institute, Rangjung	109	48	157	17	0	17
Vocational Training Institute, Shershong, Sarpang	79	54	133	11	0	11
National Institutes for Zorig Chusum, Thimphu	216	125	341	29	0	29
Institute of Automobile Engineering, Thimphu	21	4	25	10	0	10
Trashiyangtse Institute for Zorig Chusum	42	15	57	12	0	12
Sub-Total	**825**	**397**	**1,222**	**127**	**0**	**127**
Special Instittes						
National Institute for the Disabled (NID)	30	18	48	13	0	13
Jigmecholling Sanskrit Pathshala	18	0	18	1	0	1
Sub-Total	**48**	**18**	**66**	**14**	**0**	**14**
Others						
Early Childhood Care (Day Care Centres)	195	168	363	37	0	37
Non-Formal Education Programme	3,999	9,161	13,160	756	0	756
Sub-Total	**4,194**	**9,329**	**13,523**	**793**	**0**	**793**
Total	**91,157**	**92,967**	**184,124**	**7,649**	**746**	**8,395**

Source: Annual Education Statistics 2009, PPD, MoE, Thimphu.

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TABLE 3.4 NUMBER OF EDUCATIONAL FACILITIES BY TYPE AND DZONGKHAG, 2009

Dzongkhag	CPS	PS	LSS	MSS	HSS	Pvt.	Total
Bumthang	12	1	2	2	1	1	19
Chukha	19	4	7	4	3	2	39
Dagana	14	1	5	2	1	0	23
Gasa	2	1	0	1	0	0	4
Haa	3	3	3	0	1	0	10
Lhuentse	14	9	2	1	1	0	27
Mongar	31	6	8	2	2	1	50
Paro	3	3	8	2	2	4	22
Pemagatshel	18	4	6	2	1	0	31
Punakha	9	3	4	3	1	1	21
Samdrup Jongkhar	10	5	5	5	0	1	26
Samtse	9	3	1	5	1	0	19
Sarpang	11	0	4	2	2	2	21
Thimphu	7	6	9	4	2	14	42
Trashigang	35	12	9	4	3	0	63
Trashiyangtse	20	3	5	1	1	0	30
Trongsa	15	4	3	1	1	0	24
Tsirang	7	2	2	1	1	0	13
Wangdue	15	6	3	1	2	0	27
Zhemgang	15	10	3	2	1	1	32
Bhutan	268	85	89	45	27	27	541

Source: Annual Education Statistics 2009, PPD, MoE, Thimphu.

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TABLE 3.5 NUMBER OF TEACHERS IN EDUCATIONAL INSTITUTIONS BY NATIONALITY, BHUTAN, 2006 TO 2009

Institution	2006			2007			2008			2009		
	Bht	N/Bht	Total	Bht	N/Bht	Total	Bht	N/Bht	Total	Bht	N/Bht	Total
Schools	**4,350**	**613**	**4,963**	**4,757**	**615**	**5,372**	**5,098**	**647**	**5,745**	**6,015**	**653**	**6,668**
Community Primary Schools	850	2	852	893	3	896	998	2	1,000	1,278	3	1,281
Primary Schools	780	10	790	745	6	751	792	7	799	924	7	931
Lower Secondary Schools	1,506	137	1,643	1,501	103	1,604	1,537	90	1,627	1,696	89	1,785
Middle Secondary Schools	588	160	748	906	187	1,093	982	195	1,177	1,096	178	1,274
Higher Secondary Schools	388	208	596	459	224	683	510	244	754	666	246	912
Private Schools	238	96	334	253	92	345	279	109	388	355	130	485
Institutes	**279**	**75**	**354**	**279**	**75**	**354**	**618**	**77**	**695**	**700**	**93**	**793**
Sherubtse College	35	46	81	35	46	81	88	42	130	112	44	156
College of Education, Paro	45	2	47	45	2	47	77	3	80	82	1	83
College of Education, Samtse	43	4	47	43	4	47	78	9	87	81	8	89
Institute of Language and Cultural Studies	27	1	28	27	1	28	56	1	57	46	1	47
Royal Institute of Health and Sciences	22	2	24	22	2	24	41	2	43	41	0	41
National Institute of Traditional Medicine	6	0	6	6	0	6	15	0	15	15	0	15
Jigme Namgyel Polytechnic, Rinchending	20	2	22	20	2	22	57	2	59	59	2	61
College of Natural Resources, Lobesa	27	0	27	27	0	27	69	2	71	70	2	72
Royal Institute of Management	30	3	33	30	3	33	75	2	77	76	3	79
College of Science and Technology	24	15	39	24	15	39	62	14	76	66	15	81

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TABLE 3.5 (contd..): NUMBER OF TEACHERS IN EDUCATIONAL INSTITUTIONS BY NATIONALITY, BHUTAN, 2006 TO 2009

Institution	2006			2007			2008			2009		
	Bht	N/Bht	Total	Bht	N/Bht	Total	Bht	N/Bht	Total	Bht	N/Bht	Total
Gedu College of Business Studies	-	-	-	-	-	-	-	-	-	52	17	69
Vocational Institute	**98**	**0**	**98**	**86**	**0**	**86**	**106**	**0**	**106**	**127**	**0**	**127**
Vocational Training Institute, Chumey	22	-	22	10	0	10	13	-	13	21	0	21
Vocational Training Institute, Khuruthang	10	-	10	13	0	13	16	-	16	15	0	15
Vocational Training Institute, Rangjung	17	-	17	13	0	13	16	-	16	17	0	17
Vocational Training Institute, Samthang	12	-	12	17	-	17	12	-	12	12	0	12
Vocational Training Institute, Shershong, Sarpang	-	-	-	-	-	-	9	-	9	11	0	11
National Institute for Zorig Chusum, Thimphu	26	-	26	22	0	22	14	-	14	29	0	29
Tashiyangtse Institute for Zorig Chusum	11	-	11	11	0	11	26	-	26	12	0	12
Institute of Automobile Engineering, Thimphu	-	-	-	-	-	-	-	-	-	10	0	10
Special Instittes	**12**	**1**	**13**	**12**	**1**	**13**	**14**	**0**	**14**	**14**	**0**	**14**
National Institute for the Disabled (NID)	11	1	12	11	1	12	13	-	13	13	0	13
Jigmecholing Sanskrit Patshala	1	0	1	1	0	1	1	0	1	1	0	1
Others	**682**	**0**	**682**	**780**	**0**	**780**	**762**	**0**	**762**	**793**	**0**	**793**
Day Care Centres	13	-	13	18	0	18	26	0	26	37	0	37
Non Formal Education Programme	669	0	669	762	0	762	736	0	736	756	0	756
Bhutan	**5,421**	**689**	**6,110**	**5,914**	**691**	**6,605**	**6,598**	**724**	**7,322**	**7,649**	**746**	**8,395**

Source: Annual Education Statistics 2009, PPD, MoE, Thimphu.

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TABLE 3.6 NUMBER OF EDUCATIONAL FACILITIES AND STUDENTS BY DZONGKHAG, 2009

Dzongkhag	Educational facilities	Student		
		Boys	Girls	Total
Bumthang	19	2054	2136	4,190
Chukha	40	8270	8182	16,452
Dagana	26	3296	3065	6,361
Gasa	5	322	319	641
Haa	11	1521	1525	3,046
Lhuentse	27	2071	1933	4,004
Mongar	50	4970	4565	9,535
Paro	22	5154	5248	10,402
Pemagatshel	37	3308	2934	6,242
Punakha	21	3468	3846	7,314
Samdrup Jongkhar	28	4431	4121	8,552
Samtse	22	7126	6602	13,728
Sarpang	22	5227	5209	10,436
Thimphu	41	11558	12413	23,971
Trashigang	66	6539	6037	12,576
Trashiyangtse	30	2707	2610	5,317
Trongsa	24	1824	1764	3,588
Tsirang	14	2642	2436	5,078
Wangdue	29	3478	3855	7,333
Zhemgang	32	2828	2668	5,496
Bhutan	**566**	**82794**	**81468**	**164262**

Source: Annual Education Statistics 2009, PPD, MoE, Thimphu.
Note: In the above table, Institutes and NFE centres and Day Care Centres are excluded

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TABLE 3.7 NUMBER OF ENROLMENT IN EDUCATIONAL INSTITUTIONS, 2005 TO 2009

Institutions	2005	2006	2007	2008	2009
Schools	**141,388**	**146,524**	**152,194**	**157,112**	**164,262**
Community Primary Schools	26,965	29,132	28,953	29,702	31,090
Primary Schools	25,879	25,745	23,585	22,813	23,565
Lower Secondary Schools	48,995	50,576	48,716	48,706	48,153
Middle Secondary Schools	20,641	21,236	29,829	32,292	33,891
Higher Secondary Schools	13,145	14,414	14,963	16,155	18,880
Private Schools	**5,763**	**5,421**	**6,148**	**7,444**	**8,683**
Tertiary Education Institutes (Royal University of Bhutan)	3,131	3,553	3,820	4,191	5,051
Sherubtse College, Kanglung	465	1,014	1,045	1,092	772
Paro College of Education, Paro	69	744	703	839	1,062
Samtse College of Education, Samtse	72	483	546	659	966
Institute of Language and Culutural Studies	779	272	320	338	339
College of Science and Technology, Rinchending	487	446	314	247	292
Jigme Namgyal Polytechnic, Dewathang	0	0	250	307	345
Royal Institute of Health Sciences, Thimphu	34	197	211	257	257
National Institute of Traditional Medicines, Thimphu	26	28	23	35	40
College of Natural Resources, Lobesa	1,157	142	138	140	147
Royal Institute of Management, Semtokha	42	227	270	277	336
Gedu College of Business Studies	0	0	0	0	495
Vocational Institutes	**1,060**	**728**	**804**	**1,270**	**1,222**
National Institue of Zorig Chusum, Thimphu	28	59	53	380	341
Institute of Automobile Engineering, Thimphu	0	0	0	0	25
Trashiyangtse Institue of Zorigchusum	82	41	49	50	57
Vocational Training Institue of Shershong, Sarpang	215	81	121	97	133
Vocational Training Institue, Samthang	137	254	272	227	105
Vocational Training Institute, Chumey	60	133	147	168	238
Vocational Training Institute, Khuruthang	269	80	81	174	166
Vocational Training Instritute, Rangjung	269	80	81	174	157
Special Institutes	**109**	**68**	**76**	**68**	**66**
National Institute for the Disabled (NID)	82	41	49	50	48
Jigmecholing (Surey) Sanskrit patshala	27	27	27	18	18
Others	**16,728**	**18,819**	**14,909**	**14,124**	**13,523**
Day Care Centres	86	269	215	294	363
Non-formal Education Centres	16642	18550	14694	13830	13160
Total	**162,416**	**169,692**	**171,803**	**176,765**	**184,124**

Source: Annual Education Statistics 2009, PPD, MoE, Thimphu.

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TABLE 3.8 NUMBER OF STUDENTS IN HIGH SCHOOLS AND BELOW BY DZONGKHAG AND TYPE OF SCHOOL, 2009

Dzongkhag	Private school			Community school			Primary school		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Bumthang	103	99	202	535	582	1,117	142	177	319
Chukha	377	381	758	1,281	1,301	2,582	498	434	932
Dagana	0	0	0	1,334	1,325	2,659	64	70	134
Gasa	0	0	0	104	64	168	48	61	109
Haa	0	0	0	95	105	200	318	320	638
Lhuentse	0	0	0	475	433	908	739	783	1,522
Mongar	64	47	111	1,438	1,365	2,803	458	462	920
Paro	805	635	1,440	116	130	246	751	668	1,419
Pemagatshel	0	0	0	915	830	1,745	226	229	455
Punakha	435	434	869	496	487	983	479	507	986
Samtse	0	0	0	1,755	1,591	3,346	721	605	1,326
Samdrup Jongkhar	66	54	120	782	731	1,513	1,024	991	2,015
Sarpang	291	292	583	1,169	1,132	2,301	0	0	0
Thimphu	2,171	2,311	4,482	471	442	913	2,365	2,490	4,855
Trashigang	0	0	0	1,724	1,585	3,309	1,204	1,134	2,338
Trashiyangtse	0	0	0	818	887	1,705	188	152	340
Trongsa	0	0	0	603	591	1,194	441	403	844
Tsirang	0	0	0	563	519	1,082	296	303	599
Wangdue	0	0	0	855	964	1,819	978	1,104	2,082
Zhemgang	66	52	118	559	599	1,158	740	744	1,484
Bhutan	**4,378**	**4,305**	**8,683**	**16,088**	**15,663**	**31,751**	**11,680**	**11,637**	**23,317**

(Contd..)

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TABLE 3.8 (contd..): NUMBER OF STUDENTS IN HIGH SCHOOLS AND BELOW BY DZONGKHAG AND TYPE OF SCHOOL, 2009

Dzongkhag	Lower secondary			Middle secondary			Higher secondary			All school		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Bumthang	526	533	1,059	524	519	1,043	224	226	450	2,054	2,136	4,190
Chukha	2,609	2,559	5,168	1,910	1,896	3,806	1,595	1,611	3,206	8,270	8,182	16,452
Dagana	1,034	887	1,921	649	586	1,235	215	197	412	3,296	3,065	6,361
Gasa	0	0	-	170	194	364	0	0	0	322	319	641
Haa	785	739	1,524	0	0	-	323	361	361	1,521	1,525	3,046
Lhuentse	276	267	543	249	207	456	332	243	575	2,071	1,933	4,004
Mongar	1,508	1,491	2,999	657	523	1,180	845	677	1,522	4,970	4565	9,535
Paro	2,159	2,376	4,535	585	622	1,207	738	817	1,555	5,154	5,248	10,402
Pemagatshel	1,208	1,183	2,391	582	454	1,036	377	238	615	3,308	2,934	6,242
Punakha	820	1,091	1,911	876	1,023	1,899	362	304	666	3,468	3,846	7,314
Samtse	670	690	1,360	3,648	3,390	7,038	332	326	658	7,126	6,602	13,728
Samdrup Jongkhar	1,075	1,087	2,162	1,484	1,258	2,742	0	0	0	4,431	4,121	8,552
Sarpang	1,955	2,078	4,033	1,247	1,212	2,459	565	495	1,060	5,227	5,209	10,436
Thimphu	3,444	3,555	6,999	1,978	2,143	4,121	1,129	1,472	2,601	11,558	12,413	23,971
Trashigang	1,695	1,631	3,326	872	956	1,828	1,044	731	1,775	6,539	6,037	12,576
Trashiyangtse	1,037	1,057	2,094	370	304	674	294	210	504	2,707	2,610	5317
Trongsa	325	378	703	210	169	379	245	223	468	1,824	1,764	3588
Tsirang	983	921	1,904	457	456	913	343	237	580	2,642	2,436	5078
Wangdue	994	1,093	2,087	220	295	515	431	399	830	3,478	3,855	7333
Zhemgang	621	596	1,217	453	347	800	389	330	719	2,828	2,668	5496
Bhutan	**23,724**	**24,212**	**47,936**	**17,141**	**16,554**	**33,695**	**9,783**	**9,097**	**18,880**	**82,794**	**81,468**	**164,262**

Source: Annual Education Statistics 2009, PPD, MoE, Thimphu.

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TABLE 3.9 NUMBER OF STUDENTS BY GRADE AND TYPE OF SCHOOL, BHUTAN, 2009

Grade	Private	Community Pry	Primary	Lower & Middle Secondary	Higher Secondary	All Schools
Pre primary/ PP	1,020	5,734	3,452	6,902	197	17,108
I	457	5,186	3,531	7,142	173	16,316
II	393	5,002	3,518	7,008	181	15,921
III	324	4,837	3,404	7,335	135	15,900
IV	261	4,028	3,433	7,472	128	15,194
V	174	3,482	3,261	7,445	177	14,362
VI	157	2,821	2,966	6,955	151	12,899
VII	101	NA	NA	12,042	707	12,850
VIII	61	NA	NA	10,288	1,098	11,447
IX	46	NA	NA	5,389	5,116	10,551
X	58	NA	NA	4,066	4,633	8,757
XI	2,719	NA	NA	NA	3,271	5,990
XII	2,912	NA	NA	NA	2,913	5,825
Bhutan	**8,683**	**31,090**	**23,565**	**82,044**	**18,880**	**164,262**

Source: Annual Education Statistics 2009, PPD, MoE, Thimphu.

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TABLE 3.10 NUMBER OF STUDENTS BY GRADE, 2005 TO 2009

Grade	2005	2006	2007	2008	2009
Primary grade	**99,874**	**102,225**	**104,467**	**106,100**	**107,700**
Nursery	416	n.a	n.a	n.a	n.a
Pre-primary	15,518	16,869	16,392	16,432	17,108
I	16,455	15,546	16,865	16,084	16,316
II	15,633	16,109	15,537	16,529	15,921
III	14,415	14,772	15,386	14,983	15,900
IV	13,750	14,591	14,899	15,506	15,194
V	12,635	12,618	13,450	13,808	14,362
VI	11,052	11,720	11,938	12,758	12,899
Lower Secondary grade	**19,647**	**20,482**	**22,104**	**23,247**	**24,297**
VII	10,686	11,214	11,887	12,328	12,850
VIII	8,961	9,268	10,217	10,919	11,447
Middle Secondary grade	**14,183**	**15,715**	**16,807**	**17,608**	**19,308**
IX	7,732	8,859	9,116	9,699	10,551
X	6,451	6,856	7,691	7,909	8,757
Higher Secondary school	**7,684**	**8,102**	**8,816**	**10,157**	**11,815**
XI	3,997	4,234	4,581	5,426	5,990
XII	3,687	3,868	4,235	4,731	5,825
Bhutan	**141,388**	**146,524**	**152,194**	**157,112**	**164,262**

Source: Annual Education Statistics 2009, PPD, MoE, Thimphu.

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TABLE 3.11 NUMBER OF STUDENTS ENROLED,PROMOTEES,REPEATERS AND DROPOUTS BY GRADE, BHUTAN, 2009

Details	Enrolment	Promotees	Repeaters	Dropouts
PP	17,305	15,446	1,055	67
I	16,489	14,862	1,043	192
II	16,102	15,091	1,240	211
III	16,035	13,906	944	146
IV	15,322	13,652	1,416	444
V	14,539	12,451	887	477
VI	13,050	11,878	599	227
VII	12,850	10,832	972	524
VIII	11,447	10,031	615	273
IX	10,551	8,705	520	474
X*	8,757	5,923	52	0
Bhutan	**152,447**	**132,777**	**9,343**	**2,901**

Source: Annual Education Statistics 2009, PPD, MoE, Thimphu.
*Note: * The students who leave school after Class X are school leavers and not drop-outs.*
Promotees and dropout figures are imputations

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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 labor force, employment, wage rate and conditions of work.

The National Statistical Bureau conducted the two consecutive Labor Force Surveys in 1998 and 2000. The Department of Employment (DoE) under Ministry of Labour and Human Resources (MoLHR) conducted the Labor Force Survey from 2001 onwards, since its creation in 2000. Labour statistics presented in this chapter are from Labour Force Survey (LFS) Report, 2010.

Although share of primary sector in GDP is gradually decreasing, agriculture is still the predominant sector providing employment to around 67.3% of the labour force as per Bhutan Living Standard Survey 2007. The private sector is emerging as the important sector generating employment opportunities for the rapidly increasing labour market.

The employed persons comprise of all those who had performed some paid or cash or in kind, during the reference period for at least one hour or the person has a job or business formally attached but temporally absent from the work and going to resume the work. Out of the total extrapolated population of 696,500, 320,99 were found employed and 11,000 were found to be unemployed. While the unemployment rate at the national level is found to be 3.3% as per the LFS 2010.

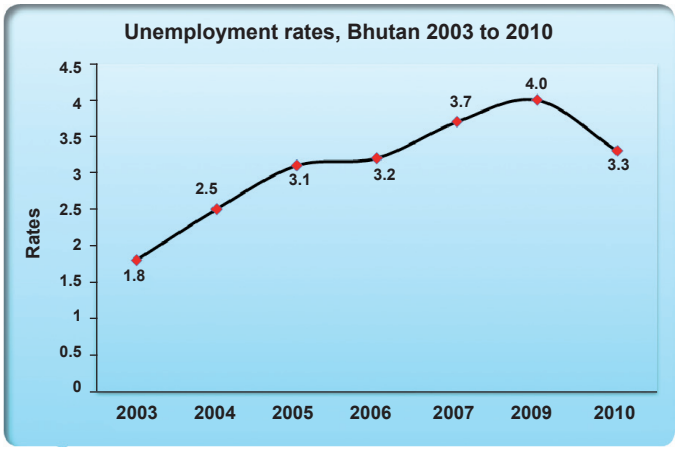

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TABLE 4.1 PERCENTAGE DISTRIBUTION OF EMPLOYED PERSONS BY SEX AND ECONOMIC ACTIVITY, BHUTAN, 2005 TO 2009

Ministry/Division	2005	2006	2007	2008	2009
His Majesty 4th King's Secretariat	33	35	29	30	26
His Majesty 5th King's Secretariat	..	7	11	14	27
Judiciary					
Royal Court of Justice	289	315	314	309	309
Legislative					
National Assembly	21	25	25	32	36
National Council	..	..	..	16	24
Constitutional					
Royal Audit Authority	161	170	178	189	199
Election Commission	..	94	93	93	94
Royal Civil Service Commission	49	54	56	57	69
Anti-Corruption Commission	..	18	23	29	29
Executive Ministries					
Ministry of Agriculture	3,150	3,243	3,036	3,084	3,176
Ministry of Economic Affairs	508	554	570	510	524
Ministry of Education	5,507	5,956	6,272	6,625	7,365
Ministry of Finance	1,216	1,293	1,308	1,424	1,547
Ministry of Foreign Affairs	113	121	116	136	141
Ministry of Health	2,216	2,328	2,374	2,492	2,660
Ministry of Home & Cultural Affairs	1,092	1,106	1,092	1,104	1,266
Ministry of Information & Communications	323	338	303	320	332
Ministry of Labour & Human Resources	212	247	253	281	310
Ministry of Works & Human Settlement	1,550	1,667	1,631	1,670	1,501

(Contd..)

TABLE 4.1 (cnotd..): PERCENTAGE DISTRIBUTION OF EMPLOYED PERSONS BY SEX AND ECONOMIC ACTIVITY, BHUTAN, 2005 TO 2009

Ministry/Division	2005	2006	2007	2008	2009
Autonomous & Other Agencies					
Royal University of Bhutan	414	463	470	552	629
Bhutan Infocomm & Media Authority	..	..	16	17	22
Bhutan Naroctic Control Agency	..	2	4	7	11
Bhutan Olympic Committee	9	8	6	7	8
Cabinet Secretariat	10	12	12	24	27
Center for Bhutan Studies	15	19	21	23	22
Dratshang Lhentshog	25	29	26	26	34
Dzongkha Development Commission	..	..	22	22	27
Gross National Happiness Commission	..	48	91	204	101
National Commission for Women & Children	4	5	6	6	6
National Environment Commission	38	42	55	58	63
National Land Commission	..	..	244	292	310
National Statistical Bureau	41	57	56	56	60
National Steering Committee for Coronation and Centenary Celebration	..	1	2	2	1
Office of Attorney General	21	21	21	22	26
Privy Council Office	..	..	..	2	8
Royal Education Council	"	"	"	2	1
Royal Institute of Management	59	58	58	60	69
Tourism Council of Bhutan	..	..	..	51	53
All Civil Servants	**17,090**	**18,350**	**18,807**	**19,848**	**21,113**
Includes Seconded to: Corporations,National Agencies, International Org. & NGO's	72	..	71	81	94

Source: Royal Civil Servic Commission

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TABLE 4.2 PERCENTAGE DISTRIBUTION OF EMPLOYED PERSONS BY SEX AND ECONOMIC ACTIVITY, BHUTAN, 2010

Economic Activity	Male	Female	Both sexes
Agriculture and forestry	54.0	65.3	59.4
Mining and quarrying	0.4	0.2	0.3
Manufacturing	2.8	5.1	3.9
Electricity, gas & water supply	2.3	1.0	1.6
Construction	1.3	0.5	0.8
Wholesale & retail trade, repair of motor vehicle & household goods	8.9	10.5	9.6
Hotels & restaurants	1.0	1.5	1.2
Transport, storage & communication goods	4.6	1.2	3.0
Financial intermediation	0.9	0.6	0.7
Real estate, renting & business activities	5.4	2.9	4.1
Public administration & defense	11.0	4.7	8.0
Education	3.2	2.9	3.0
Health & social work	1.6	1.7	1.7
Other community, social & personal service activities	2.7	1.9	2.3
Private households with employed persons	0.1	0.1	0.1
Total	**100.0**	**100.0**	**100.0**

Source: Labour Force Survey Report 2010

TABLE 4.3 PERCENTAGE DISTRIBUTION OF ECONOMICALLY INACTIVE POPULATION, BHUTAN, 2010

Age group	Economically Inactive population						
	House/family duties	Study	Old or retired	Too young	Physically challenged	Other reasons	Total
15-19	12.9	73.7	0.5	100.0	10.0	15.3	36.1
20-24	22.9	24.7	0.5	16.7	13.3	25.0	17.7
25-29	1.9	0.6	0	0	3.3	15.3	1.5
30-34	2.5	0.2	0.3	0	3.3	6.9	1.2
35-39	2.5	0	0	0	0	4.2	0.8
40-44	5.0	0	0.5	0	0	2.8	1.5
45-49	17.1	0.3	2.5	0	3.3	6.9	5.3
50-54	11.3	0.2	8.1	0	16.7	9.7	5.7
55-59	10.7	0.2	10.3	0	10.0	5.6	5.8
60-64	6.6	0.2	21.4	0	13.3	4.2	7.6
65+	6.9	0.2	56.4	0	20.0	2.8	16.9
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: Labour Force Survey Report 2010

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TABLE 4.4 NUMBER OF PERSONS EMPLOYED BY AGE GROUP AND TYPE OF ENTERPRISES, BHUTAN, 2010

Age Group	Government		Public Corporation		Pvt. Corporation		Armed Forces		Pvt. Business		Agri. farming		NGO/INGO		Total	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
15-19	300	200	0	100	200	100	0	0	900	1,600	5,600	6,800	0	0	7,000	8,900
20-24	2,300	1,500	600	500	1,000	600	300	200	3,000	4,100	9,400	11,000	0	0	16,500	17,900
25-29	6,900	5,900	1,600	1,200	1,100	800		300	5,600	8,600	8,200	11,400	100	100	24,300	28,300
30-34	6,800	3,700	1,400	800	800	300	900	100	5,200	6,000	9,300	12,100	0	100	24,500	23,200
35-39	5,700	3,000	1,100	600	1,100	400	800	300	4,600	6,000	7,500	11,700	0	100	20,800	22,100
40-44	4,300	1,600	800	400	500	200	600	100	3,200	4,200	7,800	10,500	0	100	17,300	17,100
45-49	3,000	400	700	100	500	200	200	0	2,300	1,400	8,500	9,000	100	0	15,100	11,100
50-54	2,100	300	300	0	300	0	100	100	2,300	1,000	8,500	7,800	100	0	13,900	9,300
55-59	1,000	0	100	0	300	0	0	0	2,000	700	6,900	6,100	0	100	10,300	6,900
60-64	400	0	0	0	100	0	0	0	1,100	800	7,000	4,800	0	0	8,500	5,600
65+	400	100	100	0	0	0	0	0	900	500	6,200	4,000	0	0	7,500	4,600
Total	**33,200**	**16,700**	**6,700**	**3,800**	**5,800**	**2,700**	**3,700**	**1,200**	**31,100**	**34,900**	**84,900**	**95,300**	**500**	**500**	**165,900**	**155,000**

Source: Labour Force Survey Report 2010

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TABLE 4.5 TOTAL EMPLOYED PERSONS BY AGE AND COMPLETED LEVEL OF EDUCATION, BHUTAN, 2010

Age group	Level of Education										
	Illiterate	Primary	Junior	High	Higher Secondary	Under graduate	Graduate	Masters and above	Non-for-mal	Monastic	Total
15-19	8,700	2,900	1,000	800	200	100	0	0	2,000	200	15,900
20-24	14,900	5,100	2,400	4,500	2,800	300	1,200	100	2,900	400	34,500
25-29	22,800	6,400	4,300	7,300	5,000	400	2,800	300	2,200	1,200	52,700
30-34	27,000	6,000	2,600	4,700	2,400	100	1,900	300	1,800	900	47,600
35-39	26,600	5,900	2,300	3,200	1,400	100	1,100	500	1,300	600	42,900
40-44	24,500	3,200	1,600	1,800	700	100	600	300	700	900	34,300
45-49	20,100	2,000	800	1,000	400	0	500	300	500	600	26,200
50-54	18,800	1,500	600	700	300	100	300	200	200	600	23,200
55-59	14,400	1,000	300	300	200	100	200	100	100	600	17,200
60-64	12,600	600	200	100	100	0	100	0	100	300	14,100
65+	11,200	300	0	0	0	0	0	0	0	500	12,100
Total	**201,800**	**34,900**	**16,100**	**24,400**	**13,500**	**1,200**	**8,700**	**2,000**	**11,700**	**6,700**	**320,900**

Source: Labour Force Survey Report 2010

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TABLE 4.6 EMPLOYED PERSONS BY AGE, SEX AND AREA OF RESIDENCE, BHUTAN, 2010

Dzongkhag	Rural			Urban			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Bumthang	2,600	2,000	4,600	400	300	700	3,000	2,300	5,300
Chukha	9,100	10,000	19,100	12,900	9,300	22,200	22,000	19,400	41,400
Dagana	5,300	5,200	10,500	500	400	900	5,800	5,600	11,400
Gasa	700	800	1,600	100	100	200	900	900	1,800
Haa	2,500	2,200	4,700	600	600	1,300	3,200	2,800	6,000
Lhunetse	3,100	3,800	6,900	200	100	300	3,300	3,900	7,200
Mongar	8,100	8,800	17,000	1,400	900	2,300	9,500	9,700	19,200
Paro	7,700	9,800	17,400	900	1,100	2,000	8,600	10,900	19,400
Pemagatshel	2,600	2,600	5,200	300	200	400	2,900	2,700	5,600
Punakha	6,000	7,300	13,300	500	400	900	6,400	7,800	14,200
Samdrup Jongkhar	2,900	2,200	5,100	1,800	1,200	3,000	4,700	3,400	8,100
Samtse	16,300	15,200	31,400	3,400	2,400	5,800	19,600	17,600	37,200
Sarpang	5,100	5,000	10,100	3,800	2,300	6,100	8,900	7,300	16,200
Thimphu	3,700	3,300	7,000	20,900	15,700	36,500	24,500	19,000	43,500
Trashigang	11,800	12,700	24,400	1,400	1,200	2,500	13,100	13,800	27,000
Trashiyangtse	4,000	4,900	8,900	200	200	400	4,300	5,100	9,400
Trongsa	3,000	3,000	5,900	400	400	800	3,400	3,300	6,700
Tsirang	6,400	6,300	12,700	400	400	700	6,700	6,700	13,400
Wangdue	7,000	6,000	13,000	2,500	1,600	4,100	9,500	7,600	17,100
Zhemgang	5,100	4,900	10,000	600	300	900	5,700	5,200	10,900
Total	**112,900**	**115,900**	**228,800**	**53,000**	**39,100**	**92,100**	**165,900**	**155,000**	**320,900**

Source: Labour Force Survey Report 2010

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TABLE 4.7 ALL EMPLOYED PERSONS WHO WORKED DURING THE PAST ONE WEEK PEIOR TO THE SURVEY PERIOD BY ECONOMIC ACTIVITY AND HOURS OF WORK, BHUTAN, 2010

Economic Activity	Hours Worked							
	<30 hrs	30-39 hrs	40-49 hrs	50-59 hrs	60-69 hrs	70-79 hrs	80+ hrs	Total
Agricultural and forestry	106,200	5,400	17,700	17,800	10,700	24,800	8,200	190,800
Mining and quarrying	300	0	100	200	100	100	0	900
Manufacturing	7,000	1,000	1,000	900	600	700		12,500
Electricity, gas & water supply	2,200	500	700	1,500	100	100	200	5,300
Construction	1,400	100	500	600	100	300	100	2,800
Wholesale & retail trade, repair of Motor vehicle & household goods	12,200	800	2,900	3,800	1,700	2,400	7,100	30,900
Hotels & restaurants	1,600	200	200	600	200	300	1,100	4,100
Transport, storage & communication goods	3,300	400	2,000	1,600	500	600	1,000	9,500
Financial intermediation	800	0	700	700	0	0	100	2,500
Real estate, renting & business activities	5,800	400	2,100	2,600	300	1,600	500	13,400
Public administration & defense	10,000	800	4,900	7,600	800	1,000	1,200	26,300
Education	2,900	400	1,500	3,700	300	300	700	9,800
Health & social work	2,700	100	900	1,300	0	0	200	5,300
Other community, social & personal service activities	3,400	200	1,300	1,000	200	100	600	6,700
Private households with employed persons	100	0	0	100	0	0	0	300
Total	**159,800**	**10,200**	**36,400**	**44,000**	**15,800**	**32,400**	**22,200**	**320,900**

Source: Labour Force Survey Report 2010

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TABLE 4.8 ALL EMPLOYED PERSONS BY LEVEL OF EDUCATION AND EMPLOYMENT NATURE, BHUTAN, 2010

Employment nature	Level of Education										
	Illiterate	Primary	Junior	High	Higher Second-ary	Under graduate	Graduate	Masters and above	Non-formal	Monastic	Total
Regular paid employee	24,400	9,900	8,000	16,200	10,100	400	7,100	1,800	900	1,300	80,300
Casual paid employee	9,800	2,600	1,200	1,500	700	100	400	0	600	1,200	18,100
Unpaid family worker (non-agriculture)	7,300	900	400	500	200	0		0	500	400	10,400
Unpaid family worker (Agriculture)	96,000	11,700	3,000	1,800	700	400	0	0	6,900	2,300	122,800
Own-account worker (Non-agriculture)	18,300	4,100	2,500	3,400	1,400	100	900	100	1,000	300	32,100
Own-account worker (Agriculture)	45,200	5,500	900	700	200	100	100	0	1,800	1,000	55,400
Employer	100	0	0	0	0	0	0	0	0	0	400
Piece/Contract paid worker	600	100	0	200	0	0	0	0	0	200	1,300
Total	**201,800**	**34,900**	**16,100**	**24,300**	**13,500**	**1,200**	**8,700**	**2,000**	**11,600**	**6,700**	**320,900**

Source: Labour Force Survey Report 2010

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TABLE 4.9 ALL EMPLOYED PERSONS BY NATURE OF EMPLOYMENT AND MAJOR OCCUPATION, BHUTAN, 2010

Occupation	Nature of employment								
	Regular paid employee	Casual paid employee	Unpaid family worker (Non-agriculture)	Unpaid family worker (Agriculture)	Own-account worker (Non-agriculture)	Own-account worker (Agriculture)	Employer	Piece/ Contract paid worker	Total
Legislators, sr. officials & managers	5,100	300	0	0	1,100	0	0	0	6,500
Professionals	17,800	2,300	800	200	3,600	300		100	24,900
Technicians & associated professionals	16,700	2,400	200	400	1,500	0	0	300	21,500
Clerks	6,100	200	0	0	200	0	0	0	6,400
Service workers & shop & market sales workers	9,500	3,400	2,100	400	12,700	400	0	100	28,500
Skilled agricultural & fishery workers	1,100	2,700	4,500	121,500	5,000	53,800	100	100	188,800
Craft & related workers	6,400	4,700	2,500	400	5,500	500	0	300	20,100
Plant & machine operators & assemblers	5,900	1,600	200	100	1,900	100	0	300	10,000
Elementary occupations	6,900	800	100	100	800	100	0	100	8,900
Armed force personnel	5,000	0	0	0	0	0	0	0	5,000
Total	**80,300**	**18,100**	**10,400**	**122,800**	**32,100**	**55,400**	**400**	**1,300**	**320,900**

Source: Labour Force Survey Report 2010

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TABLE 4.10 TOTAL UNEMPLOYED PERSONS BY LEVEL OF EDUCATION, SEX AND LEVEL OF EDUCATION, BHUTAN, 2010

Level of Education	Area of residence		
	Rural	Urban	Total
Both sexes			
Illiterate	3,000	1,200	4,200
Primary	600	400	1,000
Junior	400	500	900
High	700	1,200	1,900
Higher Secondary	700	1,200	1,900
Undergraduate	100	100	100
Graduate	200	300	500
Masters and above	0	0	0
Non-formal	200	100	300
Monastic	100	0	100
Total	**6,100**	**4,900**	**11,000**
Male			
Illiterate	1,600	200	1,800
Primary	200	100	400
Junior	100	100	200
High	200	300	500
Higher Secondary	500	500	1,000
Undergraduate	100	0	100
Graduate	100	200	300
Masters and above	0	0	0
Non-formal	100	0	100
Monastic	100	0	100
Total	**3,100**	**1,600**	**4,600**

(Contd..)

TABLE 4.10 (Contd..) TOTAL UNEMPLOYED PERSONS BY LEVEL OF EDUCATION, SEX AND LEVEL OF EDUCATION, BHUTAN, 2010

Level of Education	Area of residence		
	Rural	Urban	Total
Female			
Illiterate	1,400	900	2,400
Primary	400	200	600
Junior	300	400	700
High	500	900	1,400
Higher Secondary	200	700	800
Undergraduate	0	0	0
Graduate	100	100	200
Masters and above	0	0	0
Non-formal	100	100	200
Monastic	0	0	0
Total	**3,000**	**3,300**	**6,400**

Note: Totals may not add up due to rounding. '0' indicates a sample estimate less than 100 persons
Source: Labour Force Survey Report 2010

TABLE 4.11 ECONOMICALLY INACTIVE POPULATION BY AGE AND REASONS, BHUTAN, 2010

Age group	Economically Inactive population						
	House/family duties	Study	Old or retired	Too young	Physically challenged	Other reasons	Total
Male							
15-19	1,200	23,100	100	300	200	400	25,400
20-24	1,500	8,900	200	100	100	800	11,600
25-29	100	300	0	0	100	500	900
30-34	100	100	100	0	0	400	700
35-39	100	0	0	0	0	200	400
40-44	400	0	100	0	0	100	800
45-49	1,200	100	400	0	0	300	2,000
50-54	800	100	1,400	0	100	400	2,800
55-59	1,100	100	1,800	0	100	300	3,300
60-64	400	100	3,800	0	200	100	4,600

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TABLE 4.11 (contd..): ECONOMICALLY INACTIVE POPULATION BY AGE AND REASONS, BHUTAN, 2010

Age group	Economically Inactive population						Total
	House/family duties	Study	Old or retired	Too young	Physically challenged	Other reasons	
65+	600	100	10,800	0	400	100	12,000
Total	**7,400**	**32,900**	**18,800**	**400**	**1,100**	**3,700**	**64,400**
Female							
15-19	3,400	25,000	0	200	100	700	29,500
20-24	6,800	7,100	0	0	300	1,000	15,300
25-29	600	100	0	0	0	600	1,400
30-34	800	0	0	0	100	200	1,100
35-39	800	0	0	0	0	100	800
40-44	1,400	0	0	0	0	100	1,500
45-49	5,100	100	500	0	100	200	6,000
50-54	3,300	100	1,700	0	500	300	5,800
55-59	2,800	0	2,300	0	200	100	5,400
60-64	1,900	0	4,700	0	200	200	7,000
65+	1,900	0	11,500	0	200	100	13,800
Total	**28,900**	**32,400**	**20,900**	**200**	**1,800**	**3,500**	**87,800**
Both Sexes							
15-19	4,700	48,100	200	600	300	1,100	54,900
20-24	8,300	16,100	200	100	400	1,800	26,900
25-29	700	400	0	0	100	1,100	2,300
30-34	900	100	100	0	100	500	1,800
35-39	900	0	0	0	0	300	1,200
40-44	1,800	0	200	0	0	200	2,300
45-49	6,200	200	1,000	0	100	500	8,000
50-54	4,100	100	3,200	0	500	700	8,600
55-59	3,900	100	4,100	0	300	400	8,800
60-64	2,400	100	8,500	0	400	300	11,600
65+	2,500	100	22,400	0	600	200	25,700
Total	**36,300**	**65,300**	**39,700**	**600**	**3,000**	**7,200**	**152,200**

Source: Labour Force Survey Report 2010

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TABLE 4.12 RANGE OF MONTHLY ENARNINGS BY MAIN OCCUPATION OF REGULAR PAID EMPLOYEES, BHUTAN 2010

Occupation	Monthly Earnings							
	<999	1000-1999	2000-2999	3000-3999	4000-4999	5000-9999	10000+	Total
Legislators, sr. officials & managers	0	0	100	100	200	3,000	1,600	5,100
Professionals	0	0	0	400	1,600	7,200	8,500	17,800
Technicians & associated professionals	0	900	100	400	1,300	9,100	4,800	16,700
Clerks	0	0	0	100	700	3,500	1,700	6,100
Service workers & shop & market sales workers	0	300	500	1,100	1,200	5,600	700	9,500
Skilled agricultural & fishery workers	0	0	0	100	200	600	0	1,100
Craft & related workers	0	0	200	400	600	4,400	900	6,400
Plant & machine operators & assemblers	0	0	0	300	500	4,400	700	5,900
Elementary occupations	100	0	100	600	900	4,600	500	6,900
Armed force personnel	0	0	0	200	800	3,700	200	5,000
Total	**200**	**1,500**	**1,100**	**3,800**	**8,100**	**46,000**	**19,600**	**80,300**

Source: Labour Force Survey Report 2010

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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 2008, Agriculture contributed 18.5 % to the total economy i.e. as measured by the Gross Domestic Product. It was also the single largest sector that provides livelihood to 66.6% of the population as per Bhutan Living Standard Survey (BLSS) 2007.

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.

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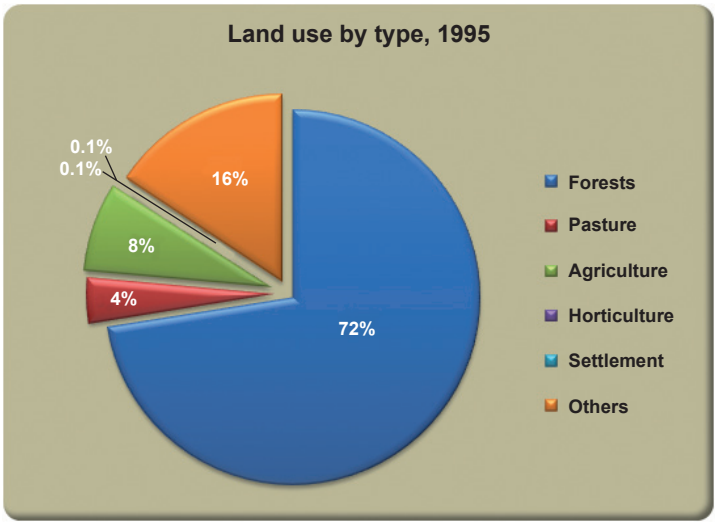

Back in 1988/89, the National Agronomic Survey was carried out in collaboration with the then Department of Agriculture. Though the Ministry of Agriculture and Forests conducted nation wide sample surveys called RNR Census in 2009, so the major source of data available are from the RNR Census 2009.

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

Infrastructure	Numbers
RNR (Common services)	
RNR Extension Centers	138
RNR Research Centers	4
RNR Research sub-stations	6
Soil and Plant Analytical Laboratory	1
Agriculture	
Agriculture Extension Centers	40
Agriculture Seed Production Farms	11
Farm Mechanization Centers	3
Farm Mechanization Training Centers	1
National Mashroom Center	1
National Post Harvest Center	1

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TABLE 5.1 (contd..): NUMBER OF AGRICULTURE RESEARCH AND EXTENSION FACILITIES, BHUTAN, JUNE 2010

Infrastructure	Numbers
National Plant Protection Center	1
National Soil Service Center	
Livestock	
Regional Hospitals	20
Livestock Extension Centers	42
Regional Livestock Development Centers	4
Regional Veterinary Laboratories	3
Livestock Farms	11
Fodder Seed Production Center	1
Vaccine Production Centre	1
National Artificial Insemination Center	1
National Cold Water Fishery Center	1
National Warm Water Fish Culture Center	1
National Center for Animal Health	1
Forestry	
Territorial Division HQs	12
National Parks	5
Range Offices	55
Beat Offices	80
Nature Conservation Study Center	1
Wildlife Sanctuaries	3
Forest Management Units	17
Nature Study Center	1
Percent of Forest cover	72
Percent of Protected Area	51.25

Source: Policy & Planning Division, MoAF, Thimphu.

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TABLE 5.2 LAND-USE AND VEGETATION TYPES AS PERCENTAGE OF TOTAL AREA, BHUTAN, 1995

Land-use and vegetation types	Percent
Forests	**72.5**
Conifer forest	26.5
Fir	8.6
Mixed conifer	12.1
Blue pine	3.2
Chir pine	2.5
Broadleaf forest	**37.7**
Broadleaf + conifer	3.4
Broadleaf forest	34.3
Forest plantation	**0.2**
Conifer plantation	0.1
Broadleaf plantation	0.1
Scrub forest	**8.1**
Pasture	**3.9**
Natural pastures	3.9
Improved pastures	0.0
Agriculture	**7.7**
Wetland cultivation	1.0
Irrigated wetland	1.0
Rainfed wetland	0.0
Dryland cultivation	2.4
Terraced dryland	0.3

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TABLE 5.2 (contd..): LAND-USE AND VEGETATION TYPES AS PERCENTAGE OF TOTAL AREA, BHUTAN, 1995

Land-use and vegetation types	Percent
Unterraced dryland	2.2
Tseri (Shifting cultivation)	2.2
Mixed cultivated land	2.1
Horticulture	**0.1**
Orchards	0.1
Apple orchards	0.0
Citrus orchard	0.0
Horticulture plantations	0.1
Cardamom plantation	0.1
Arecanut plantation	0.0
Ginger plantation	0.0
Settlement	**0.1**
Others	**15.7**
Snow/glaciers	7.5
Rock outcrops	5.0
Water spreads	0.8
Marshy areas	0.1
Landslips/erosion	2.4
Total	**100**

Source: Policy & Planning Division, MoAF, Thimphu.
Note: Horticulture areas might be underestimated as they were too small to be mapped at a scale 1:50,000 and because they were under forest cover.

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TABLE 5.3 PERCENTAGE OF AREA BY DZONGKHAG, BY TYPE OF LAND COVER, BHUTAN, 1995

(percent)

Dzongkhag	Forest	Pasture	Agriculture	Horticulture	Settlement	Others	Total area
Bumthang	4.5	0.6	0.1	0.0	0.0	1.6	6.8
Chukha	3.9	0.1	0.4	0.0	0.0	0.1	4.5
Dagana	2.8	0.0	0.4	0.0	0.0	0.1	3.5
Gasa	3.6	0.6	0.0	0.0	0.0	6.8	11.0
Haa	3.4	0.3	0.1	0.0	0.0	0.5	4.3
Lhuentse	5.4	0.2	0.3	0.0	0.0	1.2	7.2
Mongar	4.3	0.0	0.5	0.0	0.0	0.0	4.9
Punakha	2.2	0.0	0.1	0.0	0.0	0.1	2.4
Paro	2.1	0.2	0.2	0.0	0.0	0.7	3.2
Pemagatshel	0.7	0.0	0.6	0.0	0.0	0.0	1.3
Samdrup Jongkhar	4.5	0.0	1.1	0.0	0.0	0.2	5.8
Samtse	3.2	0.0	0.6	0.0	0.0	0.1	3.9
Sarpang	4.8	0.0	0.7	0.0	0.0	0.2	5.7
Thimphu	2.7	0.8	0.1	0.0	0.0	1.2	4.8
Trashigang	4.5	0.3	0.8	0.0	0.0	0.1	5.7
Trashiyangtse	2.7	0.1	0.3	0.0	0.0	0.4	3.6
Trongsa	3.9	0.2	0.3	0.0	0.0	0.1	4.5
Tsirang	1.2	0.0	0.3	0.0	0.0	0.0	1.6
Wangdue	7.4	0.4	0.2	0.0	0.0	2.1	10.0
Zhemgang	4.6	0.0	0.6	0.0	0.0	0.1	5.3
Bhutan	**72.5**	**3.9**	**7.7**	**0.0**	**0.0**	**15.7**	**100**

Source: Policy & Planning Division, MoAF, Thimphu.

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TABLE 5.4 ALTITUDE ZONES OF DZONGKHAGS AS PERCENTAGE OF THEIR TOTAL AREA, BHUTAN, 1995

(Percent)

Dzongkhag	Altitude at Dzongkhag centre(metres)	Altitude zones (metres)						Total
		0-600	600-1200	1200-1800	1800-2400	2400-3000	3000-3600	0-3600
Bumthang	2,690	0.0	0.0	0.0	0.4	10.6	26.2	37
Chukha	2,220	7.7	17.2	20.8	20.4	18.7	11.8	97
Dagana	1,520	4.0	15.7	22.0	24.3	20.7	8.7	95
Gasa	3,695	0.0	0.0	0.1	0.9	2.5	4.8	8
Haa	2,712	0.0	0.8	3.6	7.3	16.1	24.0	52
Lhuentse	1,460	0.0	0.9	6.8	14.3	19.6	17.0	59
Mongar	1,620	3.1	17.9	27.1	23.3	16.0	11.2	99
Paro	2,280	0.0	0.0	0.0	6.3	25.3	24.8	56
Pemagatshel	1,200	7.9	39.0	39.7	13.2	0.2	0.0	100
Punakha	1,220	0.0	0.0	17.8	26.5	21.8	15.5	82
Samdrup Jongkhar	160	25.6	27.6	23.1	14.4	6.5	2.4	100
Samtse	390	17.0	25.5	24.3	18.8	11.0	2.5	99
Sarpang	210	31.1	29.4	21.1	14.6	2.9	0.7	100
Thimphu	2,320	0.0	0.0	1.0	5.0	16.3	18.8	41
Trashigang	1,040	0.2	4.9	15.8	22.2	20.6	18.0	82
Trashiyangtse	1,830	0.0	2.3	6.7	16.5	23.4	18.8	68
Trongsa	2,180	0.0	2.9	10.4	19.5	28.8	21.2	83
Tsirang	1,620	7.3	31.4	30.1	19.8	7.6	3.2	99
Wangdue	1,260	0.1	3.0	9.0	13.5	17.8	19.2	63
Zhemgang	1,916	9.5	27.1	28.0	17.9	9.7	5.1	97

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TABLE 5.4 (contd.): ALTITUDE ZONES OF DZONGKHAGS AS PERCENTAGE OF THEIR TOTAL AREA, BHUTAN, 1995

(Percent)

Dzongkhag	Altitude zones (meters)							Total area (%)
	0-3600	3600-4200	4200-4800	4800-5400	5400-6000	6000-6600	> 6600	
Bumthang	37.2	25.7	18.4	16.3	2.2	0.2	0.0	100
Chukha	96.6	3.1	0.1	0.0	0.1	0.0	0.0	100
Dagana	95.4	3.7	1.0	0.0	0.0	0.0	0.0	100
Gasa	8.3	11.2	21.9	28.6	21.1	7.4	1.4	100
Haa	51.8	27.9	17.6	2.6	0.1	0.0	0.0	100
Lhuentse	58.6	15.7	16.7	8.4	0.5	0.0	0.0	100
Mongar	98.6	1.5	0.0	0.0	0.0	0.0	0.0	100
Paro	56.4	18.6	21.3	3.5	0.1	0.0	0.0	100
Pemagatshel	100.0	0.0	0.0	0.0	0.0	0.0	0.0	100
Punakha	81.6	12.6	5.7	0.1	0.0	0.0	0.0	100
Samdrup Jongkhar	99.6	0.3	0.0	0.0	0.0	0.0	0.0	100
Samtse	99.1	0.7	0.0	0.0	0.1	0.0	0.0	100
Sarpang	99.8	0.2	0.0	0.0	0.0	0.0	0.0	100
Thimphu	41.1	18.6	27.3	10.9	1.4	0.5	0.1	100
Trashigang	81.7	16.0	2.3	0.0	0.0	0.0	0.0	100
Trashiyangtse	67.7	15.5	13.4	3.2	0.2	0.0	0.0	100
Trongsa	82.8	12.4	4.7	0.1	0.0	0.0	0.0	100
Tsirang	99.4	0.5	0.0	0.0	0.0	0.0	0.0	100
Wangdue	62.6	12.7	12.5	11.1	1.1	0.0	0.0	100
Zhemgang	97.3	2.1	0.5	0.0	0.0	0.0	0.0	100

Source: Policy & Planning Division, MoAF, Thimphu.

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TABLE 5.5 PERCENTAGE OF TOTAL AREA OF BHUTAN BY DZONGKHAG BY ALTITUDE ZONES, 1995

(Percent)

Dzongkhag	Area	Altitude zones (metres)						Total
		0-600	600-1200	1200-1800	1800-2400	2400-3000	3000-3600	0-3600
Bumthang	6.8	0.0	0.0	0.0	0.0	0.7	1.8	2.5
Chukha	4.5	0.3	0.8	0.9	0.9	0.8	0.5	4.3
Dagana	3.5	0.1	0.5	0.8	0.8	0.7	0.3	3.3
Gasa	11.0	0.0	0.0	0.0	0.1	0.3	0.5	0.9
Haa	4.3	0.0	0.0	0.2	0.3	0.7	1.0	2.2
Lhuentse	7.2	0.0	0.1	0.5	1.0	1.4	1.2	4.2
Mongar	4.9	0.2	0.9	1.3	1.1	0.8	0.5	4.8
Punakha	2.4	0.0	0.0	0.4	0.6	0.5	0.4	2.0
Paro	3.2	0.0	0.0	0.0	0.2	0.8	0.8	1.8
Pemagatshel	1.3	0.1	0.5	0.5	0.2	0.0	0.0	1.3
Samdrup Jongkhar	5.8	1.5	1.6	1.3	0.8	0.4	0.1	5.7
Samtse	3.9	0.7	1.0	1.0	0.7	0.4	0.1	3.9
Sarpang	5.7	1.8	1.7	1.2	0.8	0.2	0.0	5.7
Thimphu	4.8	0.0	0.0	0.0	0.2	0.8	0.9	2.0
Trashigang	5.7	0.0	0.3	0.9	1.3	1.2	1.0	4.7
Trashiyangtse	3.6	0.0	0.1	0.2	0.6	0.8	0.7	2.4
Trongsa	4.5	0.0	0.1	0.5	0.9	1.3	1.0	3.7
Tsirang	1.6	0.1	0.5	0.5	0.3	0.1	0.1	1.6
Wangdue	10.1	0.0	0.3	0.9	1.4	1.8	1.9	6.3
Zhemgang	5.3	0.5	1.4	1.5	0.9	0.5	0.3	5.2
Bhutan	**100**	**5.3**	**9.8**	**12.6**	**13.4**	**14.3**	**13.2**	**68.6**

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TABLE 5.5 (contd.): PERCENTAGE OF TOTAL AREA OF BHUTAN BY DZONGKHAG BY ALTITUDE ZONES, 1995

(Percent)

Dzongkhag	Altitude zones (meters)								
	Area	0-3600	3600-4200	4200-4800	4800-5400	5400-6000	6000-6600	> 6600	Total area(%)
Bumthang	6.8	0.0	0.0	0.0	0.0	0.7	1.8	2.5	6.8
Chukha	4.5	0.3	0.8	0.9	0.9	0.8	0.5	4.3	4.5
Dagana	3.5	0.1	0.5	0.8	0.8	0.7	0.3	3.3	3.5
Gasa	11.0	0.0	0.0	0.0	0.1	0.3	0.5	0.9	11.0
Haa	4.3	0.0	0.0	0.2	0.3	0.7	1.0	2.2	4.3
Lhuentse	7.2	0.0	0.1	0.5	1.0	1.4	1.2	4.2	7.2
Mongar	4.9	0.2	0.9	1.3	1.1	0.8	0.5	4.8	4.9
Punakha	2.4	0.0	0.0	0.4	0.6	0.5	0.4	2.0	2.4
Paro	3.2	0.0	0.0	0.0	0.2	0.8	0.8	1.8	3.2
Pemagatshel	1.3	0.1	0.5	0.5	0.2	0.0	0.0	1.3	1.3
Samdrup Jongkhar	5.8	1.5	1.6	1.3	0.8	0.4	0.1	5.7	5.8
Samtse	3.9	0.7	1.0	1.0	0.7	0.4	0.1	3.9	3.9
Sarpang	5.7	1.8	1.7	1.2	0.8	0.2	0.0	5.7	5.7
Thimphu	4.8	0.0	0.0	0.0	0.2	0.8	0.9	2.0	4.8
Trashigang	5.7	0.0	0.3	0.9	1.3	1.2	1.0	4.7	5.7
Trashiyangtse	3.6	0.0	0.1	0.2	0.6	0.8	0.7	2.4	3.6
Trongsa	4.5	0.0	0.1	0.5	0.9	1.3	1.0	3.7	4.5
Tsirang	1.6	0.1	0.5	0.5	0.3	0.1	0.1	1.6	1.6
Wangdue	10.1	0.0	0.3	0.9	1.4	1.8	1.9	6.3	10.1
Zhemgang	5.3	0.5	1.4	1.5	0.9	0.5	0.3	5.2	5.3
Bhutan	**100**	**5.3**	**9.8**	**12.6**	**13.4**	**14.3**	**13.2**	**68.6**	**100**

Source: Policy & Planning Division, MoAF, Thimphu.

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TABLE 5.6 AVERAGE TEMPERATURE (DEGREE CENTIGRADE) RECORDS FROM 1996 TO 2009

(Degree Celsius)

Dzongkhag	Temperature	Month											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Bumthang	Max	11.1	12.4	14.9	17.3	19.5	21.7	22.5	22.5	21.3	18.3	15.3	12.7
	Min	-3.5	-1.2	1.9	5.8	9.4	12.7	14.3	14.3	12.2	6.8	1.4	-3.0
	Ave	3.8	5.6	8.4	11.5	14.5	17.2	18.4	18.4	16.7	12.5	8.3	4.8
Chukha	Max	12.8	14.0	17.0	19.1	21.4	23.1	23.3	22.8	22.0	20.4	17.9	14.4
	Min	5.0	6.5	9.0	10.7	12.7	14.4	14.4	13.6	12.8	11.4	8.9	6.2
	Ave	8.9	10.2	13.0	14.9	17.0	18.8	18.8	18.2	17.4	15.9	13.4	10.3
Dagana	Max	10.3	12.3	16.4	19.8	22.1	23.1	23.1	21.3	22.3	20.1	15.0	13.5
	Min	5.6	6.8	10.5	13.6	15.6	17.4	18.1	16.5	17.0	14.9	10.1	8.1
	Ave	8.0	9.5	13.5	16.7	18.9	20.3	20.6	18.9	19.6	17.5	12.6	10.8
Gasa*	Max	9.4	10.0	11.5	13.8	18.3	20.2	22.0	21.6	20.2	18.1	11.8	8.6
	Min	-0.0	0.6	3.8	7.3	9.6	12.1	13.2	12.1	12.0	9.6	3.6	0.1
	Ave	4.7	5.3	7.7	10.6	13.9	16.2	17.6	16.8	16.1	13.9	7.7	4.4
Haa Namjayling	Max	10.7	11.0	13.3	15.8	18.2	19.8	20.7	20.6	19.1	16.9	14.5	12.1
	Min	-4.7	-2.6	1.1	5.1	8.9	12.7	14.3	13.9	11.9	5.8	0.1	-3.5
	Ave	3.0	4.2	7.2	10.4	13.6	16.2	17.5	17.3	15.5	11.4	7.3	4.3
Lhuentse	Max	17.3	19.8	23.5	25.9	27.1	28.3	28.7	28.9	27.9	25.4	22.4	18.2
	Min	7.3	9.0	12.2	15.0	17.1	19.8	20.0	20.0	19.0	15.4	11.6	8.6
	Ave	12.3	14.4	17.8	20.4	22.1	24.0	24.4	24.4	23.5	20.4	17.0	13.4
Mongar	Max	16.3	18.7	21.8	23.9	25.8	26.6	26.9	27.7	26.8	24.6	20.8	17.8
	Min	5.8	7.3	10.7	13.3	15.5	17.7	18.3	18.0	16.9	13.6	9.8	7.0
	Ave	11.1	13.0	16.2	18.6	20.6	22.2	22.6	22.9	21.8	19.1	15.3	12.4
Punakha	Max	17.8	19.5	22.7	25.5	27.8	29.1	29.2	28.9	27.8	25.9	22.4	19.3
	Min	7.6	8.2	8.8	14.9	7.6	7.6	19.9	19.6	18.6	15.1	11.7	9.3
	Ave	12.7	13.9	15.7	20.2	17.7	18.4	24.6	24.2	23.2	20.5	17.1	14.3

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TABLE 5.6 (contd.): AVERAGE TEMPERATURE (DEGREE CENTIGRADE) RECORDS FROM 1996 TO 2009

(Degree Celsius)

Dzongkhag	Temperature	Month											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Paro	Max	13.4	15.0	18.0	20.7	22.8	24.7	25.6	25.2	23.6	20.8	16.7	14.4
	Min	0.6	2.5	5.1	8.7	12.0	15.1	17.1	16.7	14.9	10.2	5.3	2.0
	Ave	7.0	8.7	11.6	14.7	17.4	19.9	21.3	20.9	19.2	15.5	11.0	8.2
Pemagatshel	Max	16.1	17.4	20.3	22.6	24.5	25.3	26.1	25.8	25.5	24.0	21.0	18.3
	Min	5.3	6.9	9.8	12.7	15.1	16.9	17.7	17.3	16.2	12.8	9.3	6.6
	Ave	10.7	12.2	15.0	17.6	19.8	21.1	21.9	21.6	20.8	18.4	15.1	12.4
Samdrup Jongkhar	Max	19.1	22.1	24.9	25.7	27.2	28.0	28.4	29.0	28.3	27.7	23.5	21.0
	Min	9.1	11.5	14.6	16.6	18.9	20.6	21.2	21.3	20.2	16.4	13.2	10.5
	Ave	14.1	16.8	19.7	21.1	23.0	24.3	24.8	25.1	24.3	22.0	18.3	15.8
Samtse	Max	20.5	23.0	26.6	28.0	28.7	28.5	27.8	28.3	28.2	27.3	25.0	22.2
	Min	13.8	15.9	18.2	20.7	22.5	24.1	24.2	24.1	23.4	21.5	17.9	15.4
	Ave	17.2	19.5	22.4	24.4	25.6	26.3	26.0	26.2	25.8	24.4	21.5	18.8
Sarpang	Max	22.4	24.0	26.3	27.9	29.2	29.3	29.7	30.4	30.1	28.6	26.4	23.6
	Min	13.2	15.6	18.2	20.7	22.6	23.7	24.0	24.4	23.8	21.1	17.8	14.6
	Ave	17.8	19.8	22.3	24.3	25.9	26.5	26.9	27.4	26.9	24.9	22.1	19.1
Thimphu	Max	14.5	15.7	18.2	20.8	22.9	24.5	25.1	25.1	24.0	21.5	18.5	16.2
	Min	-2.9	-0.5	3.4	7.0	10.9	14.5	15.9	15.5	13.7	8.2	2.3	-1.7
	Ave	5.8	7.6	10.8	13.9	16.9	19.5	20.5	20.3	18.9	14.8	10.4	7.2
Trashigang	Max	13.7	15.5	19.0	21.2	23.0	23.9	24.3	24.7	24.1	22.0	18.6	15.7
	Min	2.8	4.5	7.4	10.5	13.3	16.0	16.8	16.5	15.4	11.5	7.5	4.3
	Ave	8.3	10.0	13.2	15.8	18.1	19.9	20.5	20.6	19.8	16.7	13.1	10.0
Tashiyangtse	Max	12.5	14.8	17.1	19.9	22.2	23.2	23.8	23.6	22.7	20.2	16.8	13.6
	Min	3.7	5.8	8.0	10.9	14.0	16.9	18.3	17.8	16.4	12.2	7.6	4.3
	Ave	8.1	10.3	12.6	15.4	18.1	20.1	21.0	20.7	19.5	16.2	12.2	9.0

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TABLE 5.6 (contd.): AVERAGE TEMPERATURE (DEGREE CENTIGRADE) RECORDS FROM 1996 TO 2009

(Degree Celsius)

Dzongkhag	Temperature	Month											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Trongsa	Max	15.1	16.6	19.6	21.2	22.1	22.4	23.4	23.9	21.3	19.1	16.5	15.1
	Min	4.6	5.1	8.7	11.7	12.7	15.4	16.4	16.3	14.3	11.0	7.7	5.7
	Ave	9.8	10.9	14.1	16.4	17.4	18.9	19.9	20.1	17.8	15.0	12.1	10.4
Tsirang	Max	14.5	15.9	18.9	21.1	22.6	23.4	23.7	24.1	23.6	22.1	19.4	16.4
	Min	4.6	6.3	9.4	13.1	15.8	18.1	18.7	18.5	17.3	13.5	9.3	5.9
	Ave	9.6	11.1	14.2	17.1	19.2	20.7	21.2	21.3	20.5	17.8	14.3	11.2
Wangdue	Max	18.0	19.5	22.9	25.8	27.8	28.6	28.2	28.2	27.5	26.1	22.8	19.9
	Min	5.8	8.0	10.7	14.6	17.5	20.2	20.9	20.6	19.5	15.1	10.3	6.3
	Ave	11.9	13.7	16.8	20.2	22.7	24.4	24.6	24.4	23.5	20.6	16.6	13.1
Zhemgang	Max	13.9	15.5	18.0	20.5	21.8	23.2	24.3	23.7	24.3	21.2	17.1	13.5
	Min	6.2	7.1	8.4	12.4	14.5	16.4	18.0	17.7	16.5	12.8	8.8	6.1
	Ave	10.1	11.3	13.2	16.5	18.2	19.8	21.2	20.7	20.4	17.0	13.0	9.8

Source : Metrology Section, Department of Energy, MoEA,Thimphu.
*Note: * Gasa-Data collected from 2003 to 2009*
*** Dagana as of 1996 to 2008*

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TABLE 5.7 TOTAL MONTHLY RAINFALL AT EXISTING STATIONS IN EACH DZONGKHAG, BHUTAN, 2009

(Millimeter)

Dzongkhag	Station	Month												
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual total rain fall
Bumthang	Chamkhar (A)	0.0	21.0	42.5	55.4	173.8	39.8	119.8	151.9	42.6	63.9	0.6	0.4	711.7
	Gyetsa (C)	0.0	16.8	20.0	42.0	196.4	38.8	253.5	169.1	66.8	94.2	0.0	0.0	897.6
Chukha	Chhukha	2.4	51.7	84.1	109.8	248.1	131.7	228.3	396	96.3	167	0.4	4.7	1520.5
	Gedu	10.0	26.0	49.2	514.9	488.8	308.6	549.9	-	80.4	-	4.0	13.0	2044.8
	Phuentsholing	0.0	70.0	81.0	221.7	275.0	544.4	708.3	828.9	225.7	201.2	0.0	19.6	3175.8
	Tala	0	0	71	267	231.5	487.6	746.8	972	277.6	283.2	0	13.4	3350.1
Dagana**	Dagana Dzong	1.0	11.3	91.0	16.0	370.2	-	345.5	355.2	74.2	260.4	0.0	0.0	1524.8
	Drujeygang	0.0	5.0	28.6	-	225.2	147.4	466.6	527.6	-	247.6	0.0	5.0	1653.0
	Sunkosh	0.0	8.4	25.0	46.7	170.8	79.6	392.0	404.0	132.2	221.5	1.0	0.3	1481.5
Gasa	Gasa Katey	12.1	16	39	141	88	192.2	358.5	390.8	228.2	41.4	7.5	-	1514.7
Haa	Haa Namjeyling	0.0	0.0	31.3	42.0	195.5	65.1	85.0	159.6	67.4	164.7	3.1	0.0	813.7
Lhuentse	Khomachu	1.2	22.4	29.0	69.4	237.8	16.6	159.8	133.9	38.1	42.6	0.8	5.8	757.4
	Autsho	3.6	50.8	46.0	34.4	253.6	41.8	171.8	159.8	37.6	75.6	1.2	6.2	882.4
	Dungkhar	22.6	15.2	48.6	388.8	385.9	881.8	1286.2	1474.7	549.6	305.6	4.2	4.2	5367.4
	Tangmachu	0.0	17.0	25.8	72.0	195.0	18.6	208.8	131.7	67.2	59.0	4.9	0.0	800.0
Mongar	Mongar (A)	0.0	0.0	18.0	39.4	199.8	78.9	160.6	228.0	39.4	95.6	0.0	3.6	863.3
	Lingmithang	0.0	26.9	23.5	64.0	261.5	83.8	83.8	211.8	48.6	6.0	0.0	0.0	809.9
	Yadi	0.0	63.1	36.8	80.4	224.5	111.2	278.2	216.8	100.5	-	0.0	11.0	1122.5
Paro	Paro (A)	0.0	23.2	17.2	22.4	146.4	29.1	48.0	131.6	52.0	138.2	1.0	0.0	609.1
	Betikha	0	78	480	404	526.2	531.7	94.1	102.7	35	75.7	0	0	2327.4
	Drukgyal Dzong	0.0	0.0	13.0	24.0	179.0	73.0	135.0	265.0	42.0	140.0	0.0	0.0	871.0
Pemagatshel	Pemagatshel	0.5	18.0	49.4	45.2	264.2	298.0	439.3	321.6	109.9	164.6	1.4	2.0	1714.1
	Dungmain	0.0	0.0	0.0	0.0	201.0	445.0	631.0	396.0	20.0	124.0	0.0	0.0	1817.0
	Yurung	2.0	9.2	32.9	49.4	-	282.8	530.9	-	123.4	200.9	0.0	0.0	1231.5

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TABLE 5.7 (contd.): TOTAL MONTHLY RAINFALL AT EXISTING STATIONS IN EACH DZONGKHAG, BHUTAN, 2009

(Millimeter)

Dzongkhag	Station	Month												
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual total rain fall
Punakha	Punakha Dzong	0.0	6.7	6.9	35.9	78.9	73.2	160.2	175.3	21.0	91.8	0.9	6.5	657.3
	Shelgana	0	4	6	35.3	160	61	177	109.6	3.5	74	0	-	630.4
Samdrup Jongkhar	Airong	5.4	12.6	27.0	132.8	479.0	424.6	941.4	423.2	97.0	141.0	2.2	-	2686.2
	Decheling	7.5	0	62	71.3	207	619	896	-	259	181	0	8.4	2311.2
	Deothang	37.1	5.8	26.4	216.9	286.6	640.4	917.0	730.4	225.9	171.0	4.0	7.2	3268.7
Samtse	Tendu	0.2	3.5	20.3	137.2	333.5	209.4	795.3	754.3	235.4	270.6	0.0	0.0	2759.7
	NIE	5.2	0.0	50.2	242.2	320.6	689.0	1049.4	915.2	568.1	317.0	1.2	37.4	4195.5
	Dorokha	0.0	0.0	46.0	95.0	324.6	284.0	303.0	-	260.5	5.3	0.0	0.0	1318.4
	Sipsu	22.6	15.2	48.6	388.8	385.9	881.8	1286.2	1474.7	549.6	305.6	4.2	4.2	5367.4
Thimphu	Gidakom	0.0	4.0	20.4	15.7	128.2	40.1	54.9	158.6	39.5	113.2	0.0	3.0	577.6
	Simtokha	1.0	0.0	0.0	27.0	146.6	18.8	80.9	127.3	46.1	108.5	1.2	4.2	561.6
	MTI Complex	0.0	14.8	9.5	21.4	151.1	38.3	67.8	186.1	40.4	109.6	0.0	0.0	639.0
Sarpang	Surey	2.2	35.2	43.8	203.4	346.4	701.8	1046.5	561.0	290.2	238.4	2.2	3.0	3474.1
	Bhur	78.2	0.0	53.6	202.8	246.0	1538.4	1265.2	1027.2	562.0	330.8	0.0	21.8	5326.0
	Sarpang	0.0	0.0	22.0	70.0	331.0	1457.0	422.4	631.2	312.0	77.0	-	15.0	3337.6
Trashigang	Chazam	0.0	52.4	29.8	80.4	103.0	47.8	132.6	137.0	68.5	67.6	0.0	0.0	719.1
	Kanglung	0.0	54.2	44.2	106.8	151.4	79.4	223.8	201.0	101.4	95.8	0.8	1.6	1060.4
	Khaling	0.0	40.0	20.0	58.0	110.0	20.0	133.0	140.2	0.0	69.0	5.0	0.0	595.2
	Radhi	0.0	0.0	0.0	31.0	25.0	23.0	170.0	320.7	229.7	67.3	0.0	1.0	867.7
	Thrimshing	0	21.6	60.5	59.5	173.4	182	-	265.8	112.4	95	1	0.8	972.0
	Wamrong	18	13.6	112	116	416.2	224.6	614	633.2	128	62	26	28	2391.6

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TABLE 5.7 (contd.): TOTAL MONTHLY RAINFALL AT EXISTING STATIONS IN EACH DZONGKHAG, BHUTAN, 2009

(Millimeters)

Dzongkhag	Station	Month												
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual total rain fall
Tashiyangtse	TashiYangtse	1.4	62.5	31.2	30.1	38.1	119.6	207.4	156.6	128.3	65.8	0.8	1.4	843.2
	Yallang	0	111.2	103.6	102.4	42.2	36.2	129	140.6	-	-	-	-	665.2
Trongsa	Bjizam	8.2	63.6	41.9	77.1	252.8	33.6	185.2	210.4	-	86.2	11.6	5.6	976.2
	Kuengarabten	-	22.7	5.0	76.0	-	26.4	35.6	63.8	27.5	13.0	1.2	8.0	279.2
	Langthel	0.0	18.8	0.0	3.0	-	13.7	105.8	226.8	45.2	60.0	1.0	2.0	476.3
	Chendepji	10.5	39	21	40.2	180.1	93.4	250.9	307	155.4	107	12	-	1216.5
	Trongsa	6.4	0.0	24.1	117.5	296.1	86.6	283.2	317.6	147.5	136.1	4.4	5.8	1425.3
Tsirang	Tsirang	0.2	9.9	34.8	59.9	217.6	137.5	510.6	466.7	185.0	303.6	2.0	2.0	1929.8
	Sunkosh Dobani	0	8.4	25	46.7	170.8	79.6	392	404	132.2	221.5	1	0.3	1481.5
Wangdue	Wangdue (RNRRC)	1.9	7.4	2.9	8.2	134.0	37.9	93.9	140.3	44.3	122.8	7.4	10.3	611.3
	Nobding	0	-	-	124.5	139	173	200	234.4	164	10.2	5	-	1050.1
	Phobjikha	0	0	-	29	-	32.6	121.8	291.2	118.4	158.6	-	0	751.6
	Samtengang	0	-	15	57.4	183.4	33.7	154.2	91	18	101	4	-	657.7
Zhemgang	Yebilaptsa	0	32.6	102	74.4	239.8	162.6	448	458.2	70	108	2.6	6.2	1704.4
	Zhemgang	1.3	27.5	77.9	71.4	220.6	232.9	301.6	307.7	57.4	57.2	1.8	3.8	1361.1

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

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TABLE 5.8 IRRIGATION CHANNEL CONSTRUCTED IN DZONGKHAGS FROM 2005 TO 2010

Dzongkhag	New Construction Year (Km)				Renovation Year (Km)				as of june 2010 Total (Km)
	2004/05	2005/06	2006/07	2007-2009	2004/05	2005/06	2006/07	2007-2009	
Bumthang	0.00	2.20	0.00	n.a	4.00	5.93	0.00	n.a	16.13
Chukha	0.00	4.50	0.00	n.a	3.94	0.00	0.00	n.a	116.35
Dagana	4.00	0.00	0.00	n.a	0.00	0.00	0.00	n.a	114.77
Gasa	0.00	0.36	0.00	n.a	16.00	0.40	0.00	n.a	28.57
Haa	0.00	0.00	0.00	n.a	2.60	1.06	0.00	n.a	25.45
Lhuentse	4.30	1.00	0.00	n.a	24.00	0.00	0.00	n.a	255.80
Mongar	5.10	5.50	0.00	n.a	12.32	0.00	0.00	n.a	115.80
Paro	4.50	37.79	0.00	n.a	19.88	16.30	3.00	n.a	83.13
Pemagatshel	1.50	0.00	0.00	n.a	7.00	0.00	0.00	n.a	8.05
Punakha	0.00	3.00	3.00	n.a	34.59	11.00	0.00	n.a	374.38
Samdrup Jongkhar	0.00	0.00	7.00	n.a	4.71	0.00	10.22	n.a	52.85
Samtse	10.00	5.72		n.a	10.00	0.00	0.00	n.a	52.35
Sarpang	9.00	3.00	0.00	n.a	19.50	8.00	0.00	n.a	315.50
Thimphu	3.00	0.00	0.00	n.a	7.00	0.00	0.00	n.a	99.50
Trashigang	14.50	0.00	0.00	n.a	2.60	0.00	0.00	n.a	86.30
Trashiyangtse	1.00	0.60	0.00	n.a	13.50	3.40	13.90	n.a	107.57
Trongsa	12.50	29.50	0.00	n.a	12.00	4.00	12.10	n.a	222.90
Tsirang	0.00	7.40	17.00	n.a	12.88	14.20	35.00	n.a	239.73
Wangdue	0.00	0.00	0.00	n.a	15.05	0.00	2.50	n.a	459.27
Zhemgang	3.00	0.00	0.70	n.a	12.80	0.00	0.00	n.a	81.66
Bhutan	**72.40**	**100.57**	**27.70**		**234.37**	**64.25**	**76.70**		**2856.06**

Source: Policy & Planning Division, MoAF, Thimphu.
Note: Since the data for 2007-2009 are not available total may not tally

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TABLE 5.9 POWER TILLER TRACKS & FARM ROADS DEVELOPMENT AND ACHIEVEMENTS, 2010

Dzongkhag	Completed (Km)					Farm Roads (Km)	Power Tiller Tracks (Km)
	2003-04	2004-05	2005-06	2006-07	2007-09	2010	2010
Bumthang	0.00	0.00	0.00	0.00	n.a	49.8	N.A
Chukha	0.00	0.00	0.00	3.00	n.a	47.31	3.00
Dagana	0.00	0.00	0.00	6.30	n.a	60.45	16.00
Gasa	n.a	n.a	n.a	n.a	n.a	8.59	N.A
Haa	0.00	0.00	1.50	3.00	n.a	44.80	4.50
Lhuentse	0.00	2.00	8.00	2.00	n.a	180.00	15.00
Mongar	0.00	0.00	4.87	14.10	n.a	298.29	82.37
Paro	0.00	0.50	3.30	0.00	n.a	186.34	9.80
Pemagatshel	0.00	0.00	0.00	0.00	n.a	138.22	N.A
Punakha	0.00	0.00	5.00	14.40	n.a	188.90	19.59
Samdrup Jongkhar	0.00	0.00	0.00	0.00	n.a	92.00	N.A
Samtse	n.a	n.a	n.a	n.a	n.a	93.73	N.A
Sarpang	n.a	n.a	n.a	n.a	n.a	97.00	N.A
Thimphu	n.a	n.a	n.a	n.a	n.a	30.07	N.A
Trashigang	0.00	0.00	4.00	0.00	n.a	243.00	24.30
Trashiyangtse	0.00	0.00	0.00	2.50	n.a	119.50	5.50
Trongsa	0.00	7.50	21.75	0.00	n.a	108.50	22.20
Tsirang	0.00	0.00	0.00	19.20	n.a	90.80	60.20
Wangdue	0.00	0.00	0.00	1.13	n.a	107.70	16.00
Zhemgang	0.00	0.00	0.00	6.00	n.a	88.80	6.00
Total	**0.00**	**10.00**	**48.42**	**71.63**		**2273.80**	**284.46**

Source: Policy & Planning Division, MoAF, Thimphu.
Note: Since the data for 2007-2009 are not available total may not tally

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TABLE 5.10 WET LAND CONVERTED TO DRY LAND FOR THE YEAR, 2009

Dzongkhag	Area (acres) proposed	Area (acres) approved	Area (acres) not approved
Trashigang	7.85	2.95	4.90
Gasa	1.86	0.25	1.61
Punakha	2.94	0.14	2.80
Paro	2.76	1.33	1.48
Wangdue	4.77	1.84	2.93
Chukha	1.50	1.50	0.00
Pemagatshel	4.80	4.80	0.00
Trashiyangtse	0.24	0.24	0.00
Total	**26.72**	**13.05**	**13.72**

Source: Policy & Planning Division, MoAF, Thimphu.

TABLE 5.11 QUANTITY OF PESTICIDES SUPPLIED TO FARMERS, BHUTAN 2004/05 TO 2008/09

(Kilogram or Litre)

Period	Insecticides	Fungicides	Herbicides	Acaricides	Rodenticides	Others (Non-toxic)	Total
2004/05	2,600.0	2,460.0	850.0	50.0	10.0	10,505.0	16,475.0
2005/06	3,036.0	2,410.0	1,020.0	20.0	38.0	10,732.0	17,256.0
2006/07	4,126.0	4,101.0	1,853.0	10.0	48.0	10,053.0	20,191.0
2007/08	4,212.0	2,247.0	1,085.0	8.0	35.0	24,120.0	31,707.0
2008/09	3,867.0	n.a	2,689.8	8.0	51.4	8,009.0	14,625.2

Source: Policy & Planning Division, MoAF, Thimphu.

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TABLE 5.12 AGRICULTURE LAND HOLDINGS & LAND TYPES BY DZONGKHAG, BHUTAN 2008

(hectares)

Dzongkhag	Wet land	Dry land	Cash Crop Land	Total area
Bumthang	65.53	4,120.70	42.87	4,229.10
Chukha	867.08	6,021.54	1,344.89	8,233.51
Dagana	1,717.51	4,494.68	749.54	6,961.73
Gasa	81.65	221.46	33.94	337.05
Haa	72.47	1,278.93	177.65	1,529.05
Lhuentse	622.28	1,433.22	11.04	2,066.54
Mongar	448.10	4,066.30	199.03	4,713.43
Paro	1,138.90	2,319.75	512.59	3,971.24
Pemagatshel	140.26	4,553.40	1,074.76	5,768.42
Punakha	1,875.14	665.63	44.96	2,585.73
Samdrup Jongkhar	863.14	5,066.71	451.06	6,380.91
Samtse	3,318.16	10,318.07	2,252.76	15,888.99
Sarpang	1,902.90	4,181.22	1,349.53	7,433.65
Thimphu	234.79	679.94	220.01	1,134.74
Trashigang	1,097.59	5,717.45	77.87	6,892.91
Trashiyangtse	552.64	1,563.03	12.16	2,127.83
Trongsa	499.02	1,221.40	10.57	1,730.99
Tsirang	1,689.62	3,366.86	751.31	5,807.79
Wangdue	1,740.40	1,448.34	97.81	3,286.55
Zhemgang	595.63	2,926.81	299.97	3,822.41
Bhutan	**19,522.81**	**65,665.44**	**9,714.32**	**94,902.57**

Source: Policy & Planning Division, MoAF, Thimphu.

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TABLE 5.13 CULTIVATED AREA, PRODUCTION AND YIELD OF MAJOR CROPS BY DZONGKHAG, BHUTAN, 2008

Dzongkhag	Wheat			Barley			Paddy		
	Area (Hectares)	Production (MT)	Yield (MT/Hectare)	Area (Hectares)	Production (MT)	Yield (MT/Hectare)	Area (Hectares)	Production (MT)	Yield (MT/Hectare)
Bumthang	224	391	1.75	160.38	245.95	1.53	37	131	3.55
Chukha	170	282	1.66	30.86	49.02	1.59	771	2753	3.57
Dagana	61	115	1.89	41.75	73.08	1.75	1578	6234	3.95
Gasa	66	122	1.86	20.68	32.42	1.57	77	313	4.05
Haa	291	513	1.76	26.95	52.88	1.96	60	245	4.06
Lhuentse	18	21	1.18	2.84	4.33	1.52	709	2749	3.88
Mongar	217	383	1.77	338.19	490.98	1.45	827	2937	3.55
Paro	448	826	1.84	53.82	80.98	1.50	1308	5796	4.43
Pemagatshel	33	70	2.12	57.15	88.45	1.55	87	280	3.22
Punakha	421	764	1.82	21.38	39.66	1.86	2081	9797	4.71
Samdrup Jongkhar	45	72	1.58	62.31	115.42	1.85	1008	4044	4.01
Samtse	158	265	1.67	48.52	80.12	1.65	2932	10825	3.69
Sarpang	19	36	1.84	5.43	5.43	9.54	1776	7197	4.05
Thimphu	84	183	2.17	11.04	18.80	1.70	239	941	3.94
Trashigang	83	135	1.62	144.28	202.83	1.41	1138	4235	3.72
Trashiyangtse	12	24	1.93	16.25	31.35	1.93	721	2501	3.47
Trongsa	188	322	1.71	89.78	133.25	1.48	545	2096	3.85
Tsirang	53	86	1.61	7.17	16.35	2.28	1443	5708	3.95
Wangdue	540	949	1.76	136.81	227.94	1.67	1483	6542	4.41
Zhemgang	57	89	1.57	38.71	57.40	1.48	538	1989	3.70
Bhutan	**3,189**	**5,647**	**1.77**	**1,314.31**	**2,050.76**	**1.56**	**19356**	**77314**	**3.99**

(Contd..)

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TABLE 5.13 (contd.): CULTIVATED AREA, PRODUCTION AND YIELD OF MAJOR CROPS BY DZONGKHAG, BHUTAN, 2008

Dzongkhag	Maize			Buckwheat			Millet		
	Area (Hectares)	Production (MT)	Yield (MT/Hectare)	Area (Hectares)	Production (MT)	Yield (MT/Hectare)	Area (Hectares)	Production (MT)	Yield (MT/Hectare)
Bumthang	8.91	19.51	2.19	285	432	1.52	2.11	2.33	1.10
Chukha	1,857.95	4,815.40	2.59	386	559	1.45	437.33	586.54	1.34
Dagana	2,702.13	7,089.44	2.62	198	312	1.57	357.76	484.11	1.35
Gasa	1.34	2.02	1.50	4	6	1.43	1.77	2.29	1.29
Haa	180.99	452.75	2.50	245	412	1.69	21.56	28.55	1.32
Lhuentse	869.30	2,027.38	2.33	11	17	1.54	49.83	72.47	1.45
Mongar	3,446.70	8,414.41	2.44	235	313	1.33	25.48	35.74	1.40
Paro	68.58	115.03	1.68	124	95	0.76	20.73	28.25	1.36
Pemagatshel	2383.78	5,494.12	2.30	252	401	1.59	238.34	370.58	1.55
Punakha	155.98	339.45	2.18	74	109	1.47	1.08	1.76	1.63
Samdrup Jongkhar	2,131.92	5,127.48	2.41	396	545	1.38	153.99	208.08	1.35
Samtse	2,998.27	7,532.18	2.51	258	437	1.69	961.71	1,346.94	1.40
Sarpang	2681.04	7,056.60	2.63	132	217	1.65	571.77	862.54	1.51
Thimphu	12.79	23.50	1.84	9	10	1.20	1.31	1.26	0.96
Trashigang	2,722.93	5,971.08	2.19	325	472	1.45	68.04	125.23	1.84
Trashiyangtse	824.76	1,635.75	1.98	9	19	2.14	167.00	262.75	1.57
Trongsa	392.96	860.83	2.19	106	155	1.46	11.96	16.41	1.37
Tsirang	2,185.92	5,734.15	2.62	98	175	1.78	280.32	390.59	1.39
Wangdue	134.95	295.20	2.19	142	213	1.49	23.48	37.15	1.58
Zhemgang	1,465.59	3773.53	2.57	148	239	1.61	123.71	160.47	1.30
Bhutan	**27,226.79**	**66,779.81**	**2.45**	**3,437**	**5,138**	**1.49**	**3519**	**50.24**	**1.43**

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

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TABLE 5.14 QUANTITY OF POTATO SEED PLANTED AND PRODUCTION BY VARIETY AND REGION, 1992/93 TO 1994/95

(Metric tons)

Location/region	Desiree			K. Jyoti			Yusikap		
	1992-1993	1993-1994	1994-1995	1992-1993	1993-1994	1994-1995	1992-1993	1993-1994	1994-1995
Quantity planted	**161.1**	**156.4**	**156.1**	**95.2**	**82.5**	**75.4**	**90.7**	**86.3**	**86.0**
Phobjikha farm	8.2	6.7	6.7	4.4	4.7	1.3	4.7	4.8	4.8
Trashigang	18.4	20.3	20.2	35.0	34.5	33.3	45.5	35.2	35.1
Pemagatshel	4.0	4.0	4.0	14.0	14.0	13.8	10.0	10.0	10.0
Bumthang	32.6	31.7	31.7	22.0	18.9	17.0	21.4	20.0	20.0
Phubjikha	98.0	93.7	93.5	19.9	10.5	10.2	9.2	16.4	16.2
Quantity produced	**141.2**	**414.9**	**447.0**	**216.7**	**188.8**	**156.6**	**238..0**	**237.9**	**240.7**
Phobjikha farm	33.5	33.5	36.0	11.4	11.4	15.8	34.0	34.0	28.3
Trashigang	15.7	15.7	41.6	42.9	42.9	67.7	95.4	95.3	93.1
Pemagatshel	10.7	10.7	8.2	28.7	28.7	30.9	22.1	22.1	21.0
Bumthang	74.1	74.1	86.1	84.9	57.1	13.3	53.2	53.2	56.6
Phubjikha	280.2	281.0	275.3	48.8	48.8	29.0	33.4	33.4	41.9
Seed to production ratio	**2.6**	**2.7**	**2.9**	**2.3**	**2.3**	**2.1**	**2.6**	**2.8**	**2.8**
Phobjikha farm	4.1	5.0	5.3	2.6	2.4	12.4	7.2	7.1	5.9
Trashigang	0.9	0.8	2.1	1.2	1.2	2.0	2.1	2.7	2.7
Pemagatshel	2.7	2.7	2.0	2.1	2.1	2.2	2.2	2.2	2.1
Bumthang	2.3	2.3	2.7	3.9	3.0	0.8	2.5	2.7	2.8
Phobjikha	2.9	3.0	2.9	2.5	4.7	2.9	3.6	2.0	2.6

Source: Policy & Planning Division, MoAF, Thimphu.

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TABLE 5.15 NUMBER OF LIVESTOCK BY TYPE AND DZONGKHAG, BHUTAN, 2008

(Numbers)

Dzongkhag	Mithun Cattle*	Nublang Cattle	Jersey Cattle*	Brown Swiss Cattle ***	Other Cattle	Yaks	Horses	Sheep	Goats	Pigs	Poultry
Thimphu	321	2,130	1,162	140	117	9,981	1,057	2	6	100	1,018
Paro	2,030	7,360	4,311	185	21	3,773	1,548	27	111	822	5,217
Haa	1,627	3,939	2,088	74	55	4,652	922	20	72	605	2,611
Chukha	2,445	17,351	3,457	0	0	0	460	1,091	5,330	2,598	18,471
Samtse	749	33,504	2,394	39	427	0	433	3,556	12,266	1,840	35,925
Punakha	2,259	7,612	2,166	33	0	0	616	8	76	892	4,291
Gasa	288	426	113	158	0	5,694	994	4	4	23	339
Wangdue	4,644	16,004	2,317	505	4	2,753	1,143	2,393	156	1,347	4,982
Tsirang	399	8,487	4,727	44	236	0	243	740	5,588	1,530	23,225
Dagana	1,933	14,690	3,112	0	80	0	445	540	5,036	2,557	18,295
Bumthang	2,229	3,616	1,439	2,671	41	3,197	1,237	467	5	0	534
Trongsa	1,969	6,180	1,505	354	0	138	308	430	5	70	2,000
Zhamgang	6,167	2,945	1,400	42	0	0	1,754	0	46	864	6,074
Sarpang	2,488	18,664	4,023	54	167	0	358	954	3,920	1,264	28,306
Lhuentse	4,732	6,099	1,201	229	17	241	1,426	63	18	229	5,654
Mongar	12,526	8,818	3,972	332	0	0	2,449	40	153	1,231	14,530
Trashigang	9,594	9,779	3,272	112	165	8,780	2,927	1,528	192	1,019	10,444
Trashiyangtse	3,347	5,347	1,694	48	112	400	1,336	39	82	710	1,397
Pemagatshel	2,950	2,975	3,076	55	0	0	1,377	3	37	678	4,968
Samdrup Jongkhar	6,403	7,699	2,922	73	26	0	1,268	70	942	565	9,849
Bhutan	**68,885**	**184,014**	**50,443**	**5,253**	**1,476**	**4,082**	**22,355**	**12,116**	**34,176**	**18,963**	**197,766**

Source: RNR Census 2009, PPD, MoAF, Thimphu.
Note: Totals may not add up due to rounding
**Includes Mithun pure+Mithun Cross like jatsa+jatsam+yangku+yangkum.*
*** Includes Jersey pure+Jersey Cross*
****Includes Swiss Brown pure + Swiss Brown cross*

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TABLE 5.16 IMPORTS AND DISTRIBUTION OF FOOD ITEMS BY FOOD CORPORATION OF BHUTAN, 2005 TO 2009

(Metric tonns)

Commodity	2005	2006	2007	2008	2009
Imports					
Rice	6,226.74	8,293.74	7,414.25	9,416.62	6,718.71
Wheat	35.59	0.00	0.00	48.96	80.32
Sugar	3,924.27	3,706.36	1,231.78	1,820.43	3,589.00
Salt	194.96	215.44	199.99	309.97	351.43
Oil	568.53	643.94	671.60	818.89	666.54
Pulses	202.65	289.56	309.67	331.72	295.59
Atta	169.7	327.8	160.20	183.78	280.18
Maida	283.4	327.8	249.88	294.53	166.99
Sales					
Rice	7,279.18	7,948.99	8,078.77	8,250.78	6,373.01
Wheat	202.91	0.00	0.00	20.50	82.50
Sugar	3,726.05	3,028.88	1,829.61	1,914.29	3,646.31
Salt	212.47	207.82	204.17	274.43	395.12
Oil	486.26	648.89	667.20	785.85	708.22
Pulses	229.08	261.73	304.56	359.43	278.11
Atta	430.61	299.04	199.32	177.78	283.03
Maida	337.41	332.72	263.07	266.06	141.91

Source: Food Corporation of Bhutan, Phuentsholing.

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TABLE 5.17 QUANTITY OF AGRICULTURAL PRODUCE HANDLED BY FOOD CORPORATION OF BHUTAN, 2005 TO 2009

(Metric tonns)

Commodity	2005	2006	2007	2008	2009
Potatoes	23,766.14	20,645.22	21,611.87	21,109.11	30,998.56
Vegetables	1,706.50	1,488.00	1,432.61	1,592.65	1,310.42
Apples	226.70	452.53	202.28	121.56	107.79
Oranges	1,916.50	1,863.61	2,876.83	2,339.96	2,767.05
Cardamom	0.17	0.01	0.00	0.50	0.00
Ginger	208.70	459.90	0.00	462.99	724.49
Garlic	0.08	0.00	0.00	0.00	0.00
Arecanut	146.62	153.86	233.33	545.12	418.44
Supari(dried doma)	0.00	0.00	0.00	0.00	0.00
Dry chilli	3.90	6.40	0.00	0.91	0.58
Kidney bean(rajma)	49.63	69.53	0.00	51.26	48.26
Soya bean	37.15	47.92	0.00	17.09	56.31
Pulses	0.00	0.00	100.36	68.35	0.34
Mustard	0.00	0.00	0.00	0.00	0.00
Pipla (wild)	0.00	0.00	0.00	0.00	0.00
Leshi	0.00	0.00	0.00	0.00	0.00
Lemon	0.00	0.00	0.00	0.00	0.32
Apricot	0.00	0.00	0.00	0.00	0.00
Peach	1.13	0.18	0.00	1.06	0.70
Plum	0.13	0.02	0.00	0.27	0.76
Pear	0.02	0.11	0.00	0.40	1.06
Dry bean	0.00	0.00	0.00	0.00	0.00

Source: Food Corporation of Bhutan, Phuentsholing.

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TABLE 5.18 QUANTITY AND VALUE OF FOREST PRODUCTS SUPPLIED BY TYPE AND USERS BHUTAN, 2004/2005 TO 2007/2008

User and product type	2004/2005		2006/2007		2007/2008	
	Quantity	Value (Nu)	Quantity	Value (Nu)	Quantity	Value (Nu)
Rural Supply						
Trees (numbers)	15,745.0	629,800.0	11,504.0	471,458.00	24,510.0	997,936.00
Shinglap (numbers)	2,536.0	101,440.0	13.0	520.00	3240.0	120,692.25
Cham (numbers)	42,625.0	1,705,000.0	19,451.0	594,064.00	56,772.0	1,840,121.75
Tsim (numbers)	25,074.0	300,888.0	10,897.0	43,588.00	32,572.0	489,147.00
Dangchung (numbers)	25,210.0	100,840.0	4,393.0	30,195.00	11,802.0	58,699.50
Poles (numbers)	36,906.0	147,624.0	22,984.0	10,3372.00	49,721.0	215,081.25
Post (numbers)	24,489.0	97,956.0	16,015.0	225,105.00	45,753.0	262,411.25
Fire wood (cubic metre)	32,491.0	324,910.0	1,331,927.7	616,728.95	50,766.1	733,978.65
Log form (Cft)	416,742.0	333,393.6	308,461.0	246,097.20	0.0	-
Sawn timber (cft)	5,043.0	5,043.0	0.0	0.00	0.0	-
Other woods (numbers)			"	"	265.0	1,170.00
Sub total		**3,746,894.6**		**2,331,128.2**		**4,719,237.65**
Non wood Forest Produce (Rural Supply)						
Bamboo (numbers)	123,200.0	11,471.2	369,390.5	30,905.8	287,235.0	47,826.44
Stones (Truck Load)	3.0	120.0	1,100.0	24,040.0	1,011.0	40,440.00
Sand (Truck Load)	4.0	160.0	647.0	1972.0	1423.0	56,920.00
Mashrrom billet (numbers)	1,290.0	774.0	9.0	360.0	4,260.0	4,260.00
Cane (Headload)	96.0	384.0	484.0	1,972.0	375.0	1,330.00
Chirrata (kg)	..	..	0.0	..	"	"
Sub total		**12,909.2**		**59,249.8**		**150,776.44**
Urban Supply (Auction)						
Trees (number)	12.0	28,800.0	961.0	291,587.0	595.0	202,561.25
Shinglap (numbers)	..	..	..	..	36.0	2,080.00
Cham (numbers)	..	..	413.0	23,946.0	723.0	41,812.00
Tsims (numbers)	..	..	987.0	11,650.0	686.0	10,488.00

(Contd..)

TABLE 5.18 (contd.): QUANTITY AND VALUE OF FOREST PRODUCTS SUPPLIED BY TYPE AND USERS BHUTAN, 2004/2005 TO 2007/2008

User and product type	2004/2005		2006/2007		2007/2008	
	Quantity	Value (Nu)	Quantity	Value (Nu)	Quantity	Value (Nu)
Dangchung (numbers)	1,565.0	688,600.0	259.0	3,158.0	688.0	4,342.00
Poles (numbers)	1,790.0	35,800.0	8,407.0	38,735.0	7,731.0	90,276.25
post (numbers)	..	..	5,585.0	53,112.0	10,084.0	78,356.75
Firewood (cubic metre)	2,896.0	28,960.0	130,686.3	1,297,404.0	77,804.3	1,646,624.72
Log form (cft)	253,447.0	4,562,046.0	1,803,567.8	25,158,174.3	"	
Sawn form (cft)	126.4	2,275.9	6,962.0	123,178.0	1968.1	30,660.39
Sub total		**22,126,095.8**		**27,000,944.30**		**2,107,201.36**
Non wood Forest Produce on Commercial rate						
Bamboo (numbers)	324,372.0	168,673.4	110,159.0	87,430.8	156,921.0	112,461.00
Stones (Truck Load)	46,038.0	1,841,520.0	27476.8	1,110,254.0	74,475.5	961,860.00
Sand (TL)	47,137.0	1,885,480.0	43,439.0	9,329,236.5	32,691.0	1,307,640.00
Stones Chips (Truck Load)	28,481.5	1,139,260.0	13,799.0	347,500.0	681.5	26,270.00
Top Soil (TL)	350.0	14,000.0	..	..	1,128.5	38,610.00
Wood Chips (Truck Load)	206.0	103,429,000.0	0.0	0.0	536.0	231,595.00
Lemon grass (kg)	6,330.0	25,320.0	..	..	1,652.2	8,261.00
Mashrrom Billet (numbers)	5,700.0	5,700.0	6,870.0	4,600.0	14,850.0	14,795.00
Resin (Kg)	7,391.5	29,566.0	24,954.5	85,503.0	54,408.0	136,620.00
Dalphne (Kg)	900.0	540.0	8,830.0	7,808.0	14,250.0	3,020.00
Cordycep (Kg)	153.0	3,442,500.0	..	..	52.3	121,495.00
Leaf mould (Truck Load)	141.0	8,460.0	206.0	11,324.0	305.0	10,363.00
Sand (Truck Load)	..	..	79.0	13,551,875.0	32691.0	1,307,640.00
Sub total		**111,990,019.4**		**24,535,531.3**		**4,280,630.00**

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TABLE 5.18 (contd.): QUANTITY AND VALUE OF FOREST PRODUCTS SUPPLIED BY TYPE AND USERS BHUTAN, 2004/2005TO 2007/2008

User and product type	2004/2005		2006/2007		2007/2008	
	Quantity	Value (Nu)	Quantity	Value (Nu)	Quantity	Value (Nu)
Subsidy (Dzong and Lhakhang)						
Tree (numbers)	247.0	9,880.0	0.0	0.0	528.0	30,120.00
Chams (numbers)	30.0	900.0	0.0	0.0	227.0	6,810.00
Tsim (numbers)	18.0	216.0	0.0	0.0	310.0	3,720.00
Ploes (numbers)	1,152.0	4,608.0	0.0	0.0	25.0	100.00
Log (cft)	..	..	0.0	0.0	0.0	0.00
Sub total		**15,604.0**		**0.0**		**40,750.00**
Commercial (Dzong and Lhakhang)						
Tree (numbers)	947.0	1,090,944.0	0.0	0.0	57.0	56,000.00
Shinglap (numbers)	23.0	26,496.0	0.0	0.0	0.0	0.00
Chams (numbers)	1,814.0	435,360.0	0.0	0.0	1.0	30.00
Dangchung (numbers)	993.0	23,832.0	0.0	0.0	0.0	0.00
Tsims (numbers)	915.0	34,770.0	0.0	0.0	0.0	0.00
Ploes (numbers)	535.0	2,140.0	0.0	0.0	200.0	4,000.00
Firewood (cubic metre)	320.0	3,200.0	0.0	0.0	1,063.9	24,020.00
Log (cft)	..	..	0.0	0.0	199.8	181.62
Swan timber (cft)	..	..	0.0	0.0	0.0	0.00
Sub total		**1,636,422.0**		**0.0**		**84,231.62**
Government Institution						
Tree (numbers)	1,238.0	1,426,176.0	0.0	0.0	1,115.0	2,12,753.00
Chams (numbers)	544.0	1,30,560.0	0.0	0.0	103.0	3,090.00
Tsims (numbers)	394.0	14,972.0	0.0	0.0	167.0	2,039.00
Dangchung (numbers)	9,459.0	2,27,016.0	0.0	0.0	237.0	3,968.00
Poles (numbers)	1,425.0	22,800.0	0.0	0.0	2,501.0	26,326.00
Post (numbers)	6,266.0	75,192.0	0.0	0.0	5,318.0	36,842.00

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TABLE 5.18 (contd.): QUANTITY AND VALUE OF FOREST PRODUCTS SUPPLIED BY TYPE AND USERS BHUTAN, 2004/2005TO 2007/2008

User and product type	2004/2005		2006/2007		2007/2008	
	Quantity	Value (Nu)	Quantity	Value (Nu)	Quantity	Value (Nu)
Firewood (cubic metre)	18,549.0	1,85,490.0	0.0	0.0	24,602.6	5,87,539.05
Log forms (cft)	4,85,025.0	6,305,325.0	0.0	0.0	4,475.7	44,526.37
Sawn timber (cft)	126.4	2,275.9	0.0	0.0	3,569.2	16,395.70
Sub total		**8,389,806.9**		**0.0**		**9,33,479.12**
Free of Royalty						
Tree (numbers)	127.0	0.0	270.0	0.0	352.0	0.00
Shinglap (numbers)	6.0	0.0	40.0	0.0	41.0	0.00
Chams (numbers)	880.0	0.0	167.0	0.0	885.0	0.00
Tsims (numbers)	1,025.0	0.0	175.0	0.0	968.0	0.00
Dangchung (numbers)	1,594.0	0.0	280.0	0.0	1,298.0	0.00
Poles (numbers)	..	0.0	1,253.0	0.0	2,094.1	0.00
Fencing post (numbers)	..	0.0	80.0	0.0	0.00	0.00
Poles (numbers)	..	0.0	0.0	0.0	0.00	0.00
Log (cft)	995.0	0.0	0.0	0.00	0.00	0.00
Firewood (cubic metre)	2,327.0	0.0	767.7	0.0	0.00	0.00
Sub total		**8,389,806.9**	**3,032.7**	**0.0**	**5,638.1**	**0.00**
Bhutan						
Tree (numbers)	18,316.0	3,185,600.0	12,465.0	763,045.00	27,157.0	1,499,370.25
Shinglap (numbers)	2,565.0	127,936.0	13.0	520.00	4,438.0	124,712.25
Cham (numbers)	45,893.0	2,271,820.0	19,864.0	618,010.00	58,711.0	1,891,863.75
Tsims (numbers))	26,401.0	350,846.0	11,884.0	55,238.00	34,703.0	505,394.00
Dangchung (numbers)	37,256.0	1,040,288.0	4,393.0	30,195.00	14,075.0	67,209.50
Poles (numbers)	39,483.0	194,712.0	28,569.0	156,484.00	60,178.0	335,783.50
Post (numbers)	33,080.0	137,621.0	24,422.0	263,840.00	61,355.0	378,410.00
Firewood (cubic metre)	32,491.0	324,910.0	1,462,614.0	1,914,133.00	156,531.0	2,996,362.42
Log forms (cft)	1,155,214.0	11,200,764.0	2,112,028.8	25,282,528.70	4,675.5	44,707.99

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TABLE 5.18 (contd.): QUANTITY AND VALUE OF FOREST PRODUCTS SUPPLIED BY TYPE AND USERS BHUTAN, 2004/2005 TO 2007/2008

User and product type	2004/05		2006/07		2007/08	
	Quantity	Value (Nu)	Quantity	Value (Nu)	Quantity	Value (Nu)
Sawn timber (cft)	5,169.4	7,318.9	6,962.0	123,178.00	5,537.3	47,056.09
Bamboo (numbers)	447,572.0	180,144.6	479,549.5	118,336.60	447,356.0	160,287.44
Stones (Truck Load)	46,041.0	1,841,640.0	28,576.8	1,134,294.00	75,695.5	1,002,300.00
Sand (Truck Load)	47,141.0	1,885,640.0	44,086.0	9,331,208.50	34,268.0	1,364,560.00
Stone chips (Truck Load)	28,481.5	1,139,260.0	13,808.0	347,860.00	715.5	27,630.00
Top Soil (Truck Load)	350.0	14,000.0	..	..	1,158.5	40,110.00
Wood chips (Truck Load)	206,858.0	103,429,000.0	..	..	536.0	231,595.00
Mashrrom Billet (numbers)	6,990.0	6,474.0	6,870.0	4,600.00	14,850.0	14,975.00
Resin (Kg)	7,391.5	29,566.0	24,954.5	85,503.00	54,408.0	136,620.00
Cordycep (Kg)	153.0	3,442,500.0	140.4	3,158,258.00	52.3	121,495.00
Daphne (Kg)	900.0	540.0	8,830.0	7,808.00	14,750.0	3,320.00
Lemon grass (Kg)	6,330.0	25,320.0	..	..	1,652.2	8,261.00
Leaf mould (Truck Load)	141.0	8,460.0	211.0	11,624.00	336.0	12,069.00
Cane (Head Load)	96.0	384.0	484.0	1,972.00	893.0	2,516.00
Chirrata (Kg)	..	..	0.0	0.00	0.0	0.00
Total		130,844,744.6		43,408,635.80		11,016,608.19

Source: Policy & Planning Division, MoAF, Thimphu.

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TABLE 5.19 DETAILS OF PROTECTED AREAS IN BHUTAN, BY YEAR OF ESTABLISHMENT AND AREA

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

Source: Policy & Planning Division, MoAF, Thimphu.

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TABLE 5.20 DISPOSAL OF LOGWOOD BY FORESTRY DEVELOPMENT CORPORATION LIMITED, BHUTAN 2005 TO 2008

Item	Units	2005	2006	2007	2008
Logwood					
Logwood (Urban/Commercial/ Auction)	cft	1,925,870.76	1,791,035.39	1,853,056.00	1,559,656.99
Rural logwood					
Logwood (Rural)	cft	285,034.73	304,699.40	227,260.68	152,526.10
Firewood	M3	..	26,826.00	36,826.32	33,831.39
Woodchips	M3	"	"	"	10,510.08
Sand	Truck Load	"	"	2,470.00	27,374.39
Stone/ Stonechips/ Gravels	Truck Load	"	"	"	6457.00
Poles	Numbers	"	12,780.00	18,080.00	36,710.00
Total		**2,210,905.49**	**2,135,340.79**	**2,137,693.00**	**1,827,065.95**

Source: Policy & Planning Division, MoAF, Thimphu.

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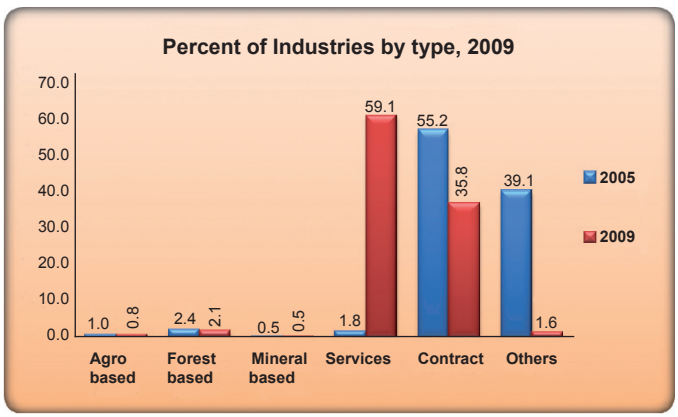
CHAPTER 6
INDUSTRIES

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

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

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

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



According to the information collected in 2010, the number of industrial license holders increased from 1389 in 2008 to 1565 in 2009, with more than 90% of the establishments operated by the private sectors. Most of the existing industrial establishments are small scale or cottage industries.

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TABLE 6.1 NUMBER OF INDUSTRIAL ESTABLISHMENTS BY SECTOR, 2005 TO 2009

Sector	2005	2006	2007	2008	2009
Production & manufacturing	**985**	**1,133**	**1,254**	**1,389**	**1,565**
New registration	99	135	116	133	173
Existing establishments	886	998	1,138	1,256	1,392
Services	**6,753**	**13,597**	**14,923**	**16,253**	**17,907**
New registration	1,366	1,479	1,263	1,331	1,626
Existing establishments	5,387	12,118	13,660	14,922	16,281
Contract	**9,519**	**9,775**	**10,084**	**10,431**	**10,845**
New registration	207	269	307	347	410
Existing establishments	9,312	9,506	9,777	10,084	10,435
All sectors	**17,257**	**24,505**	**26,261**	**28,073**	**30,317**

Source: Department of Industry, MoEA, Thimphu.
Note: During 2006 the bar licences has been transferred from Dept. of Trade to Services, therefore the no. of existing establishments has been drastically increased.

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TABLE 6.2 NUMBER OF LICENCESED FIRMS IN MANUFACTURING AND MINING INDUSTRIES BY SECTOR, BHUTAN 2007 TO 2009

Industry	2007				2008				2009			
	Public	Joint	Private	Total	Public	Joint	Private	Total	Public	Joint	Private	Total
Mining	0	0	27	27	0	0	47	47	0	0	53	53
Manufacturing	14	5	1,208	1,227	15	6	1,321	1,342	17	6	1,489	1,512
Food processing/milling	5	1	201	207	5	1	211	217	6	1	245	252
Textiles and Clothing	0	0	2	2	0	0	1	1	0	0	1	1
Wood and Paper Products	2	2	513	517	2	2	570	574	2	2	647	651
Chemical Products	..	..	..	..	..	..	..	..	..	..	..	..
Mineral Products	0	2	81	83	0	3	94	97	1	3	106	110
Others	7	0	411	418	8	0	445	453	8	0	490	498
Total	**14**	**5**	**1,235**	**1,254**	**15**	**6**	**1,368**	**1,389**	**17**	**6**	**1,542**	**1,565**

Source: Department of Industry, MoEA, Thimphu.

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TABLE 6.3 NUMBER OF INDUSTRIES BY SECTOR, SIZE AND TYPE, BHUTAN, 2005 TO 2009

Industrial establishments	2005	2006	2007	2008	2009
Sector					
Private	17,181	24,417	26,163	27,972	30,207
Joint	15	11	11	14	14
Public	61	77	87	87	96
Size	17,257	24,505	26,261	28,073	30,317
Large scale	57	72	85	91	103
Medium scale	62	78	112	128	156
Small scale	678	1,660	1,815	2,064	2,330
Cottage scale	6,941	12,920	14,165	15,359	16,883
Other (Contract)	9,519	9,775	10,084	10,431	10,845
Type	**17,257**	**24,505**	**26,261**	**28,073**	**30,317**
Production & Manufacturing	985	1,133	1,254	1,389	1,565
Agro based	181	199	207	217	252
Forest based	414	470	517	574	651
Mineral based	80	91	110	144	163
Others	310	373	420	454	499
Contract	9,519	9,775	10,084	10,431	10,845
Services	6,753	13,597	14,923	16,253	17,907
All industries	**17,257**	**24,505**	**26,261**	**28,073**	**30,317**

Source: Department of Industry, MoEA, Thimphu.

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TABLE 6.4 NUMBER OF CONTRACT FIRMS BY TYPE, BY DZONGKHAG, BHUTAN, 2009

Dzongkhag	Class of contract firm				
	A	B	C	Petty	Total
Bumthang	2	2	10	253	267
Chukha	42	20	131	665	858
Dagana	1	-	10	280	291
Gasa	-	-	-	36	36
Haa	-	5	44	217	266
Lhuentse	-	-	22	129	151
Mongar	1	2	64	360	427
Paro	-	10	68	458	536
Pemagatshel	-	3	31	214	248
Punakha	1	2	8	282	293
Samdrup Jongkhar	16	7	79	243	345
Samtse	1	1	48	293	343
Sarpang	7	2	40	445	494
Thimphu	136	86	527	3,425	4,174
Tashigang	5	23	62	464	554
Trashiyangtse	-	-	36	171	207
Trongsa	-	-	39	189	228
Tsirang	-	-	5	146	151
Wangdue	-	-	22	665	687
Zhemgang	-	-	9	280	289
Bhutan	**212**	**163**	**1,255**	**9,215**	**10,845**

Note: This are the number of contract licences issued as of 31Dec, 2008
Source: Department of Industry, MoEA, Thimphu.

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TABLE 6.5 NUMBER OF INDUSTRIAL FIRMS, BY TYPE, BY DZONGKHAG, BHUTAN, 2009

Dzongkhag	Scale of industry				
	Small	Medium	Large	Cottage	Total
Bumthang	38	6	2	608	654
Chukha	1,021	50	49	1,583	2,703
Dagana	5	2	1	340	348
Gasa	-	-	-	72	72
Haa	40	-	-	220	260
Lhuentse	1	-	-	177	178
Mongar	9	2	1	788	800
Paro	90	19	2	1,267	1,378
Pemagatshel	12	2	3	443	460
Punakha	12	2	2	357	373
Samdrup Jongkhar	23	3	6	771	803
Samtse	196	8	9	485	698
Sarpang	48	6	5	1,193	1,252
Thimphu	759	47	21	5,918	6,745
Tashigang	13	1	-	725	739
Trashiyangtse	3	-	-	204	207
Trongsa	5	4	-	411	420
Tsirang	9	-	-	307	316
Wangdue	44	3	2	696	745
Zhemgang	2	1	-	318	321
Bhutan	**2,330**	**156**	**103**	**16,883**	**19,472**

Source: Department of Industry, MoEA, Thimphu.

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TABLE 6.6 NUMBER OF INDUSTRIES BY TYPE, BY DZONGKHAG, BHUTAN, 2009

Dzongkhag	Agro based	Forest based based	Mineral based	Services	Contract	Others	All types types
Bumthang	16	44	2	588	267	4	921
Chukha	50	51	29	2,479	858	94	3,561
Dagana	1	1	1	345	291	-	639
Gasa	1	1	-	70	36	-	108
Haa	2	41	1	215	266	1	526
Lhuentse	1	4	1	172	151	-	329
Mongar	10	38	3	743	427	6	1,227
Paro	13	109	15	1,216	536	25	1,914
Pemagatshel	9	21	16	413	248	1	708
Punakha	1	4	1	366	293	1	666
Samdrup Jongkhar	16	17	5	754	345	11	1,148
Samtse	17	12	31	625	343	13	1,041
Sarpang	47	33	6	1,154	494	12	1,746
Thimphu	42	152	29	6,206	4,174	316	10,919
Tashigang	5	33	3	689	554	9	1,293
Trashiyangtse	2	36	-	168	207	1	414
Trongsa	3	10	-	407	228	-	648
Tsirang	10	6	4	296	151	-	467
Wangdue	2	17	16	706	687	4	1,432
Zhemgang	4	21	-	295	289	1	610
Bhutan	**252**	**651**	**163**	**17,907**	**10,845**	**499**	**30,317**

Source: Department of Industry, MoEA, Thimphu.

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TABLE 6.7 MINERAL PRODUCTION FROM MINES IN BHUTAN, 2005 TO 2009

Minerals	2005	2006	2007	2008	2009
Dolomite (metric tonnes)	388,711	476,516	578,552	1,247,568	1,028,993
Lime stone (metric tonnes)	536,030	581,333	543,964	583,707	649,952
Gypsum (metric tonnes)	150,585	204,198	189,198	248,445	299,736
Coal (metric tonnes)	2,908	5,873	105,261	123,704	48,545
Marble (square feet)	85,279	97,965	12,071	12,301	13,074
Slate (square feet)	4,005	3,813	78,107	8,227	18,998
Quartzite (metric tonnes)	52,694	40,198	64,049	94,688	82,578
Talc (metric tonnes)	42,791	54,208	62,015	56,077	64,949
Iron Ore (metric tonnes)	5,679	n.a	n.a	n.a	n.a
Pink Shale (metric tonnes)	364	360	n.a	n.a	n.a
Stone (metric tonnes)	146,767	232,187	388,721	408,943	511,781
Granite (square feet)	9,436	8,311	14,430	8,227	19,905

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

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TABLE 6.8 MINERAL PRODUCTION, BHUTAN, 2007 TO 2009

Minerals	2007			2008			2009		
	Export	Domestic use	Total	Export	Domestic use	Total	Export	Domestic use	Total
Dolomite (metric tonnes)	573,554	4,997	578,552	1,242,638	4,930	1,247,568	1,028,146	847	1,028,993
Lime stone (metric tonnes)	96,836	447,127	543,964	89,059	494,647	583,707	34,921	615,031	649,952
Gypsum (metric tonnes)	150,799	38,399	189,198	210,081	38,364	248,445	283,141	16,595	299,736
Coal mines (metric tonnes)	75,366	29,895	105,261	80,976	42,728	123,704	27,076	21,469	48,545
Marble (square feet)	n.a	12,071	12,071	n.a	12,301	12,301	-	13,074	13,074
Slate (square feet)	n.a	78,107	78,107	n.a	8,227	8,227	-	18,998	18,998
Quartzite (metric tonnes)	1,805	62,243	64,049	4,123	90,565	94,688	12,927	69,651	82,578
Talc (metric tonnes)	62,015	n.a	62,015	56,077	n.a	56,077	64,949	-	64,949
Iron Ore (metric tonnes)	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Pink & green Shale (mt)	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Stone (metric tonnes	101,577	287,144	388,721	121,968	286,975	408,943	63,841	447,940	511,781
Granite (square feet)	n.a	14,430	14,430	n.a	8,227	8,227	-	19,905	19,905

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

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TABLE 6.9 NUMBER OF ESTABLISHMENT BY TYPE OF INDUSTRY AND SECTOR, BHUTAN, 2000

Sectors	sole propriatorship/ partnership	Company	Venture	Company	Sectors
Forest based industry	107	6	3	5	121
Agrobased industry	68	1	1	8	78
Mineralbased industry	15	10	3	2	30
Other based industry	62	2	1	5	70
All industries	**252**	**19**	**8**	**20**	**299**

Source: Census of Manufacturing Industries, 2001

TABLE 6.10 NUMBER OF ESTABLISHMENT BY DZONGKHAG, BHUTAN, 2000

Dzongkhag	Estiblishments (No.)	Percentage
Bumthang	16	5.4
Chukha	62	20.7
Dagana	n.a	n.a
Gasa	n.a	n.a
Haa	4	1.3
Lhuentse	1	0.3
Mongar	9	3.0
Paro	23	7.7
Pemagatshel	5	1.7
Punakha	2	0.7
Samdrup Jongkhar	13	4.3
Samtse	25	8.4
Sarpang	15	5.0
Thimphu	87	29.1
Tashigang	6	2.0
Trashiyangtse	11	3.7
Trongsa	3	1.0
Tsirang	6	2.0
Wangdue	7	2.3
Zhemgang	4	1.3
Bhutan	**299**	**100.0**

Source: Census of Manufacturing Industries, 2001

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TABLE 6.11 NUMBER OF ESTABLISHMENT BY SECTOR & SIZE OF EMPLOYMENT, BHUTAN, 2000

Legal status by industry	Total persons engaged				
	1-5	6-10	11-20	21-30	31-40
Sole proprietorship/partners	87	59	45	23	10
Forest-based industry	31	24	30	9	5
Agro-based industry	36	15	6	5	1
Mineral-based industry	1	1	3	3	-
Others	19	19	6	6	4
Private Company	2	2	0	1	2
Forest-based industry	1	..	..	..	1
Agro-based industry	1	..	..	..	-
Mineral-based industry	..	1	..	1	1
Others	..	1	..	..	..
Joint Venture	1	0	1	0	0
Forest-based industry	..	..	..	..	..
Agro-based industry	1	..	..	..	..
Mineral-based industry	..	..	..	..	..
Others	..	..	1	..	..
Government company	1	2	0	4	1
Forest-based industry	1	..	..	1	..
Agro-based industry	..	2	..	1	..
Mineral-based industry	..	..	..	1	..
Others	..	..	..	1	1
Total	**91**	**63**	**46**	**28**	**13**

Contd...

TABLE 6.11 (contd.): NUMBER OF ESTABLISHMENT BY SECTOR & SIZE OF EMPLOYMENT, BHUTAN, 2000

Legal status by industry	Total persons engaged					
	41-50	51-100	101-200	201-300	300+	Total
Sole proprietorship/partners	6	12	7	3	0	252
Forest-based industry	1	5	1	1	..	107
Agro-based industry	2	1	2	..	..	68
Mineral-based industry	1	4	1	1	..	15
Others	2	2	3	1	..	62
Private Company	1	3	2	3	3	19
Forest-based industry	..	2	..	2	..	6
Agro-based industry	..	..	..	..	..	1
Mineral-based industry	1	1	2	1	2	10
Others	..	..	..	..	1	2
Joint Venture	0	2	0	1	3	8
Forest-based industry	..	1	..	..	2	3
Agro-based industry	..	..	..	..	..	1
Mineral-based industry	..	1	..	1	1	3
Others	..	..	..	..	..	1
Government Company	0	4	2	3	3	20
Forest-based industry	..	2	-	1	..	5
Agro-based industry	..	..	1	2	1	7
Mineral-based industry	..	..	..	..	1	2
Others	..	2	1	..	1	6
Total	**7**	**21**	**11**	**10**	**9**	**299**

Source: Census of Manufacturing Industries, 2001

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TABLE 6.12 NUMBER OF PERSONS ENGAGED IN INDUSTRIES BY EMPLOYMENT STATUS AND SEX, BHUTAN, 2000

Type of industry Production Line Workers	Male					
	All male	Proprietor	Employee	Casual	Skilled	Un-skilled
Forest based industry	3,877	78	1,512	812	943	532
Agro-based industry	1,327	58	324	320	332	293
Mineral based industry	5,385	17	1,357	1,935	673	1,403
Other based industry	3,573	37	1,409	553	909	665
All activities	**14,162**	**190**	**4,602**	**3,620**	**2,857**	**2,893**

Source: Census of Manufacturing Industries, 2001

TABLE 6.13 NUMBER OF PERSONS ENGAGED IN INDUSTRIES BY EMPLOYMENT STATUS AND SEX, BHUTAN, 2000

Type of industry Production Line Workers	Female					
	All female	Proprietor	Employee	Casual	Skilled	Un-skilled
Forest based industry	551	18	185	138	70	140
Agro-based industry	854	22	59	366	52	355
Mineral based industry	459	4	74	217	55	109
Other based industry	888	22	205	281	221	159
All activities	**2,752**	**66**	**523**	**1,002**	**398**	**763**

Source: Census of Manufacturing Industries, 2001

TABLE 6.14 NUMBER OF PERSON ENGAGED IN INDUSTRIAL SECTORS BY EMPLOYMENT STATUS AND SEX, BHUTAN, 2000

Sector	Male					
	All male	Proprietor	Employee	Casual	Skilled	Unskilled
Sole proprietor	4,282.0	180.0	1,315.0	1,174.0	906.0	707.0
Private Company	2,406.0	7.0	601.0	648.0	707.0	443.0
Joint sector	3,842.0	3.0	1,079.0	1,232.0	455.0	1,073.0
Government company	3,632.0	0	1,607.0	566.0	789.0	670.0
All Sectors	**14,162.0**	**190.0**	**4,602.0**	**3,620.0**	**2,857.0**	**2,893.0**

Source: Census of Manufacturing Industries, 2001

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TABLE 6.15 NUMBER OF PERSON ENGAGED IN INDUSTRIAL SECTORS BY EMPLOYMENT STATUS AND SEX, BHUTAN, 2000

Sector	Female					
	All female	Proprietor	Employee	Casual	Skilled	Unskilled
Sole proprietor	905.0	66.0	166.0	359.0	199.0	115.0
Private company	341.0	-	40.0	149.0	83.0	69.0
Joint sector	412.0	-	116.0	111.0	28.0	157.0
Government company	1,094.0	-	201.0	383.0	88.0	422.0
All Sectors	**2,752.0**	**66.0**	**523.0**	**1,002.0**	**398.0**	**763.0**

Source: Census of Manufacturing Industries, 2001

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CHAPTER 7
TRANSPORT AND COMMUNICATIONS

About two and half decades back, Bhutan had fragmented transport and communications network. An efficient road system for a landlocked country assumes paramount importance as it plays a crucial role in supporting all development activities and in stimulating domestic and international trade. The first appearance of motor vehicle was in 1962 and surface transport continues to be the main means of transport. The Bhutan Government Transport Service (BGTS) originally entrusted with goods transportation was restructured to concentrate on passenger transport. The gradual privatization of the passenger transport services began in 1985 on pilot basis and was achieved fully by October 1991 with 21 operators managing a fleet of more than 100 buses on 73 routes. As of December 2009, there were 49,300 registered vehicles in Bhutan.

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

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

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

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Following the formulation and implementation of Bhutan Postal Act of 1996, Division of Post was incorporated under the Companies Act of Bhutan. In 1993, Bhutan Post introduced International Express Mail Service and after a year Domestic Express Services and Fax Mail Services were introduced. Fax Money Order Service started in 1996 followed by Post Overnight Courier and Bhutan Post Express Passengers Services in 1997. Within a short period, Bhutan Post increased the types of services from 4 to 13. There are now 127 postal infrastructures, where on an average one Post Office caters to around 5,188 Bhutanese People.

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.

Yet another breakthrough was the launch of cellular mobile (B Mobile) services in the Kingdom, coinciding with the His Majesty's Birthday, 11 November 2003. The Bhutan Telecom Corporation Ltd. has now connected all twenty Dzongkhags by the cellular services. As of December 2009, there were 26,384 telephone sets in use and 262,052 B-Mobile subscribers and 59,443 Tashicell subscribers respectively.

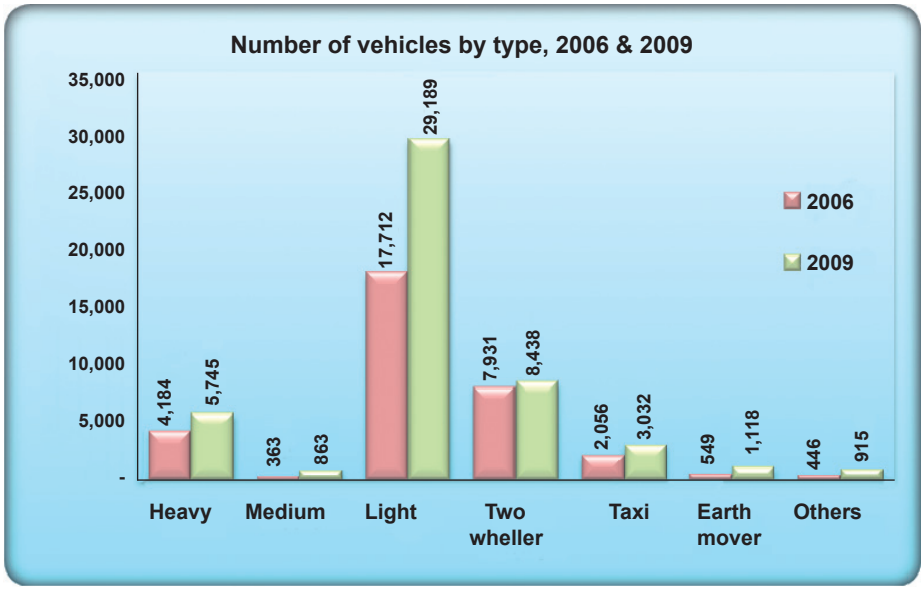

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TABLE 7.1 LENGTH OF ROADS BY TYPE, BHUTAN, 2005 TO JUNE 2010

(Length in Km)

Type of road	Express-way	National highway	District road	Feeder road	Urban road	Farm road	Forest road	Access Road	Power tiller track	All road
2005	-	1,571.0	459.0	1,278.3	125.1	388.5	570.6	n.a	n.a	4,392.5
Black topped	-	1,552.9	360.0	420.2	117.2	4.8	7.4	n.a	n.a	2,462.4
Non-black topped	-	18.2	99.0	858.1	8.0	383.7	563.2	n.a	n.a	1,930.1
2006	-	1,556.0	511.0	1,246.9	130.2	525.9	574.8	n.a	n.a	4,544.7
Black topped	-	1,537.9	380.7	436.2	118.8	4.8	7.4	n.a	n.a	2,485.7
Non-black topped	-	18.2	130.3	810.7	11.5	521.0	567.4	n.a	n.a	2,059.0
2007	6.2	1,628.1	481.2	812.7	150.6	716.9	559.6	531.2	60.2	4,946.7
Black topped	6.2	1,544.1	449.5	158.5	137.7	n.a	7.0	291.5	n.a	2,594.5
Non-black topped	-	84.0	31.7	654.2	12.9	716.9	552.6	239.7	60.2	2,352.2
2008	6.2	1,621.1	482.0	820.8	163.1	1,045.6	528.9	554.1	140.8	5,362.6
Black topped	6.2	1,537.1	449.5	160.9	150.0	-	7.0	297.6	-	2,608.3
Non-black topped	-	84.0	32.5	659.9	13.1	1,045.6	521.9	256.5	140.8	2,754.3
2009	6.2	1,709.8	490.7	910.8	206.7	1,361.6	533.0	567.9	195.6	5,982.3
Black topped	6.2	1,572.3	454.2	174.1	190.0	2.7	7.0	294.0	-	2,700.5
Non-black topped	-	137.5	36.5	736.7	16.7	1,358.9	526.0	273.9	195.6	3,281.8
2010	6.2	2,259.4	1,066.1	n.a	295.0	1,980.3	583.4	580.6	149.2	6,920.2
Black topped	6.2	2,034.7	196.5	n.a	265.8	0.2	7.0	284.2	0.0	2,794.6
Non-black topped	-	224.7	869.6	n.a	29.2	1,980.1	576.4	296.4	149.2	4,125.5

Source: Department of Roads, MoWHS, Thimphu.

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TABLE 7.2 LENGTH OF ROADS BY TYPE AND DZONGKHAG, BHUTAN, AS ON 30 JUNE 2010

(Length in Km)

Dzongkhag	Express-way	National highway	Dzongkhag road	Urban road	Farm road	Forest road	Access Road	Powertiller track	Total	Percentage
Bumthang	0.0	151.5	49.5	1.7	89.2	47.8	19.8	0.0	359.5	5.2%
Chukha	0.0	229.9	54.0	16.6	80.1	30.9	181.1	23.3	615.9	8.9%
Dagana*	0.0	87.0	80.9	1.5	121.6	0.0	2.2	28.1	321.3	4.6%
Gasa	0.0	48.9	0.0	0.0	9.2	0.0	0.0	0.0	58.1	0.8%
Haa	0.0	41.6	16.0	3.8	45.2	47.0	18.9	6.1	178.6	2.6%
Lhuentse	0.0	45.0	69.4	0.8	106.4	7.1	3.8	23.2	255.6	3.7%
Mongar	0.0	224.0	63.2	6.8	136.8	44.8	27.3	18.5	521.4	7.5%
Paro	0.0	139.4	26.2	5.2	216.1	5.2	58.6	2.0	452.7	6.5%
Pemagatshel	0.0	49.0	55.1	0.0	151.7	17.6	8.4	0.0	281.8	4.1%
Punakha	0.0	87.2	40.3	4.4	171.6	59.0	21.6	10.4	394.5	5.7%
Samdrup Jongkhar	0.0	121.5	17.0	7.6	85.4	11.5	19.2	0.0	262.2	3.8%
Samtse	0.0	94.0	100.9	7.4	19.2	7.0	3.3	0.0	231.7	3.3%
Sarpang	0.0	123.4	40.3	0.4	89.1	93.3	1.6	0.0	348.1	5.0%
Thimphu	6.2	68.0	50.7	207.9	36.4	103.9	44.0	0.0	517.0	7.5%
Tashigang	0.0	126.5	136.3	5.9	182.9	8.5	36.3	29.0	525.4	7.6%
Trashiyangtse	0.0	40.0	40.7	8.7	84.6	20.7	4.1	0.0	198.8	2.9%
Trongsa	0.0	164.0	24.2	0.6	98.3	0.0	10.2	4.6	301.9	4.4%
Tsirang	0.0	77.0	25.0	2.8	104.8	6.5	4.2	0.0	220.3	3.2%
Wangdue	0.0	141.5	102.5	6.0	108.4	70.5	95.1	0.0	524.0	7.6%
Zhemgang	0.0	200.0	73.9	7.0	43.4	2.3	20.8	4.0	351.4	5.1%
Bhutan	**6.2**	**2259.4**	**1066.1**	**295.0**	**1980.3**	**583.4**	**580.6**	**149.2**	**6920.1**	**100.0%**

Source: Department of Roads,MoWHS, Thimphu.

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TABLE 7.3 NUMBER AND LENGTH OF MOTORABLE BRIDGES BY TYPE, BHUTAN, AS ON JUNE 2009

(Length in m)

Type of bridges	Number	% by Number	Length	% by Length
RCT Beam	59	19.61	1156.30	14.53
RC Slab	29	9.61	521.25	6.55
Pre-Stressed Concrete	7	2.59	376.00	4.72
Bailey & Bailey Suspension	113	41.85	3497.03	43.94
Composite	19	7.04	331.06	4.16
Composite arch	n.a	n.a	n.a	n.a
Steel Hemilton	10	3.70	313.60	3.94
Submersible	7	2.59	193.50	2.43
RC Arch	3	1.11	265.00	3.33
Steel Pony Truss	4	1.48	190.00	2.39
Steel Truss/Grider	11	4.07	641.60	8.06
Steel Langer Arch	5	1.85	424.45	5.33
Multi Cell Box Culvert	3	1.11	48.00	0.60
Steel Arch Bridge	n.a	n.a	n.a	n.a
RC T-Girder	n.a	n.a	n.a	n.a
Fly Over	n.a	n.a	n.a	n.a
PT Slab	n.a	n.a	n.a	n.a
All bridges	270	96.61	7957.79	100.00
Type of bridges	**Number**	**% by number**	**Length (m)**	**% by length**
Total Permanent bridges	157	58.15	4460.76	54.83
Total Temporary(semi-permanent) bridges	113	41.85	3497.03	45.16
Total No of bridges	**270**	**100.00**	**7957.79**	**99.99**

Source: Bridge Division, DoR , MoWHS, Thimphu.

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TABLE 7.4 NUMBER OF PEDESTRIAN BRIDGES CONSTRUCTED DURING IVTH FIVE YEAR PLAN BY DZONGKHAG AS OF 15TH SEPTEMBER 2010

Dzongkhag	Plan periods									
	IV	V	VI	VII	VIII	IX	X Till date	Total Constructed (I - X)	%(I - X)	Existing bridge as of 15th Sept. 2010
Bumthang	1	7	3	4	2	2	0	19	4.08	18
Chukha	3	5	1	3	4	4	0	20	4.29	13
Dagana	3	2	2	5	4	4	2	22	4.72	17
Gasa	0	0	2	2	2	1	0	7	1.50	5
Haa	3	6	1	4	2	0	0	16	3.43	13
Lhuentse	3	4	2	4	4	7	1	25	5.36	21
Mongar	9	5	2	5	6	6	1	34	7.30	27
Paro	3	8	3	2	2	2	0	20	4.29	19
Pemagatshel	5	9	2	4	6	3	1	30	6.44	23
Punakha	3	4	1	1	1	3	0	13	2.79	9
Samdrup Jongkhar	7	11	5	3	3	3	3	35	7.51	18
Samtse	9	15	2	1	4	2	1	34	7.30	27
Sarpang	7	8	5	0	5	3	1	29	6.22	23
Thimphu	0	1	3	3	0	3	2	12	2.58	10
Tashigang	7	12	2	3	7	8	1	40	8.58	29
Trashiyangtse	3	6	4	3	3	3	1	23	4.94	19
Trongsa	4	6	3	4	1	1	1	20	4.29	16
Tsirang	5	4	1	2	2	1	1	16	3.43	13
Wangdue	2	10	5	3	2	3	0	25	5.36	22
Zhemgang	1	5	4	4	5	6	1	26	5.58	20
Bhutan	**78**	**128**	**53**	**60**	**65**	**65**	**17**	**466**	**100.00**	**362**

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

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TABLE 7.5 NUMBER OF REGISTERED VEHICLES BY TYPE AND REGION, 2005 TO 2009

Region	Heavy	Medium	Light	Two-Wheeler	Taxi	Earth mover	Others	All Types
2005**	**4,352**	**..**	**15,374**	**7,138**	**2,050**	**509**	**491**	**29,914**
Thimphu	1,668	..	10,235	3,417	1,410	232	140	17,102
Gelephu	152	..	483	845	34	15	136	1,665
Phuntsholing	2,301	..	4,179	1,982	583	240	52	9,337
Samdrup Jongkhar	231	..	477	894	23	22	163	1,810
2006	**4,184**	**363**	**17,712**	**7,931**	**2,056**	**549**	**446**	**33,241**
Thimphu	1,729	7	11,773	3,499	1,452	273	234	18,967
Gelephu	159	5	537	859	39	8	35	1,642
Phuntsholing	2,061	351	4,875	2,056	538	262	69	10,212
Samdrup Jongkhar	235	0	527	1,517	27	6	108	2,420
2007	**4,494**	**520**	**19,792**	**7,464**	**2,218**	**633**	**582**	**35,703**
Thimphu	1,837	53	13,063	3,601	1,575	301	275	20,705
Gelephu	162	7	572	795	44	9	19	1,608
Phuntsholing	2,174	409	5,531	2,120	569	281	86	11,170
Samdrup Jongkhar	321	51	626	948	30	42	202	2,220
2008	**4,627**	**649**	**23,687**	**7,731**	**2,481**	**725**	**759**	**40,659**
Thimphu	1,867	89	15,242	3,714	1,748	316	393	23,369
Gelephu	163	11	671	812	46	12	53	1,768
Phuntsholing	2,273	498	6,985	2,242	656	354	111	13,119
Samdrup Jongkhar	324	51	789	963	31	43	202	2,403
2009	**5,745**	**863**	**29,189**	**8,438**	**3,032**	**1,118**	**915**	**49,300**
Thimphu	2,009	150	18,187	3,855	2,096	409	476	27,182
Gelephu	178	23	834	866	73	14	73	2,061
Phuntsholing	3,216	622	9,066	2,536	820	630	146	17,036
Samdrup Jongkhar	342	68	1,102	1,181	43	65	220	3,021

Notes: 1.Excludes vehicles of armed forces.
2."Earth Movers" include bull dozers, road rollers, pay loaders, excavators, cranes, etc.
3. "Others" include Power tailler and Tractors.
*4. ** For 2005 , medium category vehicles are included in the heavy category for all regions.*

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TABLE 7.6 NUMBER OF DRIVING LICENSES ISSUED BY REGION, AS ON 30th JUNE 2010

Region	No. of Licenses
Thimphu*	32,885
Phuentsholing	6,371
Gelephu	5,677
Samdrupjongkhar	4,466
Total	**49,399**

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

TABLE 7.7 NUMBERS OF PASSENGERS CARRIED & REVENUE EARNED BY DRUK AIR FLIGHTS BY AREA OF OPERATION, 2005 TO 2009

Area of operation	2005	2006	2007	2008	2009
Paro to Kolkata	6,933.0	7,359.0	7,305.0	8,557.0	7,956.0
Kolkata to Paro	6,242.0	6,190.0	6,470.0	6,932.0	7,452.0
Paro to Bangkok	13,642.0	15,642.0	17,996.0	20,700.0	21,786.0
Bangkok to Paro	13,265.0	15,608.0	17,656.0	20,508.0	21,159.0
Paro to Dhaka	n.a	136.0	642.0	910.0	1,514.0
Dhaka to Paro	n.a	108.0	899.0	966.0	1,383.0
Paro to Delhi	7,168.0	7,866.0	8,325.0	10,619.0	10,080.0
Delhi to Paro	7,222.0	7,782.0	8,180.0	9,620.0	9,738.0
Paro to Kathmandu	5,633.0	4,945.0	6,251.0	8,015.0	8,539.0
Kathmandu to Paro	5,805.0	4,801.0	6,378.0	8,192.0	8,750.0
Kathmandu to Delhi	4,333.0	7,432.0	9,281.0	2,277.0	2,017.0
Delhi to Kathmandu	2,531.0	3,059.0	6,727.0	1,530.0	1,073.0
Kolkata to Bangkok	9,602.0	10,934.0	6,849.0	4,735.0	1,640.0

(Contd..)

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TABLE 7.7 (cnotd..): NUMBERS OF PASSENGERS CARRIED & REVENUE EARNED BY DRUK AIR FLIGHTS BY AREA OF OPERATION, 2005 TO 2009

Area of operation	2005	2006	2007	2008	2009
Bangkok to Kolkata	8,798.0	10,750.0	7,414.0	5,033.0	1,568.0
Dhaka to Bangkok	n.a	123.0	2,666.0	2,352.0	2,689.0
Bangkok to Dhaka	n.a	91.0	1,759.0	2,020.0	2,375.0
Paro to Yangon	n.a	n.a	n.a	n.a	n.a
Yangon to Paro	n.a	n.a	n.a	n.a	n.a
Dhaka to Yangon	n.a	n.a	n.a	n.a	n.a
Yangon to Dhaka	n.a	n.a	n.a	n.a	n.a
Gaya to Bangkok	n.a	3,203.0	2,748.0	2,256.0	1,444.0
Bangkok to Gaya	n.a	2,954.0	2,776.0	2,546.0	1,372.0
Yangon to Bangkok	n.a	n.a	n.a	n.a	n.a
Bangkok to Yangon	n.a	n.a	n.a	n.a	n.a
Paro to Gaya	515.0	711.0	852.0	650.0	988.0
Gaya to Paro	510.0	443.0	537.0	687.0	891.0
kolkata to Yangon	n.a	n.a	n.a	n.a	n.a
Yangon to kolkata	n.a	n.a	n.a	n.a	n.a
Paro to Bagdora	n.a	n.a	n.a	n.a	1,294.0
Bagdora to Paro	n.a	n.a	n.a	n.a	1,264.0
Bagdora to Bangkok	n.a	n.a	n.a	n.a	649.0
Bangkok to Bagdora	n.a	n.a	n.a	n.a	463.0
Total passengers	**92,199.0**	**110,137.0**	**121,711.0**	**119,105.0**	**118,084.0**
Revenue (Nu.in millions)	**838.9**	**1,184.2**	**1,255.5**	**1,168.0**	**1,344.0***

Source: Druk Air Corporation Ltd., Paro.
*Note: * From 1 January to 31st December 2009*

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TABLE 7.8 NUMBER OF FLIGHTS MADE BY DRUK AIR BY AREA OF OPERATION, 2005 TO 2009

Area of operation	2005	2006	2007	2008	2009
Paro to Calcutta	266	267	239	199	175
Calcutta to Paro	268	265	240	199	172
Paro to Bangkok	264	394	376	376	369
Bangkok to Paro	266	390	375	384	371
Paro to Dhaka	n.a	18	87	89	106
Dhaka to Paro	n.a	18	83	79	105
Paro to Delhi	162	166	180	184	175
Delhi to Paro	162	161	185	185	180
Paro to Kathmandu	164	163	191	198	184
Kathmandu to Paro	165	164	188	186	183
Paro to Yangon	n.a	n.a	n.a	n.a	n.a
Yangon to Paro	n.a	n.a	n.a	n.a	n.a
Paro to Gaya	11	90	70	70	46
Gaya to Paro	11	94	72	75	46
Delhi to katmandu	160	155	178	160	132
katmandu to Delhi	148	154	171	158	134
Bangkok to kolkata	261	259	233	181	135
Kolkata to Bangkok	245	263	234	187	133
Gaya to Bangkok	n.a	93	69	70	46
Bangkok to Gaya	n.a	95	73	76	46
Dhaka to Yangon	n.a	n.a	n.a	n.a	n.a
Yangon to Dhaka	n.a	n.a	n.a	n.a	n.a

(Contd..)

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TABLE 7.8 (cnotd..): NUMBER OF FLIGHTS MADE BY DRUK AIR BY AREA OF OPERATION, 2005 TO 2009

Area of operation	2005	2006	2007	2008	2009
kolkata to Yangon	n.a	n.a	n.a	n.a	n.a
yangon to Kolkata	n.a	n.a	n.a	n.a	n.a
Dhaka to Bangkok	n.a	18	88	90	91
Bangkok to Dhaka	n.a	18	83	78	89
yangon to bangkok	n.a	n.a	n.a	n.a	n.a
Bangkok to Yangon	n.a	n.a	n.a	n.a	n.a
Gaya to Dhaka	n.a	n.a	14	n.a	n.a
Dhaka to Gaya	n.a	n.a	14	n.a	n.a
Paro to Bagdora	n.a	n.a	n.a	n.a	56
Bagdora to Paro	n.a	n.a	n.a	n.a	58
Bagdora to Bangkok	n.a	n.a	n.a	n.a	55
Bangkok to Bagdora	n.a	n.a	n.a	n.a	55
All sectors	**2,553**	**3,245**	**3,443**	**3,224**	**3,142**

Source: Druk Air Corporation Ltd., Paro.

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TABLE 7.9 TELEPHONE CONNECTION CAPACITY BY EXCHANGE, 2005 TO 2009

Exchange (Switch type)	2005	2006	2007	2008	2009
Bubja(DRMASS)	n.a	128	128	128	128
Bartsham(DRMASS)	n.a	64	64	64	64
Basochu(DRMASS)	n.a	55	55	55	128
Bngtar(DAMA)	n.a	4	n.a	n.a	n.a
Chumey(SAU)	n.a	256	256	256	256
Chargarey(DRMASS)	n.a	42	64	64	n.a
Changmari(DRMASS)	n.a	128	128	128	n.a
Chapcha(DRMASS)	n.a	64	64	64	64
Dechencholing(ELU)	720	720	720	720	720
Damji(DRMASS)	n.a	30	30	30	30
Dramtse(DRMASS)	n.a	64	64	64	64
Deothang(SAU)	n.a	512	512	348	256
Dagana(DRMASS)	n.a	128	128	128	128
Dagana(VoIP)	n.a	400	400	n.a*	na
Drujegang(DRMASS)	128	64	64	64	64
Dagapela(DRMASS)	n.a	64	64	64	64
Damphu(RLU)	992	n.a	n.a	n.a	n.a
Damphu(E10)	n.a	992	992	992	992
Damphu(corVAN)	n.a	n.a	900	900	900
Damthang(SAU)	n.a	256	256	256	256
Gepshing(DRMASS)	n.a	128	n.a	n.a	n.a
Gepshing(RLU)	n.a	n.a	508	380	380
Gelephu(LS)	1652	2164	2164	2148	1868
Gelephu(corDECT)	n.a	1000	324	325	324

(Contd..)

TABLE 7.9 (cnotd..): TELEPHONE CONNECTION CAPACITY BY EXCHANGE, 2005 TO 2009

Exchange (Switch type)	2005	2006	2007	2008	2009
Gedu(CDOT)	n.a	672	n.a	n.a	n.a
Gedu(SAU)	n.a	n.a	640	640	640
Gomtu(SAU)	n.a	384	384	384	384
Gasa(DRMASS)	n.a	128	128	128	128
HAA(DRMASS)	532	n.a	n.a	n.a	n.a
HAA(RLU)	n.a	732	732	732	732
Jakar(RLU)	892	892	892	892	892
Jomotsangkha(EPOST)	n.a	108	n.a	n.a	n.a
Jomotsangkha(VoIP)	n.a	n.a	108	104	104
Jengkha(DRMASS)	n.a	64	64	64	64
Khasadrapchu(SAU)	n.a	384	384	384	384
Khaling(DRMASS)	n.a	128	128	128	128
Kanglung(DRMASS)	n.a	n.a	n.a	n.a	n.a
Kanglung(RLU)	508	n.a	n.a	n.a	n.a
Kanglung(E10)	n.a	1008	1008	1008	1008
Kanglung(corVAN)	n.a	n.a	1550	1550	1550
Lhuentse(DRMASS)	123	127	n.a	n.a	n.a
Lhuntse(SAU)	n.a	n.a	256	256	256
Lobesa(DRMASS)	n.a	128	128	128	128
Laya(EPOST)	n.a	8	1	1	1
Lingshi(DAMA)	n.a	4	n.a	n.a	n.a
Lingshi(VoIP)	n.a	n.a	4	4	4
Lhamoi Zhingkha(DAMA)	n.a	4	n.a	n.a	n.a
Mongar(RLU)	892	892	892	892	892

(Contd..)

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TABLE 7.9 (contd.) TELEPHONE CONNECTION CAPACITY BY EXCHANGE, 2005 TO 2009

Exchange (Switch type)	2005	2006	2007	2008	2009
Mongar (corVAN)	n.a	n.a	900	900	900
Merak(EPOST)	n.a	8	1	1	1
Menjowong(EPOST)	n.a	8	1	1	1
Nganglam(DAMA)	n.a	4	n.a	n.a	n.a
Nganglam(SAU)	n.a	n.a	128	128	128
Pemagatshel(RLU)	504	504	504	504	384
Phontsholing(LS)	6,008	6,008	6,008	5,624	5,624
Phuntsholing(corDECT)	n.a	560	400	400	400
Padechu(DRMASS)	n.a	20	n.a	n.a	n.a
Pasakha(SAU)	n.a	640	384	384	384
Paro(LS)	2,680	3,192	3,192	3,192	3,192
Paro(corDECT)	n.a	1,000	650	650	650
Punakha(RLU)	632	632	632	632	632
Panbang(DAMA)	n.a	104	n.a	n.a	n.a
Panbang(VoIP)	n.a	n.a	8	8	
Rangjung(DRMASS)	n.a	128	128	128	128
Ramitey(DRMASS)	n.a	64	64	128	n.a
Simtokha(ELU)	720	720	720	720	720
Samdrupjongkhar(LS)	1,140	1,396	1,396	1,396	1,396
Samdrupjongkhar(corVAN)	n.a	n.a	850	850	850
Sinkhar Lauri(EPOST)	n.a	8	1	1	1
Sarpang(DRMASS)	256	n.a	n.a	n.a	n.a
Sarang(RLU)	n.a	892	892	892	508
Surey(DRMASS)	n.a	64	64	64	30
Sinchekha(SAU)	n.a	384	384	384	384
Samtse(LS)	1,788	1,788	1,788	1,772	1,772

(Contd..)

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TABLE 7.9 (contd.) TELEPHONE CONNECTION CAPACITY BY EXCHANGE, 2005 TO 2009

Exchange (Switch type)	2005	2006	2007	2008	2009
Samtse(corVAN)	n.a	n.a	550	550	550
Sibsu(SAU)	n.a	384	384	384	384
Satsam(SAU)	n.a	512	512	512	512
Sombekha(EPOST)	n.a	8	1	1	1
Sakten(DAMA)	n.a	4	n.a	n.a	n.a
Thimphu(LS/INTS)	18,032	17,376	18,416	18,416	18,416
Thimphu(corDECT)	1,000	4,000	n.a	n.a	n.a
Thimphu(corVAN)	n.a	n.a	800	649	800
Trongsa(LS)	892	892	892	892	892
Tshangkha(DRMASS)	n.a	64	80	80	80
Trongsa(corVAN)	n.a	4,000	650	650	650
Tashigang(LS)	1,404	1,756	1,756	1,756	384
Tshenkherla(DRMASS)	n.a	128	128	128	128
Trashiyangtse(DRMASS)	128	128	128	256	256
Tangmachu(DRMASS)	n.a	64	64	64	64
Tala(DRMASS)	n.a	64	64	64	n.a
Tashijong(DRCS)	n.a	5	5	n.a	n.a
Tshimasham(RLU)	676	764	764	764	764
Tshimasham(CorDECT)	n.a	1,000	250	250	250
VoIP	n.a	48	4	3	
Wangdue(RLU)	976	n.a	n.a	n.a	n.a
Wangdue(E10)	n.a	1,376	1,376	1,376	1,376
Wangdue(corVAN)	n.a		950	950	950
Wamrong(DRMASS)	n.a	128	128	128	128
Yusipang(DRMASS)	n.a	125	125	n.a	n.a
Yadi(DRMASS)	n.a	64	64	64	64

Contd.

TABLE 7.9 (contd.) TELEPHONE CONNECTION CAPACITY BY EXCHANGE, 2005 TO 2009

Exchange (Switch type)	2005	2006	2007	2008	2009
Yosel Tshe(DRMASS)	n.a	12	n.a	n.a	n.a
Zhemgang(RLU)	376	376	376	376	376
Zhemgang(corDECT)	1,000	1,000	284	225	284
Zhemgang(corVAN)	n.a	n.a	500	119	500
Total capacity	48,295	59,024	56,702	61,889	59,875

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

TABLE 7.10 NUMBER OF TELEPHONE TRUNK CIRCUITS, BHUTAN, JAN TILL DEC 2009

Sector	Type of connection	Existing circuits
Thimphu INTS-London (BT)	Bothway	19
Thimphu INTS-Singapore (ST)	Bothway	8
Thimphu INTS-Janpan (KDD)	Bothway	59
Thimphu INTS-Telco214(USA)	Bothway	120
Thimphu TLS-Intel.Gateway Switch	Bothway	119
Thimphu INTS-Nepal	Bothway	7
Thimphu INTS-Thailand	Bothway	59
Thimphu INTS-India	Bothway	360
Thimphu INTS-Phuentsholing	N/A	
Thimphu INTS-Wangdue Phodrang	Bothway	60
Thimphu INTS-Tashi Cell	Bothway	60
Thimphu TLS-Trongsa	OG	45
Thimphu TLS-Trongsa	IC	45
Thimphu TLS-Gelephu	OG	30
Thimphu TLS-Gelephu	IC	30
Thimphu TLS-Trashigang	N/A	N/A
Thimphu TLS-Trashigang	N/A	N/A

(Contd..)

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TABLE 7.10 (contd.) NUMBER OF TELEPHONE TRUNK CIRCUITS, BHUTAN, JAN TILL DEC 2009

Sector	Type of connection	Existing circuits
Thimphu TLS-Samdrup Jongkhar	N/A	N/A
Thimphu TLS-Samdrup Jongkhar	N/A	N/A
Thimphu TLS-Paro	Bothway	120
Thimphu TLS-Wangdue Phodrang	Bothway	91
Thimphu TLS-Punakha	N/A	N/A
Thimphu TLS-Decholing	N/A	N/A
Thimphu TLS - Basochu	N/A	N/A
Thimphu TLS - Kasa Dapchu	N/A	N/A
Thimphu TLS - Yoesepang	N/A	N/A
Thimphu TLS - Lobesa	N/A	N/A
Thimphu TLS - VoIP National	Bothway	30
Thimphu TLS - VoIP International	N/A	N/A
Thimphu TLS - Gasa	N/A	N/A
Thimphu TLS - Damjee (Gasa)	N/A	N/A
Thimphu TLS - Simtpkha	N/A	N/A
Thimphu TLS - DAMA	N/A	N/A
Thimphu TLS - DAMA	N/A	N/A
Thimphu TLS - Thimphu corVAN	Bothway	60
Thimphu TLS - Kanglung	Bothway	152
Thimphu TLS - Samtse	Bothway	59
Thimphu TLS - Damphu	Bothway	60
Thimphu TLS - Druknet	OG	300
Thimphu TLS - Phuentsholing	Bothway	243
Thimphu TLS - Druknet	Bothway	246
Trongsa - Jakar	N/A	N/A
Trongsa - Zhemgang	N/A	N/A
Trongsa - Tshangkha	N/A	N/A
Trongsa - Bubja	N/A	N/A
Trongsa-Chumey	N/A	N/A
Trongsa-Gelephu	OG	30
Trongsa-Gelephu	IC	30
Trongsa-S/Jongkhar	N/A	N/A
Trongsa-S/Jongkhar	N/A	N/A

Contd..

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TABLE 7.10 (contd.) NUMBER OF TELEPHONE TRUNK CIRCUITS, BHUTAN, JAN TILL DEC 2009

Sector	Type of connection	Existing circuits
Trongsa-DAMA	N/A	N/A
Trongsa-DAMA	N/A	N/A
Trongsa-Zemgang cor DECT	Bothway	30
Trongsa-Zemgang cor VAN	Bothway	30
Trongsa-Trongsa cor VAN	Bothway	60
Trongsa-Kanglung	Bothway	60
Tashigang-Mongar	N/A	N/A
Tashigang-Trashiyangtse	N/A	N/A
Tashigang-Yonphula	N/A	N/A
Tashigang-Khaling	N/A	N/A
Tashigang-Wamgrong	N/A	N/A
Tashigang-Tshengkherla	N/A	N/A
Tashigang-Rangjung	N/A	N/A
Tashigang-Dremetse	N/A	N/A
Tashigang-Bartsham	N/A	N/A
Tashigang-Kanglung	Bothway	90
Tashigang-Yadi	N/A	N/A
TashigangDAMA	N/A	N/A
TashigangDAMA	N/A	N/A
Mongar-Luntse	N/A	N/A
Mongar-Tangmachu	N/A	N/A
Mongar - Gelpoishing	N/A	N/A
Kanglung - Kanglung corVAN	Bothway	60
Kanglung - Mongar corVAN	Bothway	60
S/Jongkhar - Pemagatshel	N/A	N/A
S/Jongkhar - Deothang	N/A	N/A
S/Jongkhar - Kanglung	Bothway	60

(Contd..)

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TABLE 7.10 (contd.) NUMBER OF TELEPHONE TRUNK CIRCUITS, BHUTAN, JAN TILL DEC 2009

Sector	Type of connection	Existing circuits
S/Jongkhar - Tashigang	N/A	N/A
S/Jongkhar - DAMA	N/A	N/A
S/Jongkhar - DAMA	N/A	N/A
Jomoitshangkhar DAMA	N/A	N/A
Nanglam DAMA	N/A	N/A
Bangtar DAMA	N/A	N/A
Gelephu- DAMA	N/A	N/A
Gelephu - Sarpang	N/A	N/A
Gelephu - Tsirang	Bothway	60
Gelephu - Surey	N/A	N/A
Gelephu - Gelephu corDECT	Bothway	30
Gelephu - Kanglung E10	Bothway	60
Panbang DAMA	N/A	N/A
Tsirang - Dagana	N/A	N/A
Tsirang - Dagapela	N/A	N/A
Tsirang - Drukjegang	N/A	N/A
Tsirang - Tsirang corVAN	Bothway	60
Phuentsholing - Samtse	Bothway	58
Phuentsholing - Gedu	N/A	N/A
Phuentsholing - Pasakha	N/A	N/A
Phuentsholing - Remetey	N/A	N/A
Phuentsholing - Paro	Bothway	60
Phuentsholing - Phuentsholing corDECT	Bothway	60
Phuentsholing - Kolkata	OG	15
Phuentsholing - Kolkata	IC	15
Phuentsholing - Delhi	N/A	N/A

Contd..

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TABLE 7.10 (contd..): NUMBER OF TELEPHONE TRUNK CIRCUITS, BHUTAN, JAN TILL DEC 2009

Sector	Type of connection	Existing circuits
Paro - Tsimatsham	N/A	N/A
Paro - Haa	N/A	N/A
Paro - Chapcha	N/A	N/A
Paro - Haa Damthang	N/A	N/A
Paro - Haa Jengkhana	N/A	N/A
Paro - Paro corDECT	Bothway	60
Paro - Tsimasham corDECT	Bothway	10
Thimphu B-Mobile MSC -PSTN Thimphu	Bothway	337
Thimphu B-Mobile MSC (3G) -PSTN Thimphu	Bothway	330
Thimphu B-Mobile MSC -PSTN Intl gateway switch	Bothway	180
Thimphu B-Mobile MSC-PSTN Wangdue	Bothway	122
Samtse - DAMA	N/A	N/A
Samtse - DAMA	N/A	N/A
Samtse - Samtse corVAN	Bothway	61
Wangdue - Tsirang	Bothway	60
Wangdue - Kanglung	N/A	N/A
Wangdue - Wangdue corVAN	Bothway	60
Total trunk lines (National, International and DAMA)		4,530

Source: Bhutan Telecom Corporation Ltd., Thimphu.

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TABLE 7.11 NUMBER OF TRUNK LINES, CONNECTION CAPACITIES & SETS IN USE, 2005 TO 2009

Details	2005	2006	2007	2008	2009
Trunk lines	3,102	3,140	3,358	4,018	3,868
Satellite Communications	162	232	205	402	662
International Lines	96	168	205	402	662
Domestic (DAMA)	66	64	n.a	n.a	n.a
Digital Microwave	480	480	480	480	480
Digital Radio Concentrator System	15	15	15	15	n.a
DRMASS	120	120	120	120	120
VOIP	56	56	30	3	n.a
SDH	7,560	11,340	11,340	11,340	11,340
Connection capacity	48,295	59,024	56,702	55,750	54,482
Telephone sets in use	32,709	31,526	30,279	27,937	26,384
Cellular Mobile Subscribers	37,842	82,078	148,179	178,346	262,052

Source: Bhutan Telecom Corporation Ltd., Thimphu.

TABLE 7.12 NUMBER OF TELEPHONE TRUNK CALLS BY TYPE, 2005 TO 2009

Type of call	2005	2006	2007	2008	2009
Domestic calls	22,692,205	25,784,563	24,421,096	19,324,867	17,462,920
International calls	1,877,931	1,949,680	1,899,478	1,266,838	979,362
India	1,613,460	1,686,267	1,660,127	1,247,812	819,727
Other	264,471	263,413	239,351	19,026	159,635
All calls	**24,570,136**	**27,734,243**	**26,320,574**	**20,591,705**	**18,442,282**

Source: Bhutan Telecom Corporation Ltd., Thimphu.

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TABLE 7.13 TELECOMMUNICATION TRAFFIC IN MINUTES AND REVENUE EARNINGS, BHUTAN, 2005 TO 2009

Type of calls	2005	2006	2007	2008	2009
Domestic calls (minutes)	64,676,091	70,995,238	50,325,711	37,002,667	32,928,434
International calls (minutes)	6,139,579	5,842,238	5,545,720	3,758,837	3,185,457
India	5,163,205	4,913,824	4,742,024	3,699,662	2,651,409
Other countries	976,374	928,414	803,696	59,176	534,048
Total calls (Domestic + International)	**70,815,670**	**76,837,476**	**55,871,431**	**40,761,504**	**36,113,891**
Revenue earnings (Nu. in Million)	**709**	**877**	**1,158**	**1,217**	**1,314**

Source:Bhutan Telecom Corp. Ltd, Thimphu.

TABLE 7.14 NUMBER OF COMMUNICATION FACILITIES, 2005 TO 2009

Postal infrastructure	2005	2006	2007	2008	2009
General Post Offices	2	2	2	2	2
Post Offices	34	41	41	41	41
Branch Post Offices	n.a	n.a	n.a	n.a	n.a
Agency Post Offices	7	0	0	0	0
Community Mail Offices	54	47	47	47	32
Telegraph or Fax Offices	n.a	35	37	37	37
Wireless Stations(a)	n.a	n.a	n.a	n.a	n.a
Total	**97**	**125**	**127**	**127**	**112**

Note: WT.Stations are merged with Telecommunication Division since july 1995 (a) Includes 3 stations installed at New Delhi, Dhaka and Kalimpong.
Fax offices are included in post offices
Source:Bhutan Postal Corp. Ltd, Thimphu.

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TABLE 7.15 VOLUME OF POSTAL MAIL TRAFFIC BY DESTINATION, 2005 TO 2009

Type of service	2005	2006	2007	2008	2009
Domestic	852,314	720,830	823,970	925,425	824,163
International	722,753	768,641	781,143	742,495	549,477
Dispatch	139,660	170,161	138,414	115,643	115,643
Receipt	583,093	598,480	642,729	626,852	433,834
Total mail items	**1,575,067**	**1,489,471**	**1,605,113**	**1,667,920**	**1,373,640**

Source:Bhutan Postal Corp. Ltd, Thimphu.

TABLE 7.16 VOLUME OF MAIL, BY TYPE OF ARTICLE AND DESTINATION, 2009

Type of mail	Actual Volume Total Domestic	International		
		Total	Inward	Outward
Letter-post items				
Ordinary letter	594,295	411,909	102,330	514,239
Registered items	54,073	9,377	9,110	18,487
Parcels	1,742	1,852	333	2,185
Express mail service (EMS)	10,536	6,364	8,516	14,880
Post Overnight Courier (POC)		3,671	4,525	8,196
Electronic mail				
Local Urgent Mail (LUM)	138,775	n.a	n.a	n.a
Facsimile message	24,742	661	600	1,261
All mail items	**824,163**	**433,834**	**115,643**	**549,477**

Source:Bhutan Postal Corp. Ltd, Thimphu.

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TABLE 7.17 NUMBER AND VALUE OF MONEY ORDER BY TYPE, BHUTAN, 2005 TO 2009

Type	2005	2006	2007	2008	2009
Total money orders					
Number of orders ('000)	41,971	43,927	69,403	76,139	102,119
Amount of orders ('000 Nu.)	89,481,948	115,114,821	160,583,947	174,737,274	237,085,484
Domestic money order					
Number of orders ('000)	28,986.0	34,387	62,033	71,201	98,809
Amount of orders ('000 Nu.)	62,912,814	91,250,905.9	139,602,943	160,547,857	227,566,408
International money order					
Number of orders ('000)	11,933	9,129	7,331	4,773	3,285
Amount of orders ('000 Nu.)	26,219,504.4	23,739,977	20,518,826	13,717,519	9,450,301
Receipts					
Number of orders ('000)	1,052	411	39	165	25
Amount of orders ('000 Nu.)	349,629.6	123,938.1	462,178	471,898	68,775

Source:Bhutan Postal Corp. Ltd, Thimphu.

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CHAPTER 8
ENERGY

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

The Chhukha Hydro power with the installed capacity of 336 MW, the Kurichu Hydro power with 60 MW and Basachu Hydro Power with 24 MW generated 1767.70 MU, 375.92 MU and 322.01 MU respectively in 2008/09. With the commissioning of mega "Tala Hydro Power Project" with the installed capacity of 1020 MW, there is a substantial increase in the energy generation of the country. During the year 2007/08 it has generated 4056.13 Million Unit of electricity. In 2008/09, the total electricity generation was 4473.07 Million Unit (MU).Domestic consumption of electricity has been marginal but should increase with the ongoing emphasis on Rural Electrification Programs. Other forms of energy such as the solar, wind and biomass energy are being explored. Number of villages electrified increased from 1934 in 2007/08 to 1981 villages in 2008/09. This trend is a positive indication of the prospective reduction of dependence on fuel wood as a source of energy, in the near future.

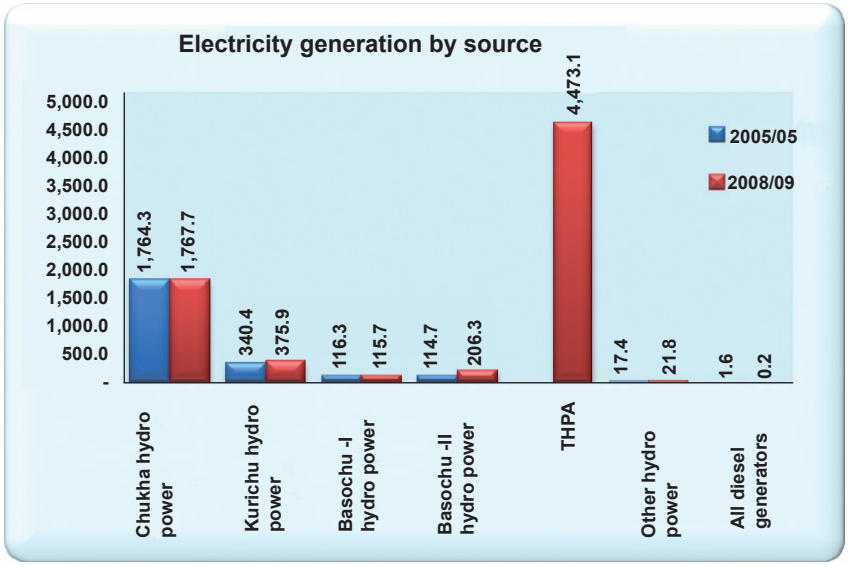

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TABLE 8.1 ELECTRICITY GENERATING STATIONS AND THEIR CAPACITIES, BHUTAN, FY 2007/08 & 2008/09

Generating stations (Dzongkhag)	2007/08				2008/09			
	Installed capacity (No. x MW)	Generating capacity (MW)	Peak generation (MW)	Energy genera-tion (MU)	Installed capacity (No. x MW)	Generating capacity (MW)	Peak generation (MW)	Energy generation (MU)
Hydro stations (a)								
Chukha	4 x 84.000	360.000	360.000	1774.374	4 x 84.000	360.000	360.000	1767.703
Chumey (Bumthang)	3 x 0.500	1.080	1.320	3.945	3 x 0.500	1.080	1.360	4.320
Gidakom (Thimphu)	5 x 0.250	0.816	0.890	5.645	5 x 0.250	0.816	0.965	5.334
Jushina (Thimphu)	4 x 0.090	0.270	0.240	1.238	4 x 0.090	0.270	0.246	1.435
Kurichu (Mongar)	4 x 15.000	60.000	60.000	379.108	4 x 15.000	60.000	80.000	375.915
Basochu..I (W/phodrang)	2 x 12.000	24.000	24.000	115.589	2 x 12.000	24.000	24.000	115.715
Basochu..II (W/phodrang)	2 x 20.000	40.000	40.000	210.566	2 x 20.000	40.000	40.000	206.292
THPA (Chukha)	6 x 170.000	1020.000	1122.000	4056.129	6 x 170.000	1020.000	1122.000	4473.072
Rangjung (Tashigang)	2 x 1.100	2.200	2.140	8.213	2 x 1.100	2.200	1.020	5.917
Chenari (Tashigang)	3 x 0.250	0.500	0.000	0.000	3 x 0.250	0.500	0.000	0.000
Khaling (Tashigang)	3 x 0.000	**Decommissioned due to flood**			3 x 0.000	**Decommissioned due to flood**		
Khalanzi (Mongar)	3 x 0.130	0.260	0.210	0.434	3 x 0.130	0.260	0.262	0.445
Wangdue	3 x 0.100	0.200	0.09	0.517	3 x 0.100	0.200	0.090	0.492
Micro hydels								
Lhuentse (Lhuentse)	2 x 0.060	0.080	0.05	0.084	2 x 0.060	0.080	0.050	0.114

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TABLE 8.1 (contd.) ELECTRICITY GENERATING STATIONS AND THEIR CAPACITIES, BHUTAN, FY 2007/08 & 2008/09

Generating stations (Dzongkhag)	2007/08				2008/09			
	Installed capacity (No. x MW)	Generating capacity (MW)	Peak generation (MW)	Energy genera-tion (MU)	Installed capacity (No. x MW)	Generating capacity (MW)	Peak generation (MW)	Energy generation (MU)
Rukubji (W/phodrang)	1 x 0.040	0.040	0.03	0.068	1 x 0.040	0.040	0.022	0.043
Tangsibi (Trongsa)	1 x 0.030	0.030	0.02	0.039	1 x 0.030	0.030	0.018	0.046
Trongsa (Trongsa)	1 x 0.050	0.050	0.04	0.128	1 x 0.050	0.050	0.040	0.096
Bubja (Trongsa)	1 x 0.030	0.030	0.03	0.139	1 x 0.030	0.030	0.028	0.145
Tamshing (Bjakar)	1 x 0.030	0.030	-	0.075	1 x 0.030	0.030	-	0.085
Ura (Bjakar)	1 x 0.050	0.050	-	0.181	1 x 0.050	0.050	-	0.149
Yadi (Mongar)	1 x 0.000	**Decommissioned due to grid supply**			1 x 0.000	**Decommissioned due to grid supply**		
Kekhar (Zhemgang)	1 x 0.020	0.020	-	0.025	1 x 0.020	0.020	-	0.026
Surey (Sarpang)	1 x 0.070	0.070	-	0.010	1 x 0.000	Dicommissioned		-
Damphu (Tsirang)	2 x 0.100	0.200	0.150	0.918	2 x 0.100	0.200	0.119	0.744
Tingtibi (Zhemgang)	2 x 0.100	0.200	0.120	0.118	2 x 0.100	0.200	0.120	0.118
Dagana (Dagana)	2 x 0.100	0.200	0.160	0.828	2 x 0.100	0.200	0.150	0.857
Lingzhi (Thimphu)	1 x 0.008	0.008	-	-	1 x 0.008	0.008	-	-
Rongchu (Lhuentse)	2 x 0.100	0.200	0.180	1.197	2 x 0.100	0.200	0.210	0.634
Chendebji	1 x 0.070	0.070	-	0.495	1 x 0.070	0.070	-	0.572
Sengor (Mongar)	1 x 0.100	0.100	-	0.318	1 x 0.100	0.100	0.03	0.206

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TABLE 8.1 (contd.) ELECTRICITY GENERATING STATIONS AND THEIR CAPACITIES, BHUTAN, FY 2007/08 & 2008/09

Generating stations (Dzongkhag)	2007/08				2008/09			
	No of Machines	Generating capacity (MW)	Peak generation (MW)	Energy generation (MU)	No of Machines	Generating capacity (MW)	Peak generation (MW)	Energy generation (MU)
Diesel generation stations								
Thimphu	7	-	-	0.003	7	-	-	0.010
Paro	1	-	-	0.000	1	-	-	0.000
Phuentsholing	3	0.000	-	0.286	3	0.000	-	0.016
Damphu	3	-	-	0.099	3	-	-	0.039
Trongsa	2	-	-	0.237	2	-	-	0.021
Gelephu	2	0.692	-		2	0.692	-	-
Sarpang	2	0.505	-	0.001	2	0.505	-	0.000
Kalikhola	2	0.000	-	-	2	0.000	-	-
Zhemgang	3	-	-	0.003	3	-	-	0.020
Dagana	2	-	-	0.006	2	-	-	0.006
Tashigang	4	-	-	0.000	4	-	-	0.000
Bjakar	4	0.806	-	1.172	4	0.806	-	0.053
Mongar	1	-	-	0.001	1	-	-	0.000
Samdrup Jongkhar	2	-	-	0.000	2	-	-	0.000

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TABLE 8.1 (contd.) ELECTRICITY GENERATING STATIONS AND THEIR CAPACITIES, BHUTAN, FY 2007/08 & 2008/09

Generating stations (Dzongkhag)	2007/08				2008/09			
	Installed capacity (No. x MW)	Generating capacity (MW)	Peak generation (MW)	Energy generation (MU)	Installed capacity (No. x MW)	Generating capacity (MW)	Peak generation (MW)	Energy generation (MU)
Trashiyangtse	1	-	-	0.006	1	-	-	0.001
Pemagatshel	1	-	-	0.002	1	-	-	0.004
Samtse	1	-	-	0.000	1	-	-	0.000
Other diesel stations								
Penden Cement Authority Ltd.	2	1.800	-	0.002	2	1.800	-	0.096
Bhutan Board Products Ltd.	2	0.458	-	-	2	0.458	-	-
Chukha Hydro Power Corp.	4	1.250	-	-	4	1.250	-	-
Bhutan Carbide & Chemical Ltd.	3	0.338	-	0.005	3	0.338	-	0.005
Bhutan Ferro Alloys Ltd.	2	0.684	-	0.148	2	0.684	-	0.067
Kurichu Project Authority	3	1.276	-	-	3	1.276	-	0.005
Basochu Project Authority	1	0.117	-	0.000	1	0.117	-	0.000
Tala Hydroelectric Project Authority	1	2.250	-	-	1	2.250	-	-
S.D.Eastern Bhutan Ferro Silicon Pvt.Ltd.	2	0.225	-	0.002	2	0.225	-	0.010

Source:Department of Energy, MoEA, Thimphu

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TABLE 8.2 TOTAL ELECTRICITY GENERATION AND SUPPLY, BHUTAN, 2004/05 TO 2008/09

Details	2004/05	2005/06	2006/07	2007/08	2008/09
Installed capacity (MW)	**477.82**	**477.26**	**1,497.36**	**1,497.36**	**1,497.29**
Chukha hydro power	336.00	336.00	336.00	336.00	336.00
Kurichu hydro power	60.00	60.00	60.00	60.00	60.00
Basochu - I hydro power	24.00	24.00	24.00	24.00	24.00
Basochu - II hydro power	40.00	40.00	40.00	40.00	40.00
THPA	-	-	1020.00	1,020.00	1,020.00
Other hydro power	8.63	8.07	8.17	8.17	8.10
All diesel generators	9.19	9.19	9.19	9.19	9.19
Electricity generation (MU)	**2,354.70**	**2,647.72**	**4,520.25**	**6,564.19**	**6,960.64**
Chukha hydro power	1764.34	1931.91	1830.42	1,774.37	1,767.70
Kurichu hydro power	340.43	365.62	374.45	379.11	375.92
Basochu - I hydro power	116.31	117.83	110.73	115.59	115.72
Basochu - II hydro power	114.68	213.84	203.52	210.57	206.29
THPA			1979.62	4,056.13	4,473.07
Other hydro power	17.39	16.65	19.83	26.61	21.78
All diesel generators	1.55	1.87	1.68	1.82	0.17
Exports (MU)	1623.66	1943.43	3643.71	5,429.12	5,609.37
Imports (MU)	21.04	34.35	11.06	7.25	16.72
Total energy requirement (MU)	752.34	738.30	887.76	1,140.49	1,368.17
Total energy sales (MU)	622.16	620.89	766.72	989.80	1,202.71
Energy losses (MU)	130.18	117.41	121.05	150.69	165.47
Percentage losses (%)	17.00	16.00	14.00	13.00	12.00
Peak system demand (MW)	120.00	128.00	157.00	194.00	211.00
Length of HT lines (33/11 KV)					
Overhead lines (km)	1895.54	2084.34	2404.32	2,399.98	73,671.81
Underground lines (km)	40.4	43.03	49.76	57.53	60.79
Length of LT lines					
Overhead lines (km)	2134.24	2272.49	3080.50	3,273.97	3,570.93
Underground lines (km)	70.37	229.44	194.62	165.77	173.30

Source:Department of Energy, MoEA, Thimphu

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TABLE 8.3 MAJOR TRANSMISSION LINES FOR EVACUATING HYDRO POWER FROM CHHUKHA POWER PLANT, 2008 & 2009

Stations	2008				2009			
	400kv Line (Km)	220 KV line(Km)	132 KV line(Km)	66 KV line (Km)	400kv Line (Km)	220 KV line(Km)	132 KV line(Km)	66 KV line (Km)
Tala- Khogla	24.615 (D/C)				24.615 (D/C)			
Tala- Malbasse - Pugli	49.528 (D/C)				49.528 (D/C)			
Chukha - Birpara	-	71.280	-	-	-	71.280	-	-
Chukha - Singhigoan	-	33.320	-	-	-	33.320	-	-
Chukha - Simtokha	-	54.367	-	-	-	54.367	-	-
Indian Border - Singhigaon	-	2.500	-	-	-	2.500	-	-
Rurichu - Simtokha	-	36.430	-	-	-	36.430	-	-
Rurichu - Tsirang	-	-	-	-	-	47.541	-	-
Gelephug - Indian border	-	-	0.300	-	-	-	0.300	-
Gyleposhing - kilikhar	-	-	10.214	-	-	-	10.214	-
Kilikhar - Kanglung	-	-	29.807	-	-	-	29.807	-
Kilikhar - Lhuentse	-	-	43.100	-	-	-	43.100	-
Nangkor - Deothang	-	-	23.668	-	-	-	23.668	-
Gyleposhing - Nangkor	-	-	33.700	-	-	-	33.700	-
Nangkor - Nganglam	-	-	34.300	-	-	-	34.300	-
Nganglam - Tingtibi	-	-	83.200	-	-	-	83.200	-
Tingtibi - Gelephug	-	-	46.000	-	-	-	46.000	-
Deothang - Mothanga	-	-	-	-	-	-	42.855	-
Mothanga - Indian Border	-	-	-	-	-	-	10.600	-

(Contd..)

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TABLE 8.3 (contd) MAJOR TRANSMISSION LINES FOR EVACUATING HYDRO POWER FROM CHHUKHA POWER PLANT, 2008 & 2009

Stations	2008				2009			
	400kv Line (Km)	220 KV line(Km)	132 KV line(Km)	66 KV line (Km)	400kv Line (Km)	220 KV line(Km)	132 KV line(Km)	66 KV line (Km)
Tingtibi - Yurmoo	-	-	-	-	-	-	32.628	-
Chukha - Gedu	-	-	-	20.100	-	-	-	20.100
Gedu - Phuntsholing	-	-	-	17.700	-	-	-	17.700
Chukha - Confluence	-	-	-	36.700	-	-	-	36.700
Confluence - Simtokha	-	-	-	18.300	-	-	-	18.300
Confluence - Haa	-	-	-	33.522	-	-	-	33.522
Simtokha - Dechenchholing				11.900			-	11.900
Confluence - Paro	-	-	-	24.022	-	-	-	24.022
Simtokha - W/phodrang	-	-	-	26.023	-	-	-	26.023
Lobeysa - Basochhu	-	-	-	23.023	-	-	-	23.023
Phuntsholing - Gomtu	-	-	-	27.002	-	-	-	27.002
Phuntsholing - Singhigoan	-	-	-	8.380	-	-	-	8.380
Phuntsholing - Birpara	-	-	-	Redundant	-	-	-	Redundant
Khasadrapchu - Jemina	-	-	-	5.960	-	-	-	5.960
Hebisa - Rurichu	-	-	-	3.080	-	-	-	3.080
Tie- Line-Watsa	-	-	-	0.500	-	-	-	0.500
Total	**74.143 (D/C)**	**71.28(D/C)::126.617 (S/C)**	**304.289**	**256.212**	**74.143 (D/C)**	**71.28(D/C)::126.617 (S/C)**	**390.372**	**256.212**

Note: D/C stands for double circuit and S/C for single circuit
Source:Department of Energy, MoEA, Thimphu

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TABLE 8.4 DETAILS OF DOMESTIC ELECTRICAL ENERGY CONSUMPTION, 2004/05 TO 2008/09

Details	2005/06	2006/07	2007/08	2008/09
Towns electrified (numbers)	68	71	71	71
Villages electrified (numbers)	1318	1761	1934	1981
Consumers ('000)	64.3	74.8	81.2	89.1
Sales of energy (million Nu.)	620.9	766.7	989.8	1202.7
Per capita energy consumption (Units)	1147.5	1380.2	1773.0	2038.8

Note: The per capita Energy consumption has increased from 2002/03 partly because of change in format which started including generation of CHPC, BHPC and KHPC.
Per capita energy consumption for 2007/08 is based on population of 6,71,083
Source:Department of Energy, MoEA, Thimphu

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TABLE 8.5 MONTHLY REVENUE FROM SALE OF ENERGY FROM CHHUKHA HYDROPOWER, 2006 TO 2009

Month	2006			2007			2008			2009		
	Export	Internal	Total	Export	Internal	Total	Export	Internal	Total	Export	Internal	Total
January	53.82	17.33	**71.15**	113.29	6.49	**119.78**	97.18	7.38	**104.56**	112.47	7.17	**119.64**
February	31.87	15.17	**47.03**	99.15	5.74	**104.89**	71.50	6.71	**78.22**	79.89	6.05	**85.94**
March	26.09	16.57	**42.66**	142.07	6.29	**148.36**	87.55	6.14	**93.69**	83.01	7.02	**90.04**
April	97.63	14.56	**112.19**	206.94	4.31	**211.25**	156.10	5.05	**161.15**	151.47	6.31	**157.77**
May	249.11	15.16	**264.27**	257.95	3.82	**261.77**	201.72	5.20	**206.92**	224.78	5.80	**230.58**
June	430.02	14.63	**444.65**	368.99	3.74	**372.73**	515.68	5.28	**520.96**	392.15	5.72	**397.87**
July	513.48	15.99	**529.47**	542.25	3.99	**546.24**	580.67	5.32	**585.99**	575.94	6.31	**582.25**
August	585.61	3.29	**588.90**	590.46	3.89	**594.35**	590.57	4.30	**594.87**	576.81	6.57	**583.38**
September	578.57	3.75	**582.33**	576.65	3.85	**580.50**	554.57	5.66	**560.24**	546.64	6.82	**553.45**
October	479.56	4.65	**484.20**	469.03	4.40	**473.43**	460.82	6.27	**467.09**	504.96	6.96	**511.92**
November	250.94	6.11	**257.05**	234.06	5.55	**239.61**	248.22	6.89	**255.11**	261.07	8.06	**269.13**
December	165.99	6.22	**172.20**	148.30	6.65	**154.95**	159.89	7.18	**167.07**	157.43	9.19	**166.63**
Total	3462.67	133.42	3596.09	3749.14	58.72	3807.86	3724.467	71.39	3795.86	3666.62	81.98	3748.60

Source:Department of Energy, MoEA, Thimphu

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TABLE 8.6 CONSUMPTION OF ELECTRICITY BY TYPE OF CONSUMER, 2004/05 TO 2008/09

Type of consumer	2004/05	2005/06	2006/07	2007/08	2008/09
Total consumption (MU)	**618.55**	**612.59**	**764.07**	**989.80**	**1,202.71**
Domestic	90.58	97.51	114.08	127.76	137.10
Commercial & Government Offices	52.51	52.89	65.95	70.09	80.54
Industries	415.08	404.15	497.07	680.42	869.58
Bulk supply	59.32	56.80	84.71	109.49	112.00
Public lighting	1.05	1.25	2.26	2.04	3.48
Consumption in percentage	**100**	**100**	**100**	**100**	**100**
Domestic	14.65	15.92	14.93	12.91	11.40
Commercial & Government Offices	8.49	8.63	8.63	7.08	6.70
Industries	67.11	65.97	65.06	68.74	72.30
Bulk supply	9.59	9.27	11.09	11.06	9.31
Public lighting	0.17	0.20	0.30	0.21	0.29

Source:Department of Energy, MoEA, Thimphu

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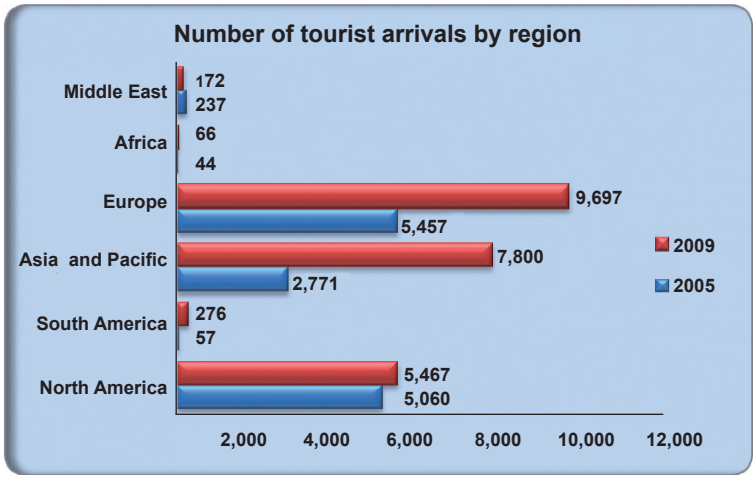
CHAPTER 9
TOURISM

The tourism industry in Bhutan began in 1974. The government agency, erstwhile Bhutan Tourism Corporation, controlled tourism until its privatization in 1991. In 2008 there were 475 licensed tour operators. The potential as far as foreign exchange earnings are concerned is very high. The revenue generation from the tourism sector has increased from over US$ 2 million in the late 1980's to over US$ 38 million in 2008.

The 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 2009 there were 23,480 tourist arrivals compared to 27,636 in 2008 which has decreased by 4,156 mainly due to Global recession and H1N1 scare restricted travel and tourists around the world spent very less time holidaying. Moreover, the 2008 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.



Following similar trend from the previous years, tourist arrivals from the European region dominated in 2009. Country wise, the highest number of tourist came from the United States of America accounting to 20.4% of the total arrivals in 2009, followed by Japan 13.4%, United Kingdom 8.4% and Germany 6.8%.

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 Spring (February-April) and Autumn (August-October) season."Culture and Nature" has always been the Unique Selling Proposition (USP) for the tourism industry of Bhutan.

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TABLE 9.1 ANNUAL TOURIST ARRIVALS BY REGION/CONTINENT, BHUTAN, 2005 TO 2009

Country	2005	2006	2007	2008	2009
Africa	**44**	**47**	**66**	**77**	**66**
Algeria	0	0	1	0	0
Egypt	0	0	1	0	18
Kenya	0	0	0	1	2
Liberia	0	0	0	1	0
Mauritius	0	0	1	3	5
Morocco	0	0	0	0	4
Namibia	0	0	0	5	0
Somalia	0	0	0	1	0
South Africa	44	47	62	65	32
Swazi	0	0	0	1	4
Tunisia	0	0	0	0	1
Uganda	0	0	1	0	0
Asia & Pacific	**2,771**	**4,264**	**5,257**	**7,514**	**7,800**
Australia	458	774	1181	1524	970
Bangladesh	0	0	0	1	0
Burma	0	0	0	5	5
Cambodia	0	0	3	1	2
China	234	362	504	1069	1143
Chinese – Macau	0	0	0	0	1
Fiji	0	0	1	0	0
Indonesia	0	0	46	36	98
Japan	1556	1815	2008	2743	3136
Kazakistan	0	0	0	1	5
Malaysia	72	49	94	221	367
Mongolia	0	0	1	0	0
Nepal	16	25	31	78	41
New Zealand	76	116	127	180	122
North Korea	..	..	..	43	0
Pakistan	0	0	1	1	5

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TABLE 9.1 (contd.) ANNUAL TOURIST ARRIVALS BY REGION/ CONTINENT, BHUTAN, 2005 TO 2009

Country	2005	2006	2007	2008	2009
Phillipines	21	72	42	72	59
Singapore	149	180	350	667	708
South Korea	..	..	..	97	49
Sri Lanka	0	0	4	26	6
Taiwan	10	35	132	114	83
Thailand	96	776	707	627	975
Uzbekistan	0	0	0	1	0
Vietnam	0	0	25	7	25
Europe	**5,457**	**7,031**	**8,777**	**11,698**	**9,697**
Andorra	0	0	0	0	3
Austria	319	484	443	472	420
Belarus	0	0	0	2	2
Belgium	134	220	291	432	364
Bosnia	0	0	0	0	1
Bulgaria	0	0	2	13	12
Crotia	0	0	0	8	4
Cypriot	0	0	0	6	5
Czech	29	49	71	65	77
Denmark	56	85	170	127	153
Estonia	0	0	37	54	14
Finland	21	35	76	191	161
France	532	708	738	1402	1189
Germany	1042	1074	1456	1717	1587
Greece	39	42	29	45	107
Hungary	0	0	112	54	49
Iceland	0	0	7	13	0
Ireland	31	51	56	98	59
Italy	529	648	614	751	759
Latvia	0	0	24	9	3

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TABLE 9.1 (contd.) ANNUAL TOURIST ARRIVALS BY REGION/CONTINENT, BHUTAN, 2005 TO 2009

Country	2005	2006	2007	2008	2009
Lithuania	0	0	9	32	4
Luxembourg	9	8	24	14	16
Netherlands	329	389	497	915	780
Norway	58	104	116	109	92
Poland	52	133	252	233	184
Portugal	45	64	208	91	116
Russia	87	125	204	245	270
Romania	0	0	3	12	19
Slovakia	0	0	18	55	53
Slovenia	0	0	21	63	30
Spain	185	281	444	803	485
Sweden	84	103	166	177	88
Switzerland	363	427	396	597	543
Turkey	49	51	94	91	51
Ukraine	0	0	5	44	28
United Kingdom	1464	1950	2193	2758	1968
Yugoslavia	0	0	1	0	1
Middle East	**237**	**440**	**169**	**107**	**172**
Israel	98	46	152	78	159
Others	139	394	17	29	13
North America	**5,060**	**5,466**	**6,488**	**7,931**	**5,467**
Canada	296	375	588	852	556

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TABLE 9.1 (contd.) ANNUAL TOURIST ARRIVALS BY REGION/CONTINENT, BHUTAN, 2005 TO 2009

Country	2005	2006	2007	2008	2009
Mexico	83	73	127	138	125
USA	4681	5018	5773	6941	4786
South America	**57**	**94**	**165**	**309**	**276**
Argentina	13	39	43	21	59
Brazil	44	55	79	249	178
Belize	0	0	2	0	0
Chile	0	0	5	15	8
Colombia	0	0	11	5	14
Costa Rica	0	0	1	0	0
Cuba	0	0	1	1	0
Ecuador	0	0	1	0	0
Guatemala	0	0	0	0	2
Hondurus	0	0	0	1	0
Peru	0	0	0	7	6
Uruguay	0	0	0	0	1
Venezuela	0	0	22	10	8
Total arrivals	**13,626**	**17,342**	**21,094**	**27,636**	**23,480**
Trekkers	613	766	903	1,210	2,404
Cultural	13,013	16576	20,191	26,426	21,076

Source: Tourism Council of Bhutan, Thimphu.

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TABLE 9.2 TOURIST ARRIVALS BY COUNTRY OF RESIDENCE AND REVENUE RECEIPTS, BHUTAN, 2005 TO 2009

Region	2005	2006	2007	2008	2009
North America	5,060	5,466	6,488	7,931	5,467
South America	57	94	165	309	276
Asia and Pacific	2,771	4,264	5,429	7,514	7,800
Europe	5,457	7,031	8,777	11,698	9,697
Africa	44	47	66	77	66
Middle East	237	440	169	107	174
All regions (persons)	**13,626**	**17,342**	**21,094**	**27,636**	**23,480**
Tourism revenue receipts					
Ngultrums (million)	821.00	1,083.60	1,234.30	1,689.49	1,402.72
Or					
US Dollars (million)	18.54	23.92	29.85	38.83	31.88

Source: Tourism Council of Bhutan, Thimphu.

TABLE 9.3 NUMBER OF TOURIST ARRIVALS BY SEASON AND MONTH, BHUTAN, 2005 TO 2009

Season & Month	2005	2006	2007	2008	2009
Winter	**2,400**	**3,350**	**4,265**	**5,848**	**4,291**
November	1,443	2084	2,733	4,126	2,607
December	625	854	1,091	1,190	1,017
January	332	412	441	532	667
Spring	**4,261**	**5,257**	**6,019**	**7,996**	**7,258**
February	632	532	814	1311	811
March	2,164	1,381	2,539	3512	2184
April	1,465	3,344	2,666	3173	4263
Summer	1,289	1,875	2,213	3,816	3,365
May	700	999	1,045	1862	1743
June	315	422	580	869	764
July	274	454	588	1085	858
Autumn	**5,676**	**6,860**	**8,597**	**9,976**	**8,566**
August	576	896	1,133	1386	1220
September	1,688	2,187	2,952	2428	3020
October	3,412	3,777	4,512	6162	4326
Total Arrival	**13,626**	**17,342**	**21,094**	**27,636**	**23,480**

Source: Tourism Council of Bhutan, Thimphu.

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TABLE 9.4 NUMBER OF TOURIST ARRIVALS BY PURPOSE OF VISIT, BHUTAN, 2005 TO 2009

Purpose	2005	2006	2007	2008	2009
Tour, holidays & recreation	13,013	16,576	20,191	26,426	21,076
Trekking & mountaineering	613	766	903	1,210	2,404
Total tourists	**13,626**	**17,342**	**21,094**	**27,636**	**23,480**

Source: Tourism Council of Bhutan, Thimphu.

TABLE 9.5 NUMBER OF TOURIST ARRIVALS BY MODE OF TRANSPORT, BHUTAN, 2005 TO 2009

Mode of transport	2005	2006	2007	2008	2009
By Air	11,715	13,968	16,053	22,563	19,564
By Road	1,911	3,374	5,041	5,073	3,916
Total arrivals	**13,626**	**17,342**	**21,094**	**27,636**	**23,480**

Source: Tourism Council of Bhutan, Thimphu.

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CHAPTER 10
FOREIGN TRADE

Foreign Trade Statistics is the official information related to export, import and balance of trade of Bhutan. 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 on foreign trade are compiled and released by Department of Revenue and Custom, Ministry of Finance.

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 comprise: 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.

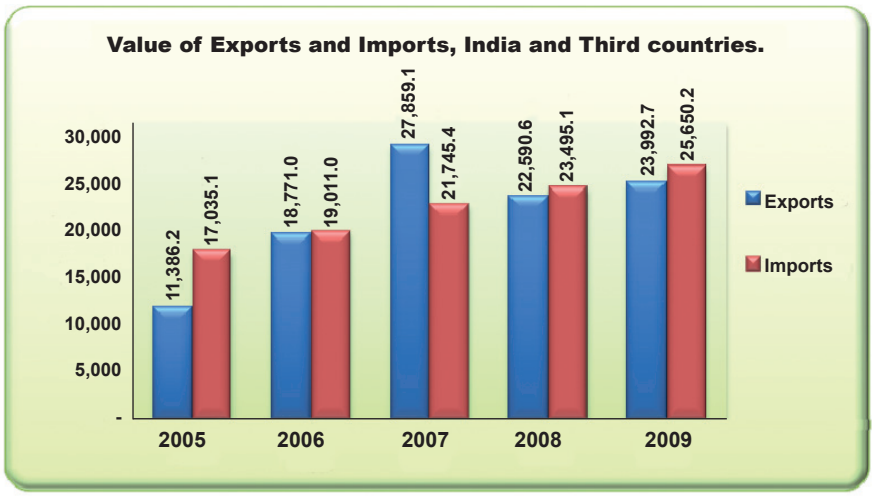

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TABLE 10.1 VALUE OF EXPORTS AND IMPORTS, BHUTAN, 2005 TO 2009

(Nu. In Million)

Trade	2005	2006	2007	2008	2009
Exports	11,386.17	18,771.00	27,859.06	22,590.64	23,992.74
India	9,969.83	14,488.00	22,723.72	21,480.02	22,434.39
Third Countries	1,416.34	4,283.00	5,135.34	1,110.62	1,558.35
Imports	17,035.07	19,011.00	21,745.44	23,495.12	25,650.18
India	12,795.08	13,053.00	15,099.54	17,339.55	19,968.01
Third Countries	4,239.99	5,958.00	6,645.90	6,155.57	5,682.17
Balance of trade	(5,648.90)	(240.00)	6,113.62	(904.48)	(1,657.44)
India	(2,825.25)	1,435.00	7,624.18	4,140.47	2,466.38
Third Countries	(2823.65)	(1,675.00)	(1,510.56)	(5,044.95)	(4,123.82)

Note: Figures within bracket indicate deficit (-).
Source : Department of Revenue & Customs, Ministry of Financ, Thimphu.

TABLE 10.2 (a): TOP TEN COMMODITIES OF EXPORTS, BHUTAN, 2009

Commodity	Million Nu.	Share %	Rank
Electricity	10,090.72	51.01	1
Ferro-silicon	4,224.79	21.36	2
Other	971.87	4.91	3
Bars and rods of iron or nonalloy steel, twisted	872.80	4.41	4
Of calcium	838.27	4.24	5
Portland pozzolana cement	797.91	4.03	6
Other	619.29	3.13	7
Ordinary Portland cement	537.83	2.72	8
Gypsum; anhydrite	428.83	2.17	9
Potatoes, fresh or chilled	398.73	2.02	10
Total	**19,781.04**	**100.00**	

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

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TABLE 10.2 (b): TOP TEN COMMODITIES OF IMPORTS, BHUTAN, 2009

Commodity	Million Nu.	Share %	Rank
Other light oils and preparations (HSD)	1910.59	25.69	1
Ferrous products obtained by direct reduction of irone ore	997.11	13.41	2
Motor spirit (gasolene) including avaitation spirit	724.34	9.74	3
Rice	721.71	9.71	4
Of which the maximum cross-sectional dimension exec	591.64	7.96	5
Machinery with a 360o revolving (excavators)	580.73	7.81	6
Other	575.23	7.74	7
Cars, petrol from 1000 cc to 1500 cc	522.26	7.02	8
Coke and semi-coke	433.99	5.84	9
Coal, other	378.11	5.09	10
Total	**7435.71**	**100.00**	

TABLE 10.3 VALUE AND ITS PERCENTAGE SHARE OF IMPORTS FROM TOP TEN SELECTED COUNTRIES, BHUTAN, 2009

Country	Mill. Nu	Share(%)	Rank
India	19840.76	83.39	1
Singapore	743.99	3.13	2
Japan	558.47	2.35	3
China	487.29	2.05	4
Sweden	462.43	1.94	5
Korea South	383.83	1.61	6
Malaysia	374.50	1.57	7
Nepal	369.79	1.55	8
Thailand	348.92	1.47	9
Germany	222.69	0.94	10
Total	**23792.67**	**100.00**	

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

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TABLE 10.4 VALUE AND ITS PERCENTAGE SHARE OF IMPORTS FROM TOP TEN SELECTED COUNTRIES, BHUTAN, 2009

Country	Mill. Nu	Share(%)	Rank
India	12343.67	88.85	1
Bangladesh	758.02	5.46	2
Hong Kong	677.62	4.88	3
Nepal	84.85	0.61	4
United States of America	9.71	0.07	5
Singapore	8.58	0.06	6
United Kingdom	3.44	0.02	7
Japan	2.74	0.020	8
Malaysia	2.15	0.015	9
Belgium	2.03	0.01	10
Total	**13892.81**	**100.00**	

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

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TABLE 10.5 OVERALL BALANCE OF PAYMENTS ESTIMATES, BHUTAN, FY 2004/05 TO 2008/09

(Nu. In Million)

Item	2004/05	2005/06	2006/07	2007/08	2008/09
A.Current Account	**(10,487.4)**	**(1,695.7)**	**6417.2**	**(1,080.2)**	**(5,400.5)**
Exports cif	9,457.1	13,959.8	25,333.8	24,170.8	21,833.5
Imports, cif	(20,556.0)	(19,456.5)	(23,271.9)	(27,092.4)	(28,744.8)
Trade balance	(11,099.0)	(5,496.7)	2,061.8	(2,921.6)	(6,911.1)
Services	(1,753.1)	(573.0)	137.0	(1,562.6)	(777.1)
Credit	1,894.9	2,313.8	2,661.2	2,206.9	2,765.3
Debit	(3,647.9)	(2,886.8)	(2,524.2)	(3,769.5)	(3,542.4)
Income	(707.7)	(312.5)	(7.3)	(1,310.1)	(1,808.3)
Credit	537.2	813.3	1,161.9	1,419.9	950.7
Debit	(1,244.9)	(1,125.8)	(1,169.1)	(2,730.0)	(2,759.0)
Current Transfers	3,072.3	4,686.5	4,225.6	4,714.1	4,095.9
Credit	5,492.8	7,313.7	6,533.7	6,780.2	7,290.7
Of Which, Budgetary Grants	5,033.0	6,424.7	6,000.9	5,935.4	6,156.9
Debit	(2,420.5)	(2,627.2)	(2,308.1)	(2,066.2)	(3,194.8)
B.Capital and Financial Account	**8,016.5**	**5,847.1**	**5,095.5**	**4,118.4**	**4,372.7**
Capital Transfers	4,586.4	1,751.5	1,111.8	635.5	1,733.2
Foreign Direct Investment	401.5	273.9	3,238.1	1,198.3	814.2
Portfolio Investment	0.0	0.0	0.0	0.0	0.0
Other Investment	3,028.6	3,821.7	745.5	2,284.7	1,825.3
Foreign Aid (Loans net)	2,939.4	3,474.7	783.3	(517.2)	4,199.2
Other loans	89.2	347.0	(37.8)	2,801.9	(2,374.0)
C.Net Errors and Omissions	**1,552.4**	**1,057.7**	**(6,091.4)**	**(1,081.1)**	**6,085.6**
D.Overall balance	**(918.6)**	**5,209.1**	**5,421.2**	**1,957.0**	**5,057.8**

Notes: Figures within bracket indicate deficit (-).
Source : Royal Monetary Authority of Bhutan, Thimphu

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TABLE 10.6 GROSS INTERNATIONAL RESERVES, BHUTAN, 2005/06 TO 2009/10

End of Period

Item	2005/06	2006/07	2007/08	2008/09	2009/10
Millions of Indian Rupees					
1.Rupee reserves	3,127.7	769.6	914.4	628.1	628.1
Royal Monetary Authority of Bhutan	1,507.4	136.3	191.4	118.4	118.4
Bank of Bhutan Ltd.	938.9	387.4	435.8	373.0	373.0
Bhutan National Bank Ltd.	681.4	245.9	287.3	136.7	136.7
Millions of US dollar					
2.Convertible currency reserves	418.5	589.5	633.9	759.6	745.1
Royal Monetary Authority of Bhutan (a)	372.3	510.7	610.6	734.9	720.9
Bank of Bhutan Ltd.	29.6	47.3	11.2	7.6	7.5
Bhutan National Bank Ltd.	16.5	31.5	12.1	17.0	16.7
3.Total reserves(1+2)	**486.4**	**608.4**	**655.3**	**772.7**	**758.0**
Month of Imports					
4.Total reserves	13.8	12.8	12.4	15.4	15.4
Rupee reserves	2.7	0.6	0.5	0.3	0.3
Convertible currecny reserves	40.7	42.4	61.0	79.9	79.9

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

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TABLE 10.7 MONTHLY AVERAGE EXCHANGE RATES, NGULTRUMS PER US $, 2005 TO 2009

Month	2005	2006	2007	2008	2009
January	43.76	44.40	44.33	39.37	48.83
February	43.68	44.33	44.16	39.73	49.26
March	43.69	44.48	44.03	40.36	51.23
April	43.74	44.95	42.15	40.03	50.06
May	43.49	45.41	40.78	42.13	48.53
June	43.58	46.06	40.77	42.82	47.77
July	43.54	46.46	40.41	42.84	48.48
August	43.63	46.54	40.82	42.94	48.34
September	43.92	46.12	40.34	45.56	48.44
October	44.82	45.47	39.51	48.66	46.72
November	45.73	44.85	39.44	49.00	46.57
December	45.64	44.54	39.44	48.64	46.63
Calendar year average	44.1	45.31	41.35	43.50	48.41
	2004/05	**2005/2006**	**2006/2007**	**2007/2008**	**2008/2009**
Fiscal year average	44.61	44.74	44.19	40.37	47.78

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

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CHAPTER 11
MONEY, BANKING AND FINANCE

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

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

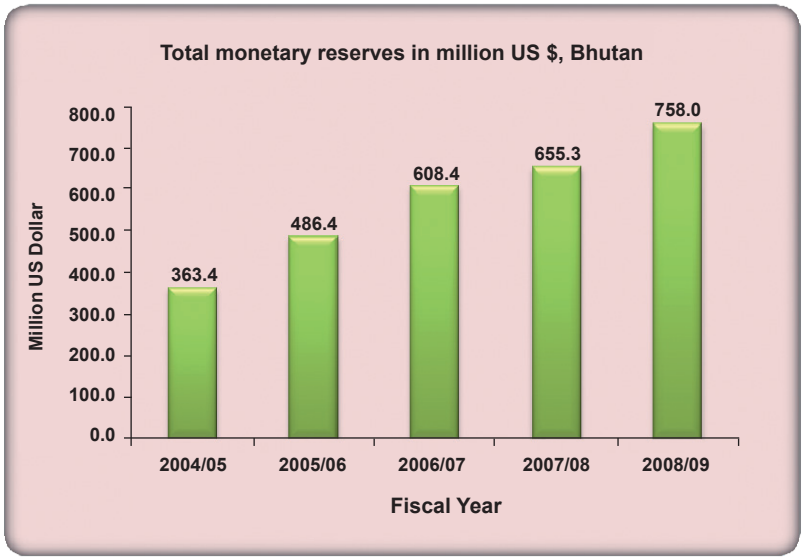

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TABLE 11.1 MONETARY SURVEY: ROYAL MONETARY AUTHORITY, BHUTAN NATIONAL BANK AND BANK OF BHUTAN, 2005 TO 2009

(Nu. in Million)

Item	2005	2006	2007	2008	2009
Assets total	26,772.2	33,537.5	38,602.5	46,906.3	57,425.0
Reserves	21,369.0	24,425.4	27,888.3	36,081.9	39,075.0
Foreign Assets	21,369.0	24,425.4	27,888.3	36,081.9	39,075.0
Rupee	4,779.5	3,786.0	4,024.7	3,471.1	2,532.9
Others	16,589.5	20,639.4	23,863.6	32,610.8	36,542.1
Domestic Credit	5,403.1	9,112.1	10,714.2	10,824.4	18,350.0
Claims on Government. (Net)	(2,715.3)	(1,495.7)	(2,955.0)	(7,417.9)	(3,239.3)
Claims on Government Corps	1,228.3	1,268.8	1,188.8	1,054.0	1,184.0
Claims on Joint Corps.	109.3	142.8	383.4	365.9	49.6
Claims on private sector	6,461.6	8,658.3	11,528.9	16,267.2	19,769.0
Claims on NMFIs(1)	319.2	537.9	568.0	555.2	586.7
Liabilities total	26,772.0	33,537.5	38,602.5	46,906.3	57,425.0
Broad money (M2)	18,569.2	24,671.8	27,670.1	31,384.4	43,862.8
Narrow Money (M1)	8,969.7	12,553.4	17,474.9	16,233.4	22,622.8
Nu. Outside Banks	2,404.4	2,762.5	3,229.1	3,839.1	4,980.1
Demand Deposits	6,565.2	9,790.9	14,245.8	12,394.3	17,642.7
NMFI Deposits	0.0	0.0	0.0	0.0	0.0
Quasi Money (2)	9,599.5	12,118.4	10,195.1	15,151.0	21,240.0
Capital accounts	3,087.6	3,312.5	4,018.8	4,272.4	4,789.8
Other items(net)	8,202.1	8,831.8	9,167.1	14,521.9	13,527.3

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)NFIs stands for Non Monetary Financial Institutions.
(2)Quasi Money stands for time deposits plus foreign currency deposits.
** Figures in the brackets ( ) are negative*
Source : Royal Monetary Authority of Bhutan, Thimphu.

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TABLE 11.2 FINANCIAL DETAILS OF ROYAL INSURANCE CORPORATION OF BHUTAN, 2005 TO 2009

(Nu. in Million)

Item	2005	2006	2007	2008	2009
Assets total	1657.6	1773.0	2,030.7	2,600.7	3,328.9
Reserves	47.1	71.0	98.6	332.9	313.7
Foreign Assets	9.6	10.7	7.5	31.1	30.0
Rupee	0.1	0.0	0.0	0.0	0.0
Others	9.5	10.6	7.5	31.1	30.0
Domestic Credit**	1592.8	1633.2	1,916.5	2,227.3	2,975.8
Claims on Government (Net)	0.0	0.0	0.0	0.0	0.3
Claims on Government Corps.	0.0	0.0	0.0	0.0	0.0
Claims on Joint Corps.	14.9	18.2	37.3	46.1	43.7
Claims on private sector	1574.9	1611.9	1,876.3	2,178.1	2,928.8
Claims on NFIs	3.0	3.0	3.0	3.0	3.0
Claims on DMBs	8.1	58.1	8.1	9.4	9.4
Liabilities total	1657.6	1773.0	2,030.7	2,600.7	3,328.9
General Insurance reserve funds	0.0	0.0	0.0	0.0	0.0
Life fund	116.9	153.6	199.0	261.4	342.3
Government employee provident funds	93.8	117.7	141.4	183.4	233.1
Group Insurance Fund	233.2	253.9	303.8	206.1	433.7
Credit from DMB	170.5	172.4	0.0	0.0	0.0
Unit Trust of Bhutan fund	350.0	300.0	480.0	780.0	1184.0
Capital accounts	373.0	445.1	531.5	644.1	799.8
Other items (net)	320.2	330.3	375.1	525.7	336.0

Notes: (1)NFIs stands for Non Monetary Financial Institutions, Including Bhutan National bank.
***Domestic credit excluding the claims on DMBs*
Source: Royal Monetary Authority of Bhutan, Thimphu.

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TABLE 11.3 FINANCIAL DETAILS OF BHUTAN NATIONAL BANK, 2005 TO 2009

(Nu. in Million)

Item	2005	2006	2007	2008	2009
Assets total	7474.7	9553.1	10,189.8	15,704.4	20,601.4
Reserves with RMA	1857.9	2210.9	1,595.5	5,232.4	7,833.2
Foreign Assets	1007.6	1707.6	790.8	754.5	1,152.6
Rupee	370.1	448.9	265.1	290.9	467.5
Others	637.5	1258.7	525.8	463.6	685.1
Domestic Credit	4609.2	5634.6	7,803.4	9,717.5	11,615.6
Claims on Government	120.0	0.0	0.0	59.3	0.0
Claims on Government Corps	576.1	635.2	608.5	527.0	578.3
Claims on Joint Sector	7.6	7.6	7.6	7.6	7.6
Claims on private sector	3818.6	4988.0	7,183.6	9,119.9	11,026.0
Claims on NBFIs	86.9	3.7	3.7	3.7	3.7
Liabilities total	7474.7	9553.1	10,189.8	15,704.4	20,601.4
Demand Deposits (Current and saving Deposits)	1060.0	2119.6	2,528.0	3,125.8	3,866.8
Time Deposits	4162.1	6020.2	4,507.1	9,862.9	15,910.1
Foreign currency Deposits	154.2	320.5	351.4	259.4	322.9
Central Govt. Deposits**	951.3	0.0	0.0	0.0	0.0
Credit from RMA (b)	0.0	0.0	0.0	0.0	0.0
Capital accounts	836.9	919.1	1,125.1	1,518.1	1,610.6
Other items (net)	310.1	173.7	1678.2	938.2	(1108.9)

Notes: (a) RICB stands for Royal Insurance Corporation of Bhutan Limited, (b) RMA stands for Royal Monetry Authority.
*** Since central government deposits are already in the RMA's balance sheet, government deposits as reported by BNBL has been reclassified atarting from June 2006 onwards.*
Source: Royal Monetary Authority and Bank of Bhutan, Thimphu.

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TABLE 11.4 MONEY AND BANKING DATAILS OF BHUTAN DEVELOPMENT FINANCE CORPORATION, 2005 TO 2009

(Nu. in Million)

Item	2005	2006	2007	2008	2009
Assets total	1,407.4	1,814.1	2,118.7	2,764.5	3,125.0
Reserves	66.6	131.3	66.6	139.9	195.7
Foreign assets	13.3	21.1	11.9	22.6	0.0
Rupees	13.3	21.1	11.9	22.6	0.0
Others	0.0	0.0	0.0	0.0	0.0
Domestic Credit*	1,327.5	1,581.7	2,039.6	2,502.0	2,819.4
Claims on Government	0.0	0.0	0.0	0.0	0.0
Claims on Government Corporations	0.0	0.0	0.0	0.0	0.0
Claims on joint Corporations	15.5	9.6	3.0	0.9	0.9
Claims on private sector	1,312.0	1,572.1	2,036.7	2,501.1	2,818.5
Claims on DMBs(a)	0.0	80.0	0.6	100.0	110.0
Claims on other NMFIs(b)	0.0	0.0	0.0	0.0	0.0
Liabilities total	1,407.4	1,814.1	2,118.7	2,764.5	3,125.0
Foreign liabilities	301.4	278.9	252.7	265.0	287.3
Credit from RMA	0.0	0.0	0.0	0.0	0.0
Credit from DMB(a)	83.0	374.6	565.0	594.0	615.2
Credit from other NMFIs	160.0	150.0	180.0	665.0	655.0
Grants	50.0	50.0	50.0	0.0	0.0
Capital account	590.3	693.8	767.8	869.3	1,125.3
Other items net	222.8	266.8	303.3	371.2	442.3

Notes: The summary exclude Agriculture Credit Program
(a) represents deposits other than demand deposit (b) represents purchase of unit shares of UTB
**Domestic Credit excluding claims on DMBs and NMFIs*
Source: Royal Monetary Authority of Bhutan, Thimphu.

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TABLE 11.5 MONEY AND BANKING OF ROYAL MONETARY AUTHORITY OF BHUTAN, 2005 TO 2009

(Nu. in Million)

Item	2005	2006	2007	2008	2009
Assets total	18,220.4	18,510.7	25,986.2	33,768.3	39,468.1
Foreign assets	17,351.6	18,397.7	24,659.8	33,636.9	39,281.5
Indian rupee	2,539.7	200.8	2,554.0	2,291.9	3,830.4
Convertible Foreign Currency (Including Gold)	14,811.9	18,197.0	22,105.7	31,345.0	35,451.1
Claims on deposit money banks	768.3	103.1	157.4	114.6	170.8
Claims on Government	100.0	0.0	0.0	0.0	0.0
Claims of private sector	0.5	9.9	11.5	16.8	15.8
Claims on NMFIs	0.0	0.0	0.0	0.0	0.0
Liabilities total	18,220.4	18,510.7	25,986.2	33,768.3	39,468.1
Reserve money	12,732.9	12,284.8	14,516.8	15,525.3	21,741.2
Currency outside banks	2,404.4	2,762.5	3,229.1	3,839.1	4,980.1
Foreign Liabilities	0.0	0.0	0.0	0.0	3,000.0
Rupee	0.0	0.0	0.0	0.0	3,000.0
Others	0.0	0.0	0.0	0.0	0.0
Government deposits	835.2	1,495.7	2,955.0	7,477.2	3,239.3
RMA Bills Outstanding	100.0	100.0	2,000.0	1,000.0	2,022.3
Capital Account	1,058.2	1,039.9	1,437.7	946.1	1,006.5
Other items (net)	3,494.1	3,590.3	5,076.7	8,819.8	8,458.8

Source: Royal Monetary Authority of Bhutan, Thimphu.

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TABLE 11.6 MONEY AND BANKING, BANK OF BHUTAN, 2005 TO 2009

(In Million Nu.)

Item	2005	2006	2007	2008	2009
Assets total	**14,404.5**	**16,930.9**	**18,431.2**	**19,645.0**	**24,905.4**
Reserve with RMA	7,565.9	7,647.5	10,139.2	9,387.2	13,306.6
Foreign assets	3,009.8	4,320.0	2,437.7	1,690.5	1,640.9
Rupee	1,869.8	3,136.3	1,205.6	888.3	1,235.0
Other	1,140.0	1,183.7	1,232.1	802.2	405.9
Claims on Government	200.0	0.0	0.0	0.0	0.0
Claims on Government'scorpns.	652.2	633.5	580.3	527.0	605.7
Claims on joint's Corporations	101.8	135.3	375.8	358.3	42.1
Claims on private sector	2,642.5	3,660.4	4,333.9	7,130.5	8,727.1
Claims on NMFIs	232.4	534.2	564.3	551.5	583.0
Liabilities total	**14,404.5**	**16,930.9**	**18,431.2**	**19,645.0**	**24,905.4**
Demand deposit (a)	5,505.0	7,671.3	11,718.0	9,271.4	13,774.4
Time deposit	4,934.6	5,366.3	4,736.7	4,218.5	4,352.3
Foreign currency deposits	348.6	411.4	600.0	810.1	654.7
Foreign liabilities	-	0.0	0.0	0.0	0.0
Rupee	-	0.0	0.0	0.0	0.0
Other	-	0.0	0.0	0.0	0.0
Government deposits*	1,348.8	0.0	0.0	0.0	0.0
Credit from RMA	-	0.0	0.0	0.0	0.0
Capital accounts	1,192.5	1,353.6	1,456.0	1,808.2	2,172.8
Other items (net)	1,075.0	2,128.3	(79.5)	3,536.7	3,951.2

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

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TABLE 11.7 INVESTMENTS OF FINANCIAL INSTITUTIONS BY INDUSTRY, AMOUNTS OUTSTANDING, 2005 TO 2009

(In Million Nu.)

Industry	2005	2006	2007	2008	2009
Agriculture	**211.6**	**242.5**	**289.1**	**573.5**	**403.3**
Bank of Bhutan	0.9	0.9	1.2	1.1	3.0
RICB	1.9	1.9	1.7	0.0	0.0
BDFC	208.8	239.8	286.2	572.4	400.2
Bhutan National Bank	0.0	0.0	0.0	0.0	0.0
Service and Tourism**	**1,084.6**	**1,663.6**	**2,422.9**	**2,958.9**	**3,718.6**
Bank of Bhutan	429.4	883.3	1,068.7	1,312.1	1,698.2
RICB	158.1	125.7	74.8	70.4	73.0
BDFC	324.5	380.2	647.1	631.5	800.8
Bhutan National Bank	172.7	274.5	632.3	944.9	1,146.7
Manufacturing	**1,701.4**	**2,278.4**	**3,039.3**	**4,364.4**	**4,727.3**
Bank of Bhutan	662.1	1,029.9	1,221.5	1,906.3	1,973.9
RICB	121.8	157.6	205.2	271.0	289.2
BDFC	235.5	270.5	323.0	425.6	453.8
Bhutan National Bank	682.0	820.3	1,289.6	1,761.5	2,010.4
Building and construction	**3,521.2**	**4,473.7**	**5,380.4**	**5,768.2**	**6,615.3**
Bank of Bhutan	700.0	998.2	1,277.8	1,497.6	1,767.9
RICB	704.8	676.7	692.9	723.4	873.1
BDFC	455.2	500.3	440.1	370.4	367.6
Bhutan National Bank	1,661.2	2,298.5	2,969.6	3,176.8	3,606.8
Trade and commerce	**1,559.7**	**1,925.4**	**2,681.7**	**3,772.5**	**4,478.4**

Contd..

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TABLE 11.7 (contd..): INVESTMENTS OF FINANCIAL INSTITUTIONS BY INDUSTRY, AMOUNTS OUTSTANDING, 2005 TO 2009

(In Million Nu.)

Industry	2005	2006	2007	2008	2009
Bank of Bhutan	562.6	672.4	830.5	954.8	769.1
RICB	400.4	435.5	598.8	690.4	939.6
BDFC	69.1	114.0	173.2	285.1	304.1
Bhutan National Bank	527.6	703.5	1,079.1	1,842.2	2,465.6
Transport (Heavy)	**373.6**	**346.2**	**440.0**	**580.5**	**875.6**
Bank of Bhutan	209.7	161.0	136.5	209.2	281.6
RICB	44.5	38.8	66.3	111.5	234.2
BDFC	28.6	47.6	108.3	117.1	167.7
Bhutan National Bank	90.7	98.8	128.9	142.7	192.0
Transport (Light)	**457.8**	**506.6**	**584.6**	**744.9**	**888.3**
Bank of Bhutan	230.5	266.2	273.3	337.6	370.5
RICB	45.2	58.2	65.8	86.9	142.5
BDFC	0.0	0.0	0.0	0.0	0.0
Bhutan National Bank	182.1	182.2	245.5	320.4	375.3
Personal loans	**860.1**	**1,077.9**	**1,404.2**	**2,746.7**	**3,989.1**
Bank of Bhutan	194.6	292.2	377.6	1,716.5	2,404.0
RICB	73.9	96.6	148.2	218.7	360.6
BDFC	3.0	19.4	39.0	69.9	292.8
Bhutan National Bank	588.5	669.7	839.5	741.6	931.6

Contd..

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TABLE 11.7 (contd..): INVESTMENTS OF FINANCIAL INSTITUTIONS BY INDUSTRY, AMOUNTS OUTSTANDING, 2005 TO 2009

(In milliom Nu.)

Industry	2005	2006	2007	2008	2009
Staff loan	**67.1**	**79.6**	**108.7**	**324.9**	**379.4**
Bank of Bhutan	51.2	64.0	74.4	138.9	143.2
RICB	0.3	0.1	0.1	0.1	0.1
BDFC	0.0	0.0	20.9	28.7	17.5
Bhutan National Bank	15.6	15.4	13.2	157.2	218.7
EDP loans	**4.9**	**5.5**	**7.1**	**7.4**	**6.5**
Bank of Bhutan	3.4	3.5	4.2	3.8	3.8
RICB	0.2	0.4	0.3	0.6	0.6
BDFC	0.0	0.0	0.0	0.0	0.0
Bhutan National Bank	1.3	1.7	2.6	3.0	2.1
Small Business and Artisan Schemes	**3.2**	**2.1**	**1.8**	**1.6**	**0.9**
Bank of Bhutan	3.2	2.1	1.8	1.6	0.9
RICB	0.0	0.0	0.0	0.0	0.0
BDFC	0.0	0.0	0.0	0.0	0.0
Bhutan National Bank	0.0	0.0	0.0	0.0	0.0
Loan Against Shares	**42.3**	**46.3**	**93.5**	**118.0**	**200.4**
Bank of Bhutan	0.7	7.8	4.9	6.8	28.7
RICB	0.4	0.4	21.1	13.1	21.7
BDFC	0.9	8.3	0.0	0.0	12.9
Bhutan National Bank	40.2	29.8	67.5	98.1	137.0
Others	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Bank of Bhutan	0.0	0.0	0.0	0.0	0.0
RICB	0.0	0.0	0.0	0.0	0.0
BDFC	0.0	0.0	0.0	0.0	0.0
Bhutan National Bank	0.0	0.0	0.0	0.0	0.0
Total	9887.4	12647.8	16,453.4	21,961.5	26,283.1

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.

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TABLE 11.8 INTEREST RATES OF DEPOSITS IN FINANCIAL INSTITUTIONS, 2005 TO 2009

(In Percent)

Type of deposit	2005	2006	2007	2008	2009
Savings	4.5	4.5	4.5	4.5	4.5
Fixed deposit					
a) 3 months to less than 1year	4.5	4.5	4.5	4.5	4.5
b) 1 year to less than 3 years	6.0	6.0	6.0	6.0	6.0
d) More than 3 years	7.0	7.0	7.0	7.0	7.0
For Institutions & Companies					
(46 days < 1 Year)	3.0	2.0	2.0	2.0	2.0

Source: Bank of Bhutan,Main Branch, Phuntsholing
**** More than 60 days of credit*
Source: Bank of Bhutan,Main Branch, Phuntsholing.

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TABLE 11.9 INTEREST RATES AND REPAYMENT PERIOD BY SECTOR AND TYPE OF LOAN, FINANCIAL INSTITUTIONS, BHUTAN, 2007 TO 2009

Sector	2007		2008		2009	
	Interest Rate (% p.a)	Repayment period (Years)	Interest Rate (% p.a)	Repayment period (Years)	Interest Rate (% p.a)	Repayment period (Years)
Export finance						
(convertible currency areas)**	13.0	0.5	13.0	0.5	13.0	-
(convertible currency areas)***	14.0	0.5	14.0	0.5	14.0	-
General trade	13.8	1.0	13.8	1.0	13.8	1.0
Buses and trucks						
Term Loan	13.0	5	13.0	5	13.0	5
Working Capital	15.0	1	15.0	1	14.0	1
Other passanger vehicles	14.0	5	14.0	5	14.0	5
Agriculture and Livestock	13.0	10	13.0	10	13.0	10
Manufacturing Industry						
Term Loan	12.0	10	12.0	10	12.0	10
Working Capital	13.0	1	13.0	1	13.0	1
Service Industries *						
Term Loan	10.0	10	10.0	10	10.0	10
Working Capital	12.0	1	12.0	1	12.75	1
Personal loans	15.0	3	15.0	3	15.0	5
Equity finance	13.0	5	13.0	5	12.0	5
Housing						
New Construction	10.00	10-20 yrs	10.00	10-20 yrs	10.00	25
Repair/Renovation	13.00	10-20 yrs	13.00	10-20 yrs	10.00	10
Consumer Loans	12.00	5	12.00	5	12.00	7

Notes: (a)Rates applicable since August 22, 1994.
** includes tourism, contract services, and other service activities.*

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TABLE 11.10 ROYAL SECURITIES EXCHANGE OF BHUTAN LTD NUMBER OF SHAREHOLDERS, BHUTAN, 2005 TO 2009

(In Numbers)

Company	2005	2006	2007	2008	2009
Bhutan Beverages & Company Ltd. *	4,372	4,372	..	..	..
Bhutan Board Products Ltd.	489	489	492	491	491
Bhutan Carbide & Chemical Ltd.	269	269	264	259	259
Bhutan Dairy and Agro Products Ltd.	96	96	96	96	96
Bhutan Ferro Alloys Ltd.	46	46	46	44	44
Bhutan National Bank Ltd.	4,193	4,193	4,440	4,357	4,374
Bhutan Polymers Company Ltd.	102	102	129	129	128
Bhutan Times Ltd.				288	289
Bhutan Tourism Corpn. Ltd	161	161	164	162	162
Bhutan Insurance Ltd.	..	..	..	..	4,432
Druk Petroleum Corpn. Ltd.	71	71	71	71	71
Druk plaster & Chemicals Ltd.	203	203	213	213	213
Druk Wang Alloys Ltd.				504	507
Druk Satair Corporation Ltd.	1,150	1,150	1,277	1,276	1,279
Druk Mining Ltd.	69	69	67	67	67
Druk Ferro Alloys Ltd.	..	..	..	..	366
Jigme Mining Corporation Ltd.	..	..	..	426	418
Kuensel corporation Ltd.	..	..	253	233	233
Penden Cement Authority Ltd.	1,477	1,477	1,471	1,472	1,462
Royal Insurance Corpn. of Bhutan	1,641	1,641	1,585	1,556	1,556
State Trading Corpn. of Bhutan Ltd.	125	125	125	125	125
S.D Eastern Bhutan Coal Company Ltd.	1,152	1,152	1,089	1,082	1,082
TOTAL	**15,616**	**15,616**	**11,782**	**12,851**	**17,654**

Note: "Delisted from 2007"
Source: Royal Securities exchange of Bhutan Ltd, Thimphu.

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TABLE 11.11 ROYAL SECURITIES EXCHANGE OF BHUTAN LTD. MARKET INFORMATION AT THE END OF DECEMBER 2009

Company	Price per share (Nu)	Paid-up Shares	Market Capitalization (Nu)
Bhutan Board Products Ltd.	140	1,400,014	196,001,960
Bhutan Carbide & Chemical Ltd.	900	1,000,000	900,000,000
Bhutan Dairy and Agro Products Ltd.	100	25,000	2,500,000
Bhutan Ferro Alloys Ltd.	550	1,500,000	825,000,000
Bhutan National Bank Ltd.	421	3,555,175	1,496,728,675
Bhutan Polymers Company Ltd.	100	249,334	24,933,400
Bhutan Times Ltd.	105	400,000	42,000,000
Bhutan Tourism Corpn. Ltd	301	209,400	63,029,400
Bhutan Insurance Ltd.	105	1,000,000	105,000,000
Druk Petroleum Corpn. Ltd.	120	62,370	7,484,400
Druk plaster & Chemicals Ltd.	200	100,000	20,000,000
Druk Wang Alloys Ltd.	100	1,940,000	194,000,000
Druk Satair Corporation Ltd.	300	456,543	136,962,900
Druk Mining Ltd.	429	37,702	16,174,158
Druk Ferro Alloys Ltd.	100	1,630,130	163,013,000
Jigme Mining Corporation Ltd.	650	426,532	277,245,800
Kuensel corporation Ltd.	100	500,000	50,000,000
Penden Cement Authority Ltd.	750	3,400,007	2,550,005,250
Royal Insurance Corpn. of Bhutan	330	2,400,000	792,000,000
State Trading Corpn. of Bhutan Ltd.	190	200,000	38,000,000
S.D Eastern Bhutan Coal Company Ltd.	300	521,000	156,300,000
TOTAL	**6,291**	**21,013,207**	**8,056,378,943**

Source: Royal Securities exchange of Bhutan Ltd, Thimphu.

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TABLE 11.12 ROYAL SECURITIES EXCHANGE OF BHUTAN LTD, VOLUME TRADED, BHUTAN 2005 TO 2009

Company	2005	2006	2007	2008	2009
Bhutan Beverages & Company Ltd. *	2,965	1,867	..	..	..
Bhutan Board Products Ltd.	140	3,030	..	100	..
Bhutan Carbide & Chemicals Ltd.	9	61	1,000,000	970	20,000
Bhutan Dairy and Argo Products Ltd.	..	..	..	..	..
Bhutan Ferro Alloys Ltd.	..	..	..	534	187,789
Bhutan National Bank Ltd.	20,997	136,383	23,444	2,413,164	..
Bhutan Polymers Company Ltd.	..	50	71	..	..
Bhutan Times Ltd.	..	..	400,000	..	300
Bhutan Tourism Corpn. Ltd	35	1,000	..	19,160	..
Bhutan Insurance Ltd.					1,001,428
Druk Petroleum Corpn. Ltd.	..	..	..	..	..
Druk Plaster & Chemicals Ltd.	33	70,000	50.0	..	..
Druk Wang Alloys Ltd.	..	..	417,500	1,252,500	270,000
Druk Satair Corpn. Ltd.	5,699	154	3,063	..	..
Druk Mining Ltd.	..	24,185	2,026	..	..
Druk Ferro Alloys Ltd.				1,222,600	..
Jigme Mining Corporation Ltd.	..	..	..	199,180	143,053
Kuensel Corporation Ltd.	..	245,000	..	216	..
Penden Cement Authority Ltd.	957	8,260	5,260	1,134,737	50,895
Royal Insurance Corpn. of Bhutan Ltd.	2,350	3,500	5,010	3,500	1,440,550
State Trading Corpn. of Bhutan Ltd.	..	..	..	30	200
S.D Eastern Bhutan Coal Company Ltd.	537,013	4500	11,607	2,986	..
TOTAL	**570,198**	**497,990**	**1,868,031**	**6,249,677**	**3,114,215**

Note: "Delisted from 2007"
Source:Royal Securities Exchange of Bhutan Ltd.

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TABLE 11.13 ROYAL SECURITIES EXCHANGE OF BHUTAN LTD. TRADED VALUES, BHUTAN, 2005 TO 2009

(Nu. In million)

Company	Sector	2005	2006	2007	2008	2009
Bhutan Beverages Company Ltd.	Primary	..	..	..	..	..
	Secondary	0.520	0.240	..	..	..
Bhutan Board Products Ltd.	Primary	..	..	..	0.020	..
	Secondary	0.130	0.303	..	..	..
Bhutan Carbide & Chemicals Ltd.	Primary	..	..	100.000	..	..
	Secondary	0.570	0.366	..	0.780	18.000
Bhutan Dairy and Argo Product Ltd.	Primary	..	..	..	..	..
	Secondary	..	..	..	..	..
Bhutan Ferro-Alloys Ltd.	Primary	..	..	..	..	..
	Secondary	..	..	..	0.290	..
Bhutan National Bank	Primary	..	77.742	..	236.520	..
	Secondary	13.850	11.307	17.401	21.000	76.450
Bhutan Polymers Company Ltd.	Primary	..	..	..	..	..
	Secondary	..	0.005	0.007	..	..
Bhutan Tourism Corpn. Ltd	Primary	..	..	..	..	..
	Secondary	0.060	0.170	..	5.750	..
Bhutan Times Ltd.	Primary	..	..	40.000	..	..
	Secondary	..	..	..	..	0.030
Druk Petroleum Corpn. Ltd.	Primary	..	..	..	..	..
	Secondary	..	..	..	..	..
Druk plaster & Chemicals Ltd.	Primary	..	..	..	..	..
	Secondary	0.010	7.000	0.010	..	..
Druk Satair Corpn. Ltd.	Primary	..	..	..	..	..
	Secondary	1.510	0.042	0.868	..	..
Druk Mining Ltd.	Primary	..	..	..	..	..
	Secondary	..	9.289	0.869	..	..
Druk Wang Alloys Ltd.	Primary	..	..	41.750	125.250	27.000
	Secondary	..	..	..	..	..

(Contd..)

TABLE 11.13 (contd..): ROYAL SECURITIES EXCHANGE OF BHUTAN LTD. TRADED VALUES, BHUTAN, 2005 TO 2009

(Nu. In million)

Company	Sector	2005	2006	2007	2008	2009
S.D Eastern Bhutan Coal Company Ltd.	Primary	..	..	..	..	..
	Secomdary	54.390	0.450	1.175	0.550	..
Kuensel corporation Ltd.	Primary	..	24.500	..	..	..
	Secondary	..	..	..	0.030	..
Penden Cement Authority Ltd.	Primary	..	..	..	113.340	..
	Secondary	0.970	6.155	3.641	1.120	37.050
Royal Insurance Corpn. of Bhutan Ltd.	Primary	..	..	..	..	144.000
	Secondary	0.860	1.219	1.607	1.460	0.190
State Trading Corpn. of Bhutan Ltd.	Primary	..	..	..	..	..
	Secondary	..	..	..	0.010	0.040
Jigme Mining Corporation Ltd.	Primary	..	..	..	19.900	14.220
	Secondary	..	..	..	0.150	0.450
Druk Ferro Alloys Ltd.	Primary	..	..	..	122.260	..
	Secondary	..	..	..	..	..
Bhutan Insurance Ltd.	Primary	..	..	..	..	..
	Secondary	..	..	..	..	100.150
TOTAL		**72.87**	**138.79**	**207.33**	**648.43**	**417.58**

Source: Royal Securities Exchange of Bhutan Ltd.

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CHAPTER 12
PUBLIC FINANCE

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

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

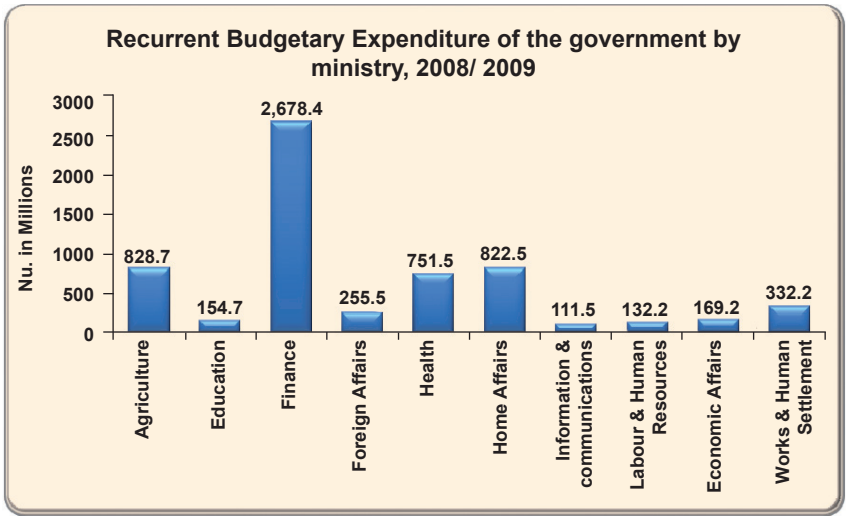

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TABLE 12.1 RECURRENT BUDGETARY EXPENDITURE OF THE GOVERNMENT BY MINISTRY/AGENCYBHUTAN, 2004/05 TO 2008/09

(Nu. in Million)

Organization	2004/05 (actual)	2005/06 (actual)	2006/07 (actual)	2007/08 (actual)	2008/09 (actual)
Ministry	**3271.800**	**3875.219**	**4215.688**	**5718.647**	**6236.157**
Agriculture	607.800	697.575	725.711	725.488	828.683
Education	419.500	155.068	156.650	154.519	154.713
Finance	1049.200	1060.544	1181.535	2518.323	2678.361
Foreign Affairs	190.500	207.291	220.844	242.814	255.461
Health	470.900	560.830	626.954	636.492	751.463
Home and Cultural Affairs	23.800	562.116	603.385	706.794	822.521
Information & communications	70.100	94.162	100.682	103.273	111.461
Labour & Human Resources	70.300	90.532	114.883	126.569	132.154
Economic Affairs	123.600	158.452	178.068	187.233	169.171
Works & Human Settlement	246.100	288.649	306.976	317.142	332.169
Non Ministerial organization	**287.800**	**675.328**	**821.077**	**1283.786**	**1593.619**
His Majesty's Secretariat (4th King)	13.600	15.337	16.343	15.082	15.608
His Majesty's Secretariat	n.a	na	na	16.535	30.222
National Assembly	26.900	29.023	28.494	19.164	51.320
Royal Advisory Council	8.90	9.38	10.47	13.01	n.a
National Council of Bhutan	n.a	n.a	n.a	n.a	33.834
Cabinet Secretarait	8.700	9.037	8.014	12.577	39.825
Royal Civil Service Commission	11.900	20.041	17.552	16.850	19.936
Judiciary	70.200	81.148	91.777	97.603	113.716
Royal Audit Authority	38.800	42.711	47.830	50.786	58.132
Bhutan Olympic Committee	5.900	10.628	23.436	25.942	29.830
Centre for Bhutan Studies	10.900	8.256	11.697	17.590	13.887
Council for Religious Affairs	25.600	192.620	205.116	242.271	373.186
Office of legal Affairs	8.600	16.720	7.140	na	na
Dzongkhag Development Commission	n.a	na	na	11.022	11.883

(Contd..)

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TABLE 12.1 (contd..): RECURRENT BUDGETARY EXPENDITURE OF THE GOVERNMENT BY MINISTRY/AGENCYBHUTAN, 2004/05 TO 2008/09

(Nu. in Million)

Organization	2004/05 (actual)	2005/06 (actual)	2006/07 (actual)	2007/08 (actual)	2008/09 (actual)
National Environment Commission	25.500	25.927	18.593	17.001	16.537
GNH commission	n.a.	na	11.565	17.905	27.161
Royal Institute of Management	25.100	17.803	20.493	21.264	25.056
Royal University of Bhutan	5.800	181.275	210.335	233.001	300.571
National Statistics Bureau	n.a	9.305	17.312	13.283	14.600
Anti-Corruption Commission	n.a	1.991	8.838	9.472	11.888
Office Of The Election Commission	1.400	4.124	54.306	256.256	18.951
HRH Trongsa Penlop's Secretariat	n.a	n.a	10.763	n.a	n.a
Bhutan Narcotic Control Agency	n.a	n.a	1.006	3.128	4.701
Office of the Attorney General	n.a	n.a	n.a	9.938	11.904
Bhutan Information Communication Media Authority	n.a	n.a	n.a	6.040	6.652
National Land Commission	n.a	n.a	n.a	59.014	114.127
Thimphu Thromdey Schools	n.a	n.a	n.a	99.054	207.840
Drug Regulatory Authority	n.a	n.a	n.a	n.a	3.099
Tourism Council of Bhutan	n.a	n.a	n.a	n.a	28.970
National Commission For Women And Children	n.a	n.a	n.a	n.a	10.183
Gewog Administration & Services (Local Government)	n.a	63.290	69.555	90.640	107.141
Dzongkhags Administration	1741.500	2016.366	2529.874	2632.640	3124.514
Total current expenditure	**6170.600**	**6630.203**	**7636.194**	**9725.713**	**11061.431**

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

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TABLE 12.2 CAPITAL BUDGETARY EXPENDITURE OF THE GOVERNMENT BY MINISTRY/ AGENCY, 2004/05 TO 2008/09

(Nu. in Million)

Ministerial/Non-Ministerial Organization	2004/05 (actual)	2005/06 (actual)	2006/07 (actual)	2007/08 (actual)	2008/09 (actual)
Ministry	**5538.190**	**5372.100**	**5365.074**	**7818.597**	**7245.156**
Agriculture	348.150	588.575	408.908	511.366	629.237
Education	298.490	476.833	527.822	539.840	571.006
Finance	2219.560	510.304	543.107	1974.888	2195.492
Foreign Affairs	5.820	19.216	16.054	38.703	16.735
Health	321.840	687.331	539.624	695.801	591.514
Home and Cultural Affairs	118.020	130.397	200.450	241.883	327.870
Information & Communications	64.360	279.939	161.839	141.865	80.510
Labour & Human Resources	90.690	125.194	150.897	110.832	98.549
Economic Affairs	246.500	543.144	503.756	595.406	658.183
Works & Human Settlement	1824.760	2011.167	2312.617	2968.013	2076.060
Non ministerial organization	**144.420**	**318.218**	**551.211**	**720.862**	**815.429**
His Majesty's Secretariat (4th King)	0.570	0.225	0.570	0.176	0.180
His Majesty's Secretariat	n.a	n.a	n.a	44.214	64.095
National Assembly	0.780	6.277	12.982	55.794	32.338
Royal Advisory Council	0.230	0.706	0.446	20.722	
National Council of Bhutan	n.a	n.a	n.a	n.a	26.139
Cabinet Secretarait	0.830	0.647	0.803	10.919	4.973
Royal Civil Service Commission	56.040	50.198	80.523	67.309	90.629
Judiciary	12.730	31.803	113.475	25.084	58.508
Royal Audit Authority	11.840	7.615	4.638	5.081	14.705
Bhutan Olympic Committee	0.730	1.405	0.072	1.634	2.432
Centre for Bhutan Studies	1.310	2.972	2.335	3.008	2.399
Council for Religious Affairs	21.610	33.606	35.920	43.550	49.686
Office of Legal Affairs	3.410	3.945	5.166	na	
Dzongkha Dev. Commission	na	na	na	3.332	2.879

(Contd..)

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TABLE 12.2 (contd..): CAPITAL BUDGETARY EXPENDITURE OF THE GOVERNMENT BY MINISTRY/ AGENCY, 2004/05 TO 2008/09

(Nu. in Million)

Ministerial/Non-Ministerial Organization	2004/05 (actual)	2005/06 (actual)	2006/07 (actual)	2007/08 (actual)	2008/09 (actual)
National Environment Commission	18.560	33.699	20.764	26.198	29.002
Gross National Happiness Commission	n.a	na	6.509	20.744	48.009
Royal Institute of Management	13.140	24.284	26.065	29.761	35.728
Royal University of Bhutan	2.640	108.414	116.035	191.110	123.477
National Statistics Bureau	n.a	1.758	1.670	7.527	10.511
Office of the Anti-corruption Commission	n.a	7.384	5.479	11.462	18.742
Office of the Election Commission	n.a	3.280	102.271	47.179	13.307
HRH Trongsa Penlop's Secretariat	n.a	n.a	14.266	n.a	
Bhutan Narcotic Control Agency	n.a	n.a	1.223	2.242	2.221
Office of the Attorney General	n.a	n.a	n.a	4.760	4.326
Bhutan Information Communication Media Authority	n.a	n.a	n.a	1.688	7.989
National Land Commission	n.a	n.a	n.a	77.140	80.747
Thimphu Thromdey Schools	n.a	n.a	n.a	20.228	12.668
Drug Regulatory Authority	n.a	n.a	n.a	n.a	2.024
Tourism Council of Bhutan	n.a	n.a	n.a	n.a	72.932
National Commission For Women And Children	n.a	n.a	n.a	n.a	4.783
Gewog Administration & Services (Local Government)	n.a	254.930	407.069	255.210	559.358
Dzongkhags Administration	611.500	739.171	1206.529	1172.642	1209.203
Total development expenses	**6615.250**	**6684.420**	**7529.882**	**9967.311**	**9829.146**

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

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TABLE 12.3 BUDGETARY RECEIPTS OF THE GOVERNMENT BY SOURCE, BHUTAN, 2004/05 TO 2008/09

Nu. in million

Source of revenue	2004/05 (actual)	2005/06 (actual)	2006/07 (actual)	2007/08 (actual)	2008/09 (actual)
Tax revenue	**3,382.37**	**4,124.68**	**4,266.91**	**5,238.36**	**6,482.41**
Direct tax	**2,013.63**	**2,420.09**	**2,829.02**	**3,386.78**	**4,328.73**
Business Income Tax	423.16	356.54	367.65	464.94	553.43
Corporate Income Tax	1,022.08	1,363.30	1,566.94	1,817.27	2,340.94
Rural tax	-	-	-	-	-
Health Contribution	36.00	44.06	49.42	58.19	71.28
Motor Vehicle Tax	72.54	85.25	93.27	107.95	117.49
Business & Prof. Licences	24.20	25.63	45.63	52.90	65.47
Royalties	332.24	407.40	498.61	572.95	757.05
Tax on payroll/PIT	84.61	113.35	174.46	264.66	387.48
Other Tax Revenue	18.81	24.56	33.04	47.92	35.60
Indirect tax	**1,368.74**	**1,704.59**	**1,437.88**	**1,851.57**	**2,153.68**
Bhutan Sales Tax	567.90	662.79	765.54	830.99	918.24
Export Tax	0.87	0.34	0.01	0.10	0.003
Excise Duty	565.62	879.54	519.39	877.72	1,040.69
Import duty	230.77	157.18	144.69	129.48	177.96
Other Indirect Tax	3.58	4.75	8.24	13.29	16.79
Non tax revenue	**2,683.73**	**2,778.23**	**5,815.25**	**7,107.63**	**7,566.63**
Fees,Dividends,Profits	**2,451.12**	**2,610.40**	**5,639.99**	**7,023.27**	**7,470.21**
Administrative Fees & Charges	187.57	197.13	214.73	238.57	236.77
Dividends	1,550.52	1,542.43	2,123.16	2,479.82	1,915.09
Revenue from Govt. Departments	78.69	102.06	225.70	256.91	194.76
Transfer of Profits	384.48	503.27	2,678.75	2,366.13	3,394.54
Other Non-Tax revenue	249.86	265.51	397.65	22.50	33.77
Interest on loan from corporations	..	..	..	1,659.35	1,695.28
Capital Revenue	**232.61**	**167.83**	**175.26**	**84.36**	**96.42**
Total revenue	**6,066.10**	**6,902.91**	**10,082.16**	**12,345.98**	**14,049.04**

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

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TABLE 12.4 SUMMARY OF BUDGETARY OPERATIONS, BHUTAN, 2004/05 TO 2008/09

(Nu. in Million)

Item	2004/05 (actual)	2005/06 (actual)	2006/07 (actual)	2007/08 (actual)	2008/09 (actual)
Revenue and Grants	**10,439.20**	**13,327.50**	**10,267.84**	**18,281.41**	**20,624.11**
Revenue	**6066.10**	**6902.91**	**12782.16**	**12345.98**	**14049.04**
Tax revenue	3382.40	4124.68	4266.91	5238.36	6482.41
Non-tax revenue	2683.70	2778.23	8515.25	7107.63	7566.63
Grants	**4373.10**	**6424.59**	**6000.93**	**5935.42**	**6575.07**
India	2624.96	3417.22	4024.28	4671.11	4394.88
Other	1748.06	3007.37	1976.65	1264.31	2180.19
Other Receipts(+)/Payments(-)	61.90	124.53	..	35.50	..
Total Expenditure	**13360.80**	**13314.63**	**15166.11**	**19693.03**	**20890.58**
Current	6170.60	6630.20	7636.23	9725.72	11061.43
Capital	6615.30	6684.43	7529.88	9967.31	9829.14
Lending	379.10	590.20	463.52	39.89	92.82
Net Advance/Suspense	195.80	124.99	486.69	25.72	196.36
Lending Minus Recoveries	(88.10)	289.09	87.32	(1805.39)	(1580.30)
Repayment	397.90	2651.45	668.62	2076.78	2051.63
Overall surplus/deficit (Balance)	(2392.60)	(318.70)	287.77	403.55	1092.46

Note: Figure in the brackets are negative
Source : Department of Budget & Accounts, MoF, Thimphu.

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CHAPTER 13
PLAN OUTLAYS

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

The Ninth Five Year Plan (2002-2007) focused on five major goals; 1. Improve the quality of life and income, 2. Ensure good governance, 3. Promote private sector growth and employment generation, 4. Preserve and promote cultural heritage and 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.

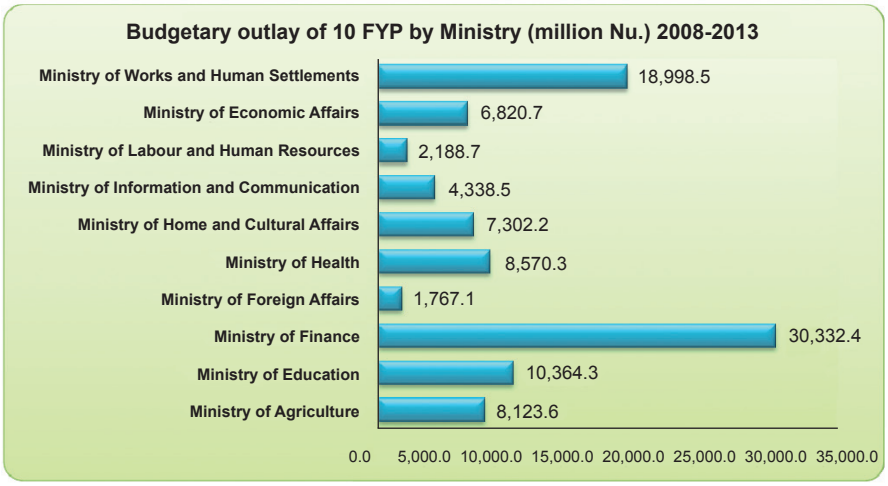

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TABLE 13.1 TENTH PLAN BUDGETARY OUTLAY AND ALLOCATION, BHUTAN, 2008/2013

(Nu. in Million)

Organization	Recurrent	Capital	Total	Percent
Constitutional Bodies	**1,577.88**	**5,199.11**	**6,776.98**	**4.62**
Judiciary	611.89	724.51	1,336.40	0.91
Royal Audit Authority	289.02	53.56	342.57	0.23
Election Commission Of Bhutan	523.50	79.91	603.41	0.41
Anti Corruption Commission	64.66	125.37	190.03	0.13
Royal Civil Service Commission	88.81	4,215.76	4,304.57	2.94
Autonomous Agencies	**5,783.46**	**6,503.98**	**12,287.44**	**8.40**
His Majesty's Secretariat	147.22	100.00	247.22	0.17
Secretariat of His Majesty the Fourth King	89.33	50.00	139.33	0.10
National Assembly Secretariat	252.86	42.91	295.77	0.20
Royal Advisory Council (National Council)	149.59	56.99	206.58	0.14
Cabinet Secretariat	141.18	15.58	156.76	0.11
Office of the Attorney General	64.84	56.15	120.99	0.08
GNH Commission	170.08	1,050.00	1,220.08	0.83
National Land Commission	454.81	385.86	840.67	0.57
National Environment Commission	78.02	109.30	187.32	0.13
Dzongkha Development 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

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TABLE 13.1 (contd.): TENTH PLAN BUDGETARY OUTLAY AND ALLOCATION, BHUTAN, 2008/2013

(Nu. in Million)

Organization	Recurrent	Capital	Total	Percent
Ministries	**48,897.65**	**49,908.69**	**98,806.32**	**67.56**
Ministry of Agriculture	4,497.09	3,626.51	8,123.60	5.55
Ministry of Education	875.12	9,489.13	10,364.25	7.09
Ministry of Finance	29,632.49	699.92	30,332.41	20.74
Ministry of Foreign Affairs	1,319.63	447.51	1,767.14	1.21
Ministry of Health	4,175.97	4,394.34	8,570.30	5.86
Ministry of Home and Cultural Affairs	4,301.61	3,000.64	7,302.24	4.99
Ministry of Information and Communication	561.99	3,776.47	4,338.46	2.97
Ministry of labour and Human Resources	742.67	1,446.07	2,188.74	1.50
Ministry of 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.

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

(Nu.in Million)

Organization	Ninth Plan (%)	Tenth Plan (%)
Constitutional Bodies	**5.40**	**4.62**
Judiciary	0.70	0.91
Royal Audit Authority	0.30	0.23
Election Commission Of Bhutan	na	0.41
Anti Corruption Commission	na	0.13
Royal Civil Service Commission	4.40	2.94
Autonomous Agencies	**3.40**	**8.40**
His Majesty's Secretariat	0.10	0.17
Secretariat of His Majesty the Fourth King	..	0.10
National Assembly Secretariat	0.10	0.20
Royal Advisory council (National Council)	0.10	0.14
Cabinet Secretariat	0.00	0.11
Office of the Attorney General	0.10	0.08
GNH Commission	0.20	0.83
National Land Commission	na	0.57
National Environment Commission	0.10	0.13
Dzongkha Development Commision	0.10	0.07
Council for Ecclesiasstical Affairs	1.10	1.71
National Statistics Bureau	na	0.12
Royal University of Bhutan	na	2.71
Royal Institute of Management	0.40	0.28
Centre for Bhutan Studies	0.00	0.07
Bhutan Narcotic Control Agency	na	0.03
Bhutan Olympic Committee	0.30	0.18
Bhutan Broadcasting service Corporation	0.50	0.28
National commission for Women and Children	na	0.09
Bhutan Information Communication Media Authority	..	0.03
Drug Regulatory Authority	..	0.01
Tourism Council ob Bhutan	0.30	0.49

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

(Nu.in Million)

Organization	Ninth Plan (%)	Tenth Plan (%)
Ministries		**67.56**
Ministry of Agriculture	6.5	5.55
Ministry of Education	3.7	7.09
Ministry of Finance	2.3	20.74
Ministry of Foreign Affairs	2.1	1.21
Ministry of Health	6.4	5.86
Ministry of Home and Cultural Affairs	0.9 & 0.6	4.99
Ministry of Information and Communication	14.8	2.97
Ministry of labour and Human Resources	0.4	1.50
Ministry of Econimic Affairs	12.2	4.66
Ministry of Works and Human Settlements	..	12.99
Others		**0.66**
Thimphu Thromdey Schools	..	0.66
Total (Constitutional Bodies, Autonomous Bodies and Ministries)		81.24
Dzongkhags and Gewogs	**..**	**18.75**
Dzongkhags	..	4.92
Gewogs	..	3.28
Total Outlay		**100.0**

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

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

(Nu.in Million)

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

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

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

(Nu.in Million)

Dzongkhags	Current	Capital	Total
Bumthang	-	138.96	138.96
Ch hukha	792.66	483.13	1,275.79
Dagana	294.21	273.60	567.81
Gasa	-	58.93	58.93
Ha	-	123.62	-
Lhuentse	226.90	292.61	519.51
Monggar	486.94	529.03	1,015.97
Paro	-	259.06	259.06
Pemagatshel	474.51	278.88	753.39
Punakha	277.35	244.64	521.99
Samdrup Jongkhar	-	358.01	358.01
Samtse	-	715.23	715.23
Sarpang	369.32	316.73	686.05
Thimphu	-	177.76	177.76
Trashi Yangtse	135.46	225.40	360.86
Trashigang	314.26	686.56	1,000.82
Trongsa	205.82	126.69	332.51
Tsirang	-	200.33	200.33
Wangdue Phodrang	426.89	233.25	660.14
Zhemgang	375.39	247.27	622.66
Total	**4,379.71**	**5,969.67**	**10,349.38**

Source: Gross National Happiness Commission (GNHC), Thimphu.
Note: 1. Capital budget does not include the gewogs capital budget

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CHAPTER 14
NATIONAL ACCOUNTS

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

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

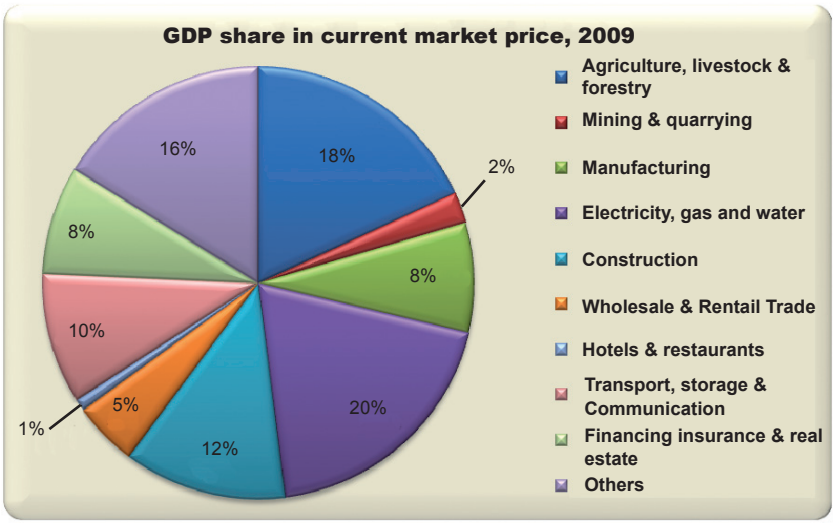

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TABLE 14.1 GROSS DOMESTIC PRODUCT BY KIND OF ACTIVITY AT CURRENT PRICES, 2005 TO 2009

(million Nu.)

Sectors	2005	2006	2007	2008	2009
Agriculture Livestock & forestry	8,066.5	8,707.2	9,234.1	10,078.3	11,158.6
Agriculture proper	3,684.9	3,925.7	4,377.0	5,060.6	5,668.2
Livestock	2,261.2	2,466.5	2,530.9	2,624.5	2,894.9
Forestry & logging	2,120.4	2,315.0	2,326.2	2,393.2	2,595.5
Mining and quarrying	549.8	877.8	890.5	1,252.0	1,392.0
Manufacturing	2,570.9	3,098.0	4,033.2	4,593.4	5,017.2
Electricity and water	3,634.5	5,339.9	10,082.0	11,520.9	11,816.4
Construction	6,219.2	6,019.7	6,781.0	6,251.0	7,469.7
Wholesale & Retail Trade	2,088.9	2,317.2	2,497.1	2,694.6	2,935.3
Hotels & Restaurants	211.7	301.0	368.1	569.2	537.6
Transport, storage & Communication	3,890.5	4,095.1	4,468.8	5,365.8	5,989.9
Financing, insurance & real estate	2,918.2	3,472.6	4,105.4	4,576.5	4,962.1
Finance and Insurance	1,809.7	2,293.9	2,801.5	3,174.3	3,466.2
Real Estate & dwellings	1,108.5	1,178.7	1,297.4	1,374.0	1,460.3
Business services			6.5	28.2	35.6
Community, Social services	4,471.7	4,895.0	5,311.8	5,930.4	7,963.4
Public administration	3,120.1	3,220.8	3,370.2	3,762.7	4,728.4
Education and Health	1,351.6	1,674.1	1,941.6	2,167.7	3,235.0
Private social, personal & recreational Services	172.3	212.6	241.9	267.7	276.4
Plus: taxes net of subsidies	1,317.9	1,337.6	1,442.5	1,613.1	1,704.9
Gross domestic product	**36,112.1**	**40,673.6**	**49,456.5**	**54,712.9**	**61,223.5**

Source: National Statistical Bureau

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TABLE 14.2 GROSS DOMESTIC PRODUCT BY KIND OF ACTIVITY IN 2000 PRICES, 2005 TO 2009

(million Nu.)

Sectors	2005	2006	2007	2008	2009
Agriculture, livestock & forestry	6,043.4	6,196.1	6,246.5	6,290.7	6,457.9
Crops	2,860.9	2,898.1	2,942.3	2,997.0	3,064.3
Livestock	1,727.6	1,765.3	1,811.7	1,821.4	1,864.2
Forestry & logging	1,454.9	1,532.7	1,492.5	1,472.3	1,529.4
Mining & quarrying	446.6	531.5	649.7	780.2	726.3
Manufacturing	2,214.4	2,468.7	3,086.8	3,349.4	3,579.9
Electricity & water	3,259.3	4,312.3	8,060.5	9,110.2	8,893.1
Construction	4,701.2	4,247.5	4,465.9	4,009.6	4,672.2
Wholesale & Retail trade	1,878.1	1,901.2	1,975.7	1,992.6	2,116.3
Hotel & restaurants	186.0	246.1	264.4	384.5	334.9
Transport, storage & Communication	2,660.6	2,856.5	3,083.2	3,247.1	3,546.8
Financing, insurance & real estate	2,553.8	3,004.7	3,281.8	3,447.2	3,661.0
Finance	1,846.1	2,285.1	2,505.1	2,644.5	2,823.6
Real estate	707.7	719.6	771.8	782.9	813.5
Business services			4.9	19.8	23.9
Community, social & personal services	3,752.6	3,912.2	4,037.2	4,160.8	5,350.0
Public administration	2,618.4	2,574.2	2,561.5	2,640.0	3,179.0
Education and health	1,134.2	1,338.0	1,475.7	1,520.9	2,171.0
Private Social & recreational services	144.4	166.5	178.0	187.3	190.9
Plus: Indirect taxes less subsidies	1,038.9	1,014.2	1,059.2	1,128.4	1,121.1
Gross Domestic Product	**28,879.4**	**30,857.5**	**36,388.9**	**38,088.0**	**40,650.4**

Source: National Statistical Bureau

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TABLE 14.3 SHARE OF GROSS DOMESTIC PRODUCT IN CURRENT PRICES, 2005 TO 2009

(percent)

Sectors	2005	2006	2007	2008	2009
Agriculture, livestock & forestry	22.4	21.4	18.7	18.4	18.2
Agriculture proper	10.2	9.7	8.9	9.2	9.3
Livestock	6.3	6.1	5.1	4.8	4.7
Forestry & logging	5.9	5.6	4.7	4.4	4.2
Mining & quarrying	1.5	2.2	1.8	2.3	2.3
Manufacturing	7.1	7.6	8.2	8.4	8.2
Electricity and water	10.1	13.1	20.4	21.1	19.3
Construction	17.2	14.8	13.7	11.4	12.2
Wholesale & Retail Trade	5.8	5.7	5.0	4.9	4.8
Hotels & restaurants	0.6	0.7	0.7	1.0	0.9
Transport, storage & Communication	10.8	10.1	9.0	9.8	9.8
Financingn insurance & real estate	8.1	8.5	8.3	8.4	8.1
Finance & Insurance	5.0	5.6	5.7	5.8	5.6
Real estate & dewllings	3.1	2.9	2.6	2.5	2.4
Business services				0.1	0.1
Community, Social services	12.3	12.0	10.8	10.9	13.0
Public administration	8.6	7.9	6.8	6.9	7.7
Education & health	3.7	4.1	3.9	4.0	5.3
Private social, personal & recreational services	0.5	0.5	0.5	0.5	0.5
Plus: taxes net of subsidies	3.6	3.3	2.9	2.9	2.8
Gross Domestic Product	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: National Statistical Bureau

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TABLE 14.4 GROSS DOMESTIC PRODUCT GROWTH RATES OVER THE PRECEEDING YEARS IN CURRENT PRICES, 2005 TO 2009

(percent)

Sectors	2005	2006	2007	2008	2009
Agriculture, livestock & forestry	5.6	7.9	6.1	9.1	10.7
Agriculture proper	5.9	6.5	11.5	15.6	12.0
Livestock production	13.6	9.1	2.6	3.7	10.3
Forestry & logging	(2.0)	9.2	0.5	2.9	8.5
Mining & quarrying	25.1	59.6	1.4	40.6	11.2
Manufacturing	12.0	20.5	30.2	13.9	9.2
Electricity and water	17.8	46.9	88.8	14.3	2.6
Construction	8.3	(3.2)	12.6	(7.8)	19.5
Wholesale & Retail Trade	21.0	10.9	7.8	7.9	8.9
Hotels & restaurants	25.5	42.2	22.3	54.6	(5.5)
Transport, storage & Communication	18.1	5.3	9.1	20.1	11.6
Financingn insurance & real estate	28.0	19.0	18.2	11.5	8.4
Finance and Insurance	41.5	26.8	22.1	13.3	9.2
Real estate & dwellings	10.7	6.3	10.1	5.9	6.3
Business Services				336.0	26.2
Community, Social services	17.0	9.5	8.5	11.6	34.3
Public administration	18.3	3.2	4.6	11.6	25.7
Education & health	13.9	23.9	16.0	11.6	49.2
Private social, personal & recreational services	19.4	23.4	13.8	10.7	3.2
Plus: indirect taxes, net subsidies	8.8	1.5	7.8	11.8	5.7
Gross Domestic Product	**13.4**	**12.6**	**21.6**	**10.6**	**11.9**

Note: Figure in the brackets ( ) are negative
Source: National Statistical Bureau

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TABLE 14.5 GROSS DOMESTIC PRODUCT GROWTH RATES OVER THE PRECEEDING YEARS IN 2000 PRICES, 2005 TO 2009

(percent)

Sectors	2005	2006	2007	2008	2009
Agriculture, livestock & forestry	1.1	2.5	0.8	0.7	2.7
Crops	1.3	1.3	1.5	1.9	2.2
Livestock	4.9	2.2	2.6	0.5	2.4
Forestry & logging	(3.6)	5.4	(2.6)	(1.4)	3.9
Mining & quarrying	17.1	19.0	22.3	20.1	(6.9)
Manufacturing	7.8	11.5	25.0	8.5	6.9
Electricity and water	9.4	32.2	86.9	13.0	(2.4)
Construction	(2.5)	(9.7)	5.1	(10.2)	16.5
Wholesale & Retail Trade	15.0	1.2	3.9	0.9	6.2
Hotels & restaurants	18.5	32.3	7.4	45.4	(12.9)
Transport, storage & Communication	8.7	7.4	7.9	5.3	9.2
Financingn insurance & real estate	28.3	17.7	9.2	5.0	6.2
Finance	42.9	23.8	9.6	5.6	6.8
Real estate	1.2	1.7	7.3	1.4	3.9
Business services					21.0
Community, Social & personal services	11.1	4.3	3.2	3.1	28.6
Public administration	12.4	(1.7)	(0.5)	3.1	20.4
Education & health	8.2	18.0	10.3	3.1	42.8
Private social & recreational services	13.7	15.3	6.9	5.2	1.9
Plus: indirect taxes less subsidies	2.9	(2.4)	4.4	6.5	(0.6)
Gross Domestic Product	**7.1**	**6.8**	**17.9**	**4.7**	**6.7**

Note: Figure in the brackets ( ) are negative
Source: National Statistical Bureau

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TABLE 14.6 GROSS DOMESTIC PRODUCT BY MAJOR SECTORS IN CURRENT PRICES, 2005 TO 2009

(Million Nu.)

Sector	2005	2006	2007	2008	2009
Primary	8616.3	9,585.0	10,124.6	11,330.2	12,550.7
Secondary	12424.7	14,457.6	20,896.3	22,365.3	24,303.3
Tertiary	15071.2	16,631.0	18,435.8	21,017.4	24,369.5
Gross Domestic Product	36,112.1	40,673.5	49,456.6	54,713.0	61,223.5

Source: National Statistical Bureau

TABLE 14.7 GROSS DOMESTIC PRODUCT BY MAJOR SECTORS IN 2000 PRICES, 2005 TO 2009

(Million Nu.)

Sector	2005	2006	2007	2008	2009
Primary	6490.0	6,727.5	6,896.2	7,070.9	7,184.3
Secondary	10174.9	11,028.5	15,613.2	16,469.2	17,145.2
Tertiary	12214.5	13,101.3	13,879.5	14,547.9	16,321.2
Gross Domestic Product	28,879.4	30,857.4	36,388.9	38,088.0	40,650.6

Source: National Statistical Bureau

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TABLE 14.8 SECTORAL SHARE TO GROSS DOMESTIC PRODUCT IN CURRENT PRICES, 2005 TO 2009

(Percent)

Sector	2005	2006	2007	2008	2009
Primary	23.9	23.6	20.5	20.7	20.5
Secondary	34.4	35.5	42.3	40.9	39.7
Tertiary	41.7	40.9	37.3	38.4	39.8
Gross Domestic Product	100.0	100.0	100.0	100.0	100.0

Source: National Statistical Bureau

TABLE 14.9 GROSS DOMESTIC CAPITAL FORMATION IN CURRENT AND CONSTANT 2000 PRICES, 2005 TO 2009

(Million Nu.)

Sector	2005	2006	2007	2008	2009
In current prices					
Machinary and Equipment	4,535.0	5,530.0	4,513.0	7,824.0	8,129.0
Govt.	611.0	1,084.0	869.0	1,131.0	1,578.0
Private	3,924.0	4,446.0	3,644.0	6,693.0	6,550.0
Construction	13,495.0	13,245.0	15,025.0	13,340.0	17,173.0
Govt.	3,059.0	4,106.0	5,434.0	5,598.0	5,460.0
Private	10,436.0	9,140.0	9,591.0	7,742.0	11,713.0
Gross fixed capital formation	10,030.0	18,775.0	19,538.0	21,164.0	25,301.0
Change in stock	(5.0)	(12.0)	(1289.0)	623.0	(73.0)
Gross Domestic capital formation	**18,024.0**	**18,763.0**	**18,249.0**	**21,788.0**	**25,228.0**
In constant 2000 prices					
Machinary and Equipment	4,541.0	1,418.0	1,101.0	1,762.0	1,771.0
Govt.	547.0	922.0	712.0	872.0	1,197.0
Private	3,994.0	495.0	389.0	890.0	574.0
Construction	9,565.0	9,242.0	9,915.0	8,820.0	11,355.0
Govt.	2,168.0	2,865.0	3,586.0	3,701.0	3,610.0
Private	7,397.0	6,377.0	6,329.0	5,119.0	7,744.0
Gross fixed capital formation	14,106.0	10,660.0	11,016.0	10,582.0	13,125.0
Change in stock	10.0	(9.0)	(994.0)	450.0	(50.0)
Gross Domestic capital formation	**14,116.0**	**10,651.0**	**10,022.0**	**11,032.0**	**13,075.0**

Note: Figure in the brackets ( ) are negative
Source: National Statistical Bureau

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TABLE 14.10 EXPENDITURES ON GROSS DOMESTIC PRODUCT IN CURRENT PRICES 2005 TO 2009

(Million Nu.)

Expenditures	2005	2006	2007	2008	2009
Final consumption expenditure	**22,497.7**	**24,197.9**	**28,318.8**	**32,134.2**	**36,284.4**
Household and NPISH	14,586.2	15,553.7	18,864.1	21,761.6	23,202.2
General Government	7,911.5	8,644.2	9,454.8	10,372.6	13,082.1
Gross domestic capital formation	**18,024.4**	**18,762.9**	**18,248.8**	**21,787.7**	**25,228.0**
Construction	13,494.8	13,245.1	15,025.0	13,340.0	17,172.7
Machinery and equipment	4,534.9	5,529.9	4,512.8	7,824.4	8,128.5
Change in inventory	(5.3)	(12.1)	(1289.0)	623.2	(73.2)
Net export of goods & services	**(8,556.0)**	**(1,795.5)**	**(1,142.6)**	**(6,086.2)**	**(4,423.9)**
Export of goods & services	14,105.7	25,464.9	27,186.5	25,488.5	39,639.1
Imports of goods & services	(22,662.00)	(27260.0)	(28329.0)	(31575.0)	(44063.0)
Total Expenditure on GDP	**31,966.0**	**41,165.4**	**45,425.1**	**47,835.7**	**57,088.4**

Notes: Figure in the brackets ( ) are negative
Source: National Statistical Bureau

TABLE 14.11 EXPENDITURES ON GROSS DOMESTIC PRODUCT AT CONSTANT 2000 PRICES, 2005 TO 2009

(Million Nu.)

Expenditure	2005	2006	2007	2008	2009
Final consumption expenditure	**18,917.1**	**19,336.4**	**21,440.3**	**22,958.1**	**24,139.7**
Household and NPISH	12,278.5	12,438.2	14,264.0	15,041.4	15,344.7
General Government	6,638.6	6,898.3	7,176.3	7,916.7	8,794.9
Gross domestic capital formation	**14,115.9**	**10,650.8**	**10,022.1**	**11,032.4**	**13,075.2**
Construction	9,564.9	9,241.8	9,915.2	8,820.4	11,354.6
Machinery and equipment	4,540.9	1,417.7	1,101.2	1,761.8	1,770.7
Change in inventory	10.1	(8.7)	(994.3)	450.2	(50.1)
Net export of goods and services	**(7,184.2)**	**(1,415.4)**	**(865.70)**	**(4,231.9)**	**(2,930.5)**
Export of goods nad services	11,844.0	20,075.0	20,599.5	17,723.0	26,257.7
Imports of goods and services	(19,028.1)	(21,490.4)	(21,465.2)	(21,955.0)	(29,188.2)
Total expenditure on GDP	**25,848.9**	**28,571.8**	**30,596.7**	**29,758.6**	**34,284.4**

Notes: Figures in the brackets ( ) are negative
Source: National Statistical Bureau

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CHAPTER 15
PRICES

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

The purpose of the CPI is to provide a general indicator of the rate of price change for consumer goods and services. The CPI is important monitoring overall price development and assessing changes in the living standard of the population.

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

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

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

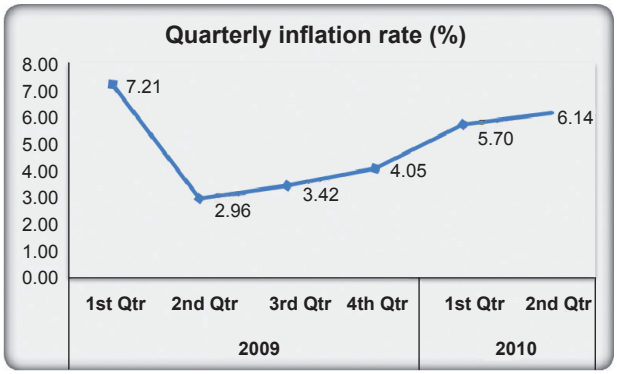

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TABLE 15.1 CONSUMER PRICE INDEXES FOR FOOD AND NON-FOOD COMPONENTS, BHUTAN 1ST QTR. 2008 TO 2ND QTR. 2010

3rd Qtr. 2003=100

Item	Weight (%)	2008				2009				2010	
		1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr
Index											
Food	31.67	129.1	140.98	140.35	140.02	140.51	150.38	154.21	155.06	157.83	160.75
Non-Food	68.33	122.82	130.38	131.19	130.96	130.71	131.83	131.46	131.92	133.84	139.39
Total	100	124.81	133.74	134.09	133.83	133.81	137.7	138.67	139.25	141.44	146.15
PERCENTAGE CHANGE YEAR ON YEAR											
Food	31.67	10.99	12.32	12.52	11.75	8.84	6.67	9.88	10.74	12.33	6.90
Non-Food	68.33	3.78	7.19	7.77	7.74	6.42	1.11	0.21	0.73	2.39	5.73
Total	100	6.03	8.85	9.30	9.04	7.21	2.96	3.42	4.05	5.70	6.14
PERCENTAGE CHANGE PERIOD TO PERIOD											
Food	31.67	3.03	9.20	(0.45)	(0.24)	0.35	7.02	2.55	0.55	1.79	1.85
Non-Food	68.33	1.04	6.16	0.62	(0.18)	(0.19)	0.86	-0.28	0.35	1.46	4.15
Total	100	1.69	7.15	0.26	(0.19)	(0.01)	2.91	0.70	0.42	1.57	3.33
PURCHASING POWER OF NGULTRUM (PPN)											
	1.00	0.80	0.75	0.75	0.75	0.75	0.73	0.72	0.72	0.71	0.68

Source: National Statistics Bureau, Thimphu

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TABLE 15.2 CONSUMER PRICE INDEXES FOR MAJOR COMPONENTS, BHUTAN 1ST QTR. 2008 TO 2ND QTR. 2010

3rd Qtr. 2003=100

Item	Weight (%) (%)	2008				2009				2010	
		1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr
Food and Non-Alcoholic Beverages	29.44	128.41	140.64	139.85	139.13	139.36	149.99	154.09	155.12	158.14	161.18
Alcoholic Beverages, Tobacco & Narcotics	2.23	138.14	145.42	146.98	151.68	155.59	155.58	155.77	154.27	153.79	155.11
Clothing And Footwear	10.49	133.38	144.92	144.86	145.56	144.23	145.53	143.97	147.49	147.27	149.47
Housing,water,electricity,gas & other fuels	25.68	125.41	132.99	134.73	133.70	134.80	134.94	134.92	134.35	139.74	150.78
Furnishing, household equipment & routine household maintenance	5.68	122.37	129.51	128.03	127.40	127.77	128.00	132.73	132.59	131.13	136.50
Health	2.94	117.78	124.31	123.15	123.61	127.08	129.11	122.39	122.97	122.97	125.77
Transport	7.06	127.20	140.08	143.78	143.79	141.58	144.30	144.25	144.82	145.45	148.15
Communication	4.10	97.51	97.67	96.95	97.06	96.90	96.55	96.93	95.45	95.31	92.96
Recreation and Culture	2.62	126.02	128.84	129.38	130.29	130.13	131.04	128.58	131.05	130.91	131.09
Education	4.04	100.00	100.00	100.00	100.00	100.00	100.00	100	100.00	100	100.00
Restaurants and Hotels	3.01	118.26	127.65	127.36	127.90	124.63	128.46	127.94	128.14	128.26	134.48
Miscellaneous Goods & Services	2.72	126.59	131.73	131.70	132.01	125.64	133.18	129.96	131.07	131.06	132.96
Total	**100.00**	**124.81**	**133.74**	**134.09**	**133.83**	**133.81**	**137.70**	**138.67**	**139.25**	**141.44**	**146.15**

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

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TABLE 15.3 CONSUMER PRICE INDEXES - MAJOR COMPONENTS, BHUTAN 1ST QTR. 2008 TO 2ND QTR. 2010 YEAR ON YEAR INFLATION RATE (%)

3rd Qtr. 2003=100

Item	Weight (%)	2008				2009				2010	
		1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr
Food and Non-Alcoholic Beverages	29.44	10.87	12.49	12.58	11.98	8.53	6.65	10.18	11.49	13.48	7.46
Alcoholic Beverages, Tobacco & Narcotics	2.23	12.36	10.12	11.85	9.03	12.63	6.99	5.98	1.71	(1.16)	(0.30)
Clothing And Footwear	10.49	10.00	13.19	13.00	13.79	8.13	0.42	(0.61)	1.33	2.11	2.71
Housing,water,electricity,gas & other fuels	25.68	0.94	3.18	6.27	7.19	7.49	1.47	0.14	0.49	3.66	11.74
Furnishing, household equipment & routine household maintenance	5.68	6.28	5.70	4.91	4.93	4.41	(1.17)	3.67	4.07	2.63	6.64
Health	2.94	3.64	11.27	4.71	4.58	7.90	3.86	(0.62)	(0.52)	(3.23)	(2.59)
Transport	7.06	5.20	16.89	18.58	13.61	11.31	3.01	0.33	0.72	2.73	2.67
Communication	4.10	1.04	1.38	1.07	0.05	(0.63)	(1.15)	(0.02)	(1.66)	(1.64)	(3.72)
Recreation and Culture	2.62	9.74	13.22	3.49	3.40	3.26	1.71	(0.62)	0.58	0.60	0.04
Education	4.04	-	-	-	-	-	-	-	-	-	-
Restaurants and Hotels	3.01	0.89	9.19	7.90	8.33	5.39	0.63	0.46	0.19	2.91	4.69
Miscellaneous Goods & Services	2.72	4.08	5.17	4.24	4.46	(0.75)	1.10	(1.32)	(0.71)	4.31	(0.17)
Total	**100.00**	**6.03**	**8.85**	**9.30**	**9.04**	**7.21**	**2.96**	**3.42**	**4.05**	**5.70**	**6.14**

Source: National Statistics Bureau, Thimphu

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TABLE 15.4 CONSUMER PRICE INDEXES - MAJOR COMPONENTS, BHUTAN, 1ST QTR. 2008 TO 2ND QTR. 2010 QUARTER TO QUARTER INFLATION RATE (%)

3rd Qtr. 2003=100

Item	Weight (%)	2008				2009				2010	
		1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr
Food and Non-Alcoholic Beverages	29.44	3.35	9.52	(0.56)	(0.51)	0.17	7.63	2.73	0.67	1.95	1.92
Alcoholic Beverages, Tobacco & Narcotics	2.23	(0.70)	5.27	1.07	3.20	2.58	(0.01)	0.12	(0.96)	(0.31)	0.86
Clothing And Footwear	10.49	4.27	8.65	(0.04)	0.48	(0.91)	0.90	(1.07)	2.44	(0.15)	1.49
Housing,water,electricity,gas & other fuels	25.68	0.55	6.04	1.31	(0.76)	0.82	0.10	(0.01)	(0.42)	4.01	7.90
Furnishing, household equipment & routine household maintenance	5.68	0.78	5.83	(1.14)	(0.49)	0.29	0.18	3.70	(0.11)	(1.10)	4.10
Health	2.94	(0.36)	5.54	(0.93)	0.37	2.81	1.60	(5.20)	0.47	-	2.28
Transport	7.06	0.50	10.13	2.62	0.01	(1.54)	1.92	(0.03)	0.40	0.44	1.86
Communication	4.10	0.52	0.16	(0.74)	0.11	(0.16)	(0.36)	0.39	(1.53)	(0.15)	(2.47)
Recreation and Culture	2.62	0.02	2.24	0.42	0.70	(0.12)	0.70	(1.88)	1.92	(0.11)	0.14
Education	4.04	-	-	-	-	-	-	-	-	-	-
Restaurants and Hotels	3.01	0.16	7.94	(0.23)	0.42	(2.56)	3.07	(0.40)	0.16	0.09	4.85
Miscellaneous Goods & Services	2.72	0.17	4.06	(0.02)	0.24	(4.83)	6.00	(2.42)	0.85	(0.01)	1.45
Total	**100.00**	**1.69**	**7.15**	**0.26**	**(0.19)**	**(0.01)**	**2.91**	**0.70**	**0.42**	**1.57**	**3.33**

Source: National Statistics Bureau, Thimphu

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TABLE 15.5 CONSUMER PRICE INDEXES FOR FOOD ITEMS, SUB - COMPONENTS, BHUTAN 1ST QTR. 2008 TO 2ND QTR. 2010

3rd Qtr. 2003=100

Item	Weight (%) (%)	2008				2009				2010	
		1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr
Food	27.69	129.21	142.19	141.29	140.51	140.46	151.74	156.05	157.02	160.20	163.61
Bread and Cereals (ND)	7.93	127.17	138.14	139.10	138.45	143.32	147.87	150.08	152.81	159.05	159.28
Meat	3.27	128.12	138.21	135.88	136.88	139.12	172.21	167.28	165.83	167.92	172.23
Fish	1.03	116.61	126.88	127.89	129.10	130.96	137.08	141.91	152.58	151.68	160.26
Milk,cheese & Eggs	5.16	137.99	148.95	151.66	152.49	153.25	161.56	160.94	158.90	160.50	166.82
Oils and Fats	3.41	115.13	123.42	124.56	123.17	123.19	123.71	123.32	131.70	132.57	133.10
Fruits	1.35	145.82	190.16	172.05	170.41	161.57	194.44	191.97	187.16	221.86	222.10
Vegetables	4.12	132.11	150.13	145.03	139.89	131.09	147.76	174.64	168.00	162.40	167.28
Sugar, Jam & Etc	0.56	127.64	128.70	128.76	129.46	118.75	123.97	133.77	174.01	168.33	168.33
Food Products n.e.c (ND)	0.87	131.38	142.15	143.93	146.82	147.93	149.29	154.61	145.70	146.59	151.23
Non - Alcoholic Beverages	1.74	115.68	116.03	116.99	117.26	121.95	122.20	122.91	124.84	125.37	122.52
Alcoholic Beverages	1.22	123.47	129.50	131.17	134.71	129.52	130.82	130.87	127.46	128.26	131.43
Tobacco	0.33	180.42	188.25	190.29	197.61	211.16	211.82	212.62	213.35	208.59	208.59
Narcotics (ND)	0.69	144.16	153.41	154.54	160.06	175.58	172.91	173.05	173.89	173.17	171.83
Clothing	7.87	132.15	143.71	140.94	141.48	137.91	141.95	145.99	150.29	150.08	152.27
Actual Rentals for Housing	18.77	126.33	134.68	134.02	133.84	135.05	134.99	135.06	134.70	141.82	155.42
Electricity,gas&other fuels	6.04	123.80	128.27	137.33	134.38	134.51	135.16	134.72	133.93	134.66	138.55
Fules & Lubricants	3.20	120.67	144.20	144.56	144.12	141.08	142.22	144.93	147.90	149.28	150.45
Education	4.04	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Personal Care	2.72	126.59	131.73	131.70	132.01	125.64	133.18	129.96	131.07	131.06	132.96
Total	**100.00**	**124.81**	**133.74**	**134.09**	**133.83**	**133.81**	**137.70**	**138.67**	**139.25**	**141.44**	**146.15**

Source: National Statistics Bureau, Thimphu

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TABLE 15.6 CONSUMER PRICE INDEXES FOR FOOD ITEMS, SUB - COMPONENTS, BHUTAN 1ST QTR. 2008 TO 2ND QTR. 2010 QUARTER TO QUARTER INFLATION RATE (%)

3rd Qtr. 2003=100

Item	Weight (%)	2008				2009				2010	
		1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr
Food	27.69	3.42	10.05	(0.63)	(0.55)	(0.04)	8.03	2.84	0.62	2.03	2.13
Bread and Cereals (ND)	7.93	8.21	8.63	0.69	(0.47)	3.52	3.17	1.49	1.82	4.08	0.14
Meat	3.27	1.59	7.88	(1.69)	0.74	1.64	23.79	(2.86)	(0.87)	1.26	2.57
Fish	1.03	2.93	8.81	0.80	0.95	1.44	4.67	3.52	7.52	(0.59)	5.66
Milk,cheese & Eggs	5.16	4.98	7.94	1.82	0.55	0.50	5.42	(0.38)	(1.27)	1.01	3.94
Oils and Fats	3.41	4.60	7.20	0.92	(1.12)	0.02	0.42	(0.32)	6.80	0.66	0.40
Fruits	1.35	0.75	30.41	(9.52)	(0.95)	(5.19)	20.34	(1.27)	(2.51)	18.54	0.11
Vegetables	4.12	(4.90)	13.64	(3.40)	(3.54)	(6.29)	12.72	18.19	(3.80)	(3.33)	3.00
Sugar, Jam & Etc	0.56	4.94	0.83	0.05	0.54	(8.27)	4.40	7.91	30.08	(3.26)	0.00
Food Products n.e.c (ND)	0.87	3.55	8.20	1.25	2.01	0.76	0.92	3.56	(5.76)	0.61	3.17
Non - Alcoholic Beverages	1.74	2.07	0.30	0.83	0.23	4.00	0.21	0.58	1.57	0.42	-2.27
Alcoholic Beverages	1.22	(2.12)	4.88	1.29	2.70	(3.85)	1.00	0.04	(2.61)	0.63	2.47
Tobacco	0.33	(0.13)	4.34	1.08	3.85	6.86	0.31	0.38	0.34	(2.23)	0.00
Narcotics (ND)	0.69	1.17	6.42	0.74	3.57	9.70	(1.52)	0.08	0.49	(0.41)	-0.77
Clothing	7.87	6.47	8.75	(1.93)	0.38	(2.52)	2.93	2.85	2.95	(0.14)	1.46
Actual Rentals for Housing	18.77	0.30	6.61	(0.49)	(0.13)	0.90	(0.04)	0.05	(0.27)	5.29	9.59
Electricity,gas&other fuels	6.04	1.31	3.61	7.06	(2.15)	0.10	0.48	(0.33)	(0.59)	0.55	2.89
Fules & Lubricants	3.20	0.42	19.50	0.25	(0.30)	(2.11)	0.81	1.91	2.05	0.93	0.78
Education	4.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Personal Care	2.72	0.17	4.06	(0.02)	0.24	(4.83)	6.00	(2.42)	0.85	(0.01)	1.45
Total	**100.00**	**1.69**	**7.15**	**0.26**	**(0.19)**	**(0.01)**	**2.91**	**0.70**	**0.42**	**1.57**	**3.33**

Source: National Statistics Bureau, Thimphu

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TABLE 15.7 CONSUMER PRICE INDEXES, SUB-COMPONENTS, BHUTAN, 1ST QTR. 2008 TO 2ND QTR. 2010 YEAR ON YEAR INFLATION RATE (%)

3rd Qtr. 2003=100

Item	Weight (%) (%)	2008				2009				2010	
		1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr
Food	27.69	11.31	13.01	13.10	12.46	8.71	6.72	10.45	11.75	14.05	7.82
Bread and Cereals (ND)	7.39	14.92	19.90	19.61	17.81	12.70	7.04	7.89	10.37	10.98	7.72
Meat	3.27	17.39	8.19	7.85	8.54	8.59	24.60	23.11	21.15	20.70	0.01
Fish	1.03	8.48	15.68	14.94	13.96	12.31	8.04	10.96	18.19	15.82	16.91
Milk,cheese & Eggs	5.16	14.76	14.92	16.05	16.01	11.06	8.47	6.12	4.20	4.73	3.26
Oils and Fats	3.41	7.93	12.55	14.18	11.90	7.00	0.23	(1.00)	6.93	7.61	7.59
Fruits	1.35	(1.39)	11.34	19.44	17.74	10.80	2.25	11.58	9.83	37.32	14.23
Vegetables	4.12	7.56	5.44	1.12	0.71	(0.77)	(1.58)	20.42	20.09	23.88	13.21
Sugar, Jam & Etc	0.56	3.74	3.77	3.84	6.44	(6.96)	(3.68)	3.89	34.41	41.75	35.78
Food Products n.e.c (ND)	0.87	2.51	11.20	13.21	15.72	12.60	5.02	7.42	(0.76)	(0.91)	1.30
Non - Alcoholic Beverages	1.74	3.53	3.39	3.57	3.47	5.42	5.32	5.06	6.46	2.80	0.26
Alcoholic Beverages	1.22	8.04	2.48	5.92	6.79	4.90	1.02	(0.23)	(5.38)	(0.97)	0.47
Tobacco	0.33	3.73	2.12	3.50	9.39	17.04	12.52	11.73	7.97	(1.22)	-1.52
Narcotics (ND)	0.69	26.25	30.66	28.75	12.33	21.80	12.71	11.98	8.64	(1.37)	-0.62
Clothing	7.87	8.11	14.92	15.10	13.99	4.36	(1.22)	3.58	6.23	8.82	7.27
Actual Rentals for Housing	18.77	(0.68)	2.36	4.31	6.26	6.90	0.23	0.78	0.64	5.01	15.13
Electricity,gas&other fuels	6.04	6.16	4.51	11.55	9.97	8.65	5.37	(1.90)	(0.33)	0.11	2.51
Fules & Lubricants	3.20	3.90	26.70	23.76	19.94	16.91	(1.37)	0.26	2.62	5.81	5.79
Education	4.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Personal Care	2.72	4.08	5.17	4.24	4.46	(0.75)	1.10	(1.32)	(0.71)	4.31	-0.17
Total	**100.00**	**6.03**	**8.85**	**9.30**	**9.04**	**7.21**	**2.96**	**3.42**	**4.05**	**5.70**	**6.14**

Source: National Statistics Bureau, Thimphu

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CHAPTER 16
CRIMES

The data available in this sector are from the cases reported and registered by Royal Bhutan Police. The statistics presented here are those compiled by the Crime and Operations, Police Headquarters.

This sector presents the details of crime statistics by nature of crime categorized by the Police, namely: attempt, aiding and abetting, solicitation and criminal conspiracy/ homicide/ assault, battery and related offences/ kidnapping and related offences/ sexual offences/ offence against infant, child, mentally disabled and incompetent person/ arson and related offences/ larceny, robbery, armed robbery and related offences/ money laundering and smuggling/ embezzlement and bribery/ burglary, trespass and related offences/ forgery and related offences/ defamation and related offences/ treason, terrorism and related offences/ offences against cultural and national heritage/ offences against judicial authority/ prostitution and related offences/ offences against the public welfare/ offences related to public order and tranquility/ offences against privacy/ computers offences/ offences related to firearms and weapons/ offences related to protected species, controlled and other harmful substances and motor vehicle offences etc.

The figures on top ten crime incidents by nature of crime are presented as of 2009 through administrative records maintained by Crime and Operations, Royal Bhutan Police.

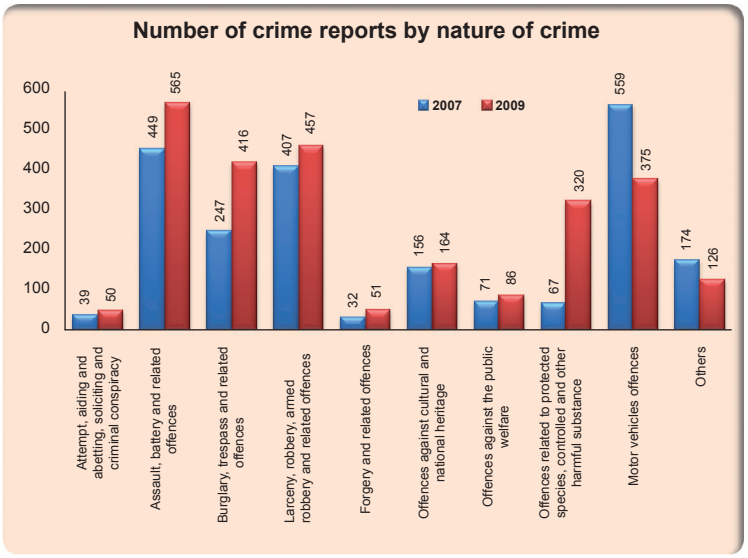

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TABLE 16.1 SUMMURY OF CRIME REPORTS BY NATURE OF CRIME, BHUTAN, 2007 to 2009

(Incident)

Nature of Crime	2007	2008	2009
ATTEMPT, AIDING AND ABETTING, SOLICITATION AND CRIMINAL CONSPIRACY	39	33	50
HOMICIDE	14	18	16
ASSAULT,BATTERY AND RELATED OFFENCES	449	440	565
KIDNAPPING AND RELATED OFFENCES	5	6	14
SEXUAL OFFENCE	40	35	50
OFFENCE AGAINST INFANT,CHILD,MENTALLY DISSABLED AND INCOMPETENT PERSON	5	4	7
ARSON AND RELATED OFFENCES	41	20	25
BURGLARY, TRESPASS AND RELATED OFFENCES	247	310	416
LARCENY,ROBBERY, ARMED ROBBERY AND RELATED OFFENCES	407	436	457
MONEY LAUNDERING AND SMUGGLING	16	17	7
EMBEZZLEMENT AND BRIBERY	8	3	5
FORGERY AND RELATED OFFENCES	32	37	51
DEFAMATION AND RELATED OFFENCES	4	5	5
TREASON,TERRORISM AND RELATED OFFENCES	6	16	6
OFFENCES AGAINST CULTURAL AND NATIONAL HERITAGE	156	168	164
OFFENCES AGAINST JUDICIAL AUTHORITY	0	0	1
PROSTITUTION AND RELATED OFFENCES	5	8	4
OFFENCES AGAINST THE PUBLIC WELFARE	71	84	86
OFFENCES RELATED TO PUBLIC AND CIVIC DUTIES	2	10	21
OFFENCES RELATED TO PUBLIC ORDER AND TRANQUILLITY	11	10	40
OFFENCES AGAINST PRIVACY	0	0	0
COMPUTER OFFENCES	0	1	0
OFFENCES RELATED TO FIREARMS AND WEAPONS	13	38	29
OFFENCES RELATED TO PROTECTED SPECIES,CONTROLLED AND OTHER HARMFUL SUBSTANCES	67	168	320
MOTOR VEHICLE OFFENCES	559	357	375
OTHERS	174	136	126
TOTAL CRIMES	**2371**	**2360**	**2840**

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

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TABLE 16.2 DETAILS OF CRIME REPORTS BY NATURE OF CRIME, BHUTAN , 2007 to 2009

(Incident)

Details of Crime	2007	2008	2009
ATTEMPT, AIDING AND ABETTING,SOLICITATION AND CRIMINAL CONSPIRACY			
Aiding and Abetting	0	1	3
Solicitation	0	0	0
Criminal Conspiracy	0	0	0
Criminal Attempt Murder	6	7	8
Criminal Attempt Rape	7	5	18
Criminal Attempt Burglary	3	7	6
Criminal Attempt Larceny	8	7	12
Criminal Attempt Suicide	15	6	3
TOTAL	**39**	**33**	**50**
HOMICIDE			
Murder	3	4	2
Voluntary Manslaughter	5	3	6
Involuntary Manslaughter	2	7	2
Negligent Homicide	3	3	4
Illegal Abortion	0	0	1
Custodial Death	0	0	0
Complicity in Suicide	0	0	0
Illegal Selling or Buying of Human Organs	1	1	0
Trafficking a Person	0	0	1
TOTAL	**14**	**18**	**16**
ASSAULT, BATTERY AND RELATED OFFENCES			
Assault	41	34	37
Battery	401	403	526
Reckless Endangerment	7	3	2
TOTAL	449	440	565
KIDNAPPING AND RELATED OFFENCES			
Kidnapping	0	0	2
Abduction	0	2	0
Criminal Elopement	4	4	12
Escape from Lawful Custody	1	0	0
Felonious Restriant	0	0	0
Infringement of Movement	0	0	0
TOTAL	**5**	**6**	**14**

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

Contd.

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TABLE 16.2 (contd.): DETAILS OF CRIME REPORTS BY NATURE OF CRIME, BHUTAN , 2007 to 2009

(Incident)

Details of Crime	2007	2008	2009
SEXUAL OFFENCES			
Rape	22	11	8
Rape of a Married Person	1	3	4
Statutory Rape	4	5	5
Rape of a Child above twelve years of age	3	3	14
Rape of a Pregnant Woman	0	0	0
Gang Rape	2	1	2
Gang Rape of a Married Person	0	0	0
Gang Rape of a Child below Twelve years of age	0	0	0
Gang Rape of a Child above twelve years of age	1	0	0
Gang Rape of a Pregnant Woman	0	0	0
Custodial Rape	0	0	0
Marital Rape	0	0	0
Child Molestation	4	4	6
Sexual Harrassment	2	4	8
Incest	1	1	0
Indecent Exposure	0	1	2
Bestiality	0	0	0
Un-Natural Sex	0	2	1
TOTAL	**40**	**35**	**50**
OFFENCE AGAINST INFANT, CHILD, MENTALLY DISSABLED AND INCOMPETENT PERSON			
Abandonment of an Infant or a Child	3	1	2
Abandonment of Dead Infant	1	2	2
Child Abuse	0	0	1
Endangerment of a Child	0	1	2
Pedophilia	0	0	0
Trafficking of a Child	1	0	0
Endangerment of a Mentally Dissabled or an Incompetent Person	0	0	0
TOTAL	**5**	**4**	**7**
ARSON AND RELATED OFFENCES			
Arson	5	3	2
Negligent Burning or Exploding	36	17	23
TOTAL	**41**	**20**	**25**

Contd.

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TABLE 16.2 (contd.): DETAILS OF CRIME REPORTS BY NATURE OF CRIME, BHUTAN , 2008 & 2009

(Incident)

Details of Crime	2007	2008	2009
LARCENY,ROBBERY,ARMED ROBBERY AND RELATED OFFENCES			
Larceny	348	339	348
Larceny by Deception	1	2	5
Robbery	6	17	13
Armed Robbery	4	12	11
Extortion	0	0	1
Illegal Transfer of Immovable Property	0	0	0
Larceny of Property Lost, Mislaid or Delivered by Mistake	3	1	2
Possession of Stolen Property	0	0	2
Theft of Service	0	0	2
Un-Authorized use of Property	0	0	0
Breach of Trust	14	16	12
Criminal Misappropriation of Property	2	1	0
Reckless Endangerment of Property	1	1	1
Un-Lawful Posting of Advertisements	0	0	0
Auto Striping	25	44	58
Pick Pocketing	3	3	2
Total	**407**	**436**	**457**
MONEY LAUNDERING & SMUGGLING			
Money Laundering	0	0	1
Smuggling	12	15	4
Receiving of Smuggled Goods or Substances	0	0	0
Tax Evasion	0	0	0
Breach of Contract	4	2	2
TOTAL	**16**	**17**	**7**
EMBEZZLEMENT & BRIBERY			
Embezzlement	7	3	5
Bribery	0	0	0
Commercial Bribery	0	0	0
Official Misconduct	1	0	0
TOTAL	**8**	**3**	**5**

Contd.

TABLE 16.2 (contd.): DETAILS OF CRIME REPORTS BY NATURE OF CRIME, BHUTAN, 2007 to 2009

(Incident)

Details of Crime	2007	2008	2009
BURGLARY,TRESPASS AND RELATED OFFENCES			
Burglary	237	303	395
Trespass	3	5	14
Impersonation	7	2	7
TOTAL	**247**	**310**	**416**
FROGERY & RELATED OFFENCES			
Frogery	13	10	17
Tampering with Public Records	0	0	0
Tampering with Documents	0	1	0
Execution of a Document by Deception	0	0	0
Fraudulent Cheque Writing	2	2	2
Counterfeiting	0	1	2
Deceptive Practice	17	23	30
Fraudulent Obtaining of Insurance	0	0	0
Fraudulent Insolvency	0	0	0
Fraud Involving a Security Interest	0	0	0
TOTAL	**32**	**37**	**51**
DEFAMATION & RELATED OFFENCES			
Defamation	3	4	5
Libel	1	0	0
Black Mail	0	1	0
False Advertising	0	0	0
TOTAL	**4**	**5**	**5**
TREASON, TERRORISM & RELATED OFFENCES			
Treason	1	2	1
Terrorism	1	11	0
Sedition	2	0	3
Espionage	0	0	0
Hijacking	0	0	0
Abettor of Mutiny	0	0	0
Harbouring of Deserter	0	0	0
Impersonation of Uniformed Personnel	0	0	0
Impersonation of an Official	2	3	2
TOTAL	**6**	**16**	**6**

Contd.

TABLE 16.2 (contd.): DETAILS OF CRIME REPORTS BY NATURE OF CRIME, BHUTAN , 2007 to 2009

(Incident)

Details of Crime	2007	2008	2009
OFFENCES AGAINST CULTURAL & NATIONAL HERITAGE			
Illegal sale of Cultural and National Heritage Property	0	1	0
Damage to Cultural or National Heritage Property and National Monuments	0	0	0
Damage to Religious Objects	144	131	155
Offence against the Ku, Sung, Thuk-Ten or Zungs	10	16	1
Illegal Purchase or sale of Ku, Sung, Thuk-Ten or Zungs	0	0	0
Illegal Gift of Ku, Sung, Thuk-Ten or Zungs	0	0	0
Caretaker's Negligence causing loss or Larceny of Ku, Sung, Thuk-Ten or Zungs	0	15	1
Larceny of Antique	1	4	3
Illegal Purchase or sale of Antique	1	1	4
Illegal Gift of Antique	0	0	0
TOTAL	**156**	**168**	**164**
OFFENCES AGAINST JUDICIAL AUTHORITY			
Un-Authorized Hearing	0	0	0
Contempt of Court	0	0	1
Perjury	0	0	0
Cantankerous Litigation	0	0	0
TOTAL	**0**	**0**	**1**
PROSTITUTION & RELATED OFFENCES			
Prostitution	5	2	2
Promotion of Prostitution	0	4	1
Patronizing a Prostitute	0	2	0
Trafficking a Person for Prostitution	0	0	0
Lewed and Lascivious Conduct	0	0	1
TOTAL	**5**	**8**	**4**

Contd.

TABLE 16.2 (contd.): DETAILS OF CRIME REPORTS BY NATURE OF CRIME, BHUTAN , 2007 to 2009

(Incident)

Details of Crime	2007	2008	2009
OFFENCES AGAINST THE PUBLIC WELFARE			
Public Intoxication	0	4	4
Use of Tobacco or Health Hazard Substances	23	22	0
Illegal Sale fo Tobacco or other Health Hazard Substances	4	6	6
Illegal Sale of Alcohol	2	0	0
Gambling	0	0	0
Malicious Mischief	39	52	75
Usury	0	0	0
Tampering with a Consumer Product	0	0	1
Black-Marketing	2	0	0
Anti-Trust	0	0	0
Endangerment of a Public Water Source	0	0	0
Environment Pollution	1	0	0
Criminal Nuisance	0	0	0
TOTAL	**71**	**84**	**86**
OFFENCES RELATED TO PUBLIC & CIVIC DUTIES			
Entrapment	0	0	0
Torture	0	0	0
Illegal Arrest	0	0	0
Hindering Prosecution	0	0	1
Obstruction of Lawful Authority	2	8	12
Obstruction of Public Service	0	0	1
Reporting of False Information	0	1	5
Failure to Assist Lawful Authority	0	0	0

Contd.

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TABLE 16.2 (contd.): DETAILS OF CRIME REPORTS BY NATURE OF CRIME, BHUTAN , 2007 to 2009

(Incident)

Details of Crime	2007	2008	2009
Failure to Report a Crime	0	0	1
Tampering with a Dead Body	0	0	0
Abandonment of a Person in Danger	0	0	0
Malpractice	0	0	0
Crime Against Public Election	0	0	0
Illegal Immigration	0	1	1
Illegal Issue of Immigration Documents	0	0	0
Illegal Transportation of Immigrat	0	0	0
Drawing of illegal Document	0	0	0
TOTAL	**2**	**10**	**21**
OFFENCES RELATED TO PUBLIC ORDER AND TRANQUILLITY			
Breach of Public Order and Tranquillity	0	0	0
Unlawful Assembly	0	0	0
Disruption of a Lawful meeting or Gathering	0	0	0
Failure to Disperse	0	0	0
Rioting	0	0	0
Promotion of Civil Unrest	0	0	0
Disorderly Conduct	3	3	6
Harassment	3	5	33
Prowling	4	1	1
Obstruction of Through Fare	1	1	0
TOTAL	**11**	**10**	**40**
MISCELLANEOUS OFFENCES			
OFFENCES AGAINST PRIVACY			
Eavesdropping	0	0	0
Unauthorized oppening of Mail or Parcel	0	0	0
TOTAL	**0**	**0**	**0**

Contd.

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TABLE 16.2 (contd.): DETAILS OF CRIME REPORTS BY NATURE OF CRIME, BHUTAN , 2007 to 2009

(Incident)

Details of Crime	2007	2008	2009
COMPUTER OFFENCES			
Tampering with Computer Material	0	1	0
Unlawful Possession of Computer Materials	0	0	0
Computer Pornography	0	0	0
TOTAL	**0**	**1**	**0**
OFFENCES RELATED TO FIREARMS AND WEAPONS			
Illegal Manufacturing of a Firearms, Ammunition, Explosive or other Lethal Weapons	0	1	0
Illegal Possession of Firearm, Ammunition, Explosive or other Lethal Weapons	5	14	7
Illegal Sale or Purchase of a Firearm, Ammunition, Explosive or other Lethal Weapons	1	0	0
Illegal Pointing of a Firearm	0	0	0
Display of Weapon	7	23	22
False Alarm	0	0	0
TOTAL	**13**	**38**	**29**
OFFENCES RELATED TO PROTECTED SPECIES, CONTROLLED AND OTHER HARMFUL SUBSTANCES			
Risking the Protedted Species	4	2	2
Illegal Hunting or Fishing	3	2	2
Genetic Interference	0	0	0
Illegal Cultivitation, Production or Manufacturing	0	0	0
Illegal Transaction of Contolled Substances	11	79	40
Possession of a Controlled Substances	44	71	272
Adulteration of Drugs	0	0	0
Sale of a Prescription for a controlled Substances	0	1	0

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TABLE 16.2 (contd.): DETAILS OF CRIME REPORTS BY NATURE OF CRIME, BHUTAN , 2007 to 2009

(Incident)

Details of Crime	2007	2008	2009
Illegal Sale and use of Harmful Chemical Substance	5	13	4
TOTAL	**67**	**168**	**320**
MOTOR VEHICLE OFFENCES			
M.V Accident	469	282	284
M.V Accident (Fatal)	18	27	31
Hit and Run	60	27	35
Cycle Accident	0	0	0
Pedestrain Accident	12	19	25
Traffic Violation	0	2	0
TOTAL	**559**	**357**	**375**
OTHERS			
Accidental Death	42	28	28
Accidental Injury	1	0	1
Absconding	0	0	0
Black Magic	1	0	0
Copy Right Infriengment	n.a	n.a	3
Acquiring Citizenship ID Card of Foreign Country	n.a	n.a	2
Drowning	32	19	12
Natural Calamities	1	0	0
Missing of Person	19	2	9
Un-Natural Death	28	34	22
Suicide	50	53	49
TOTAL	**174**	**136**	**126**
TOTAL CRIMES	**2371**	**2360**	**2840**

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

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TABLE 16.3 MONTHLY MOTOR VEHICLE ACCIDENTS BY TRAFFIC DIVISION, BHUTAN, 2009

(incident)

Traffic Divisions	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL
Thimphu Division	5	8	8	2	10	5	12	8	10	7	10	9	94
Div-I Paro	1	1	1	2	2		4	5	3			1	20
Div-II Punakha	2	2	3	2	4	2	3	1	2	2	0	3	26
Div-III Phuentsholing	16	16	10	14	10	11	12	20	18	28	15	12	182
Div-IV Samtse	0	0	1	2	0	1		0	0	0	0	0	4
Div-V Gelephu	1	2	0	0	0	0	1	0	0	0	0	1	5
Div-VI Tsirang	0	0	1	0	0	0	0	0	0	0	0	0	1
Div-VII Trongsa	0	0	2	1	1	0	1	1	2	3	0	0	11
Div-Samdrup Jongkhar	1	1		1		0	1		0		1		5
Div-IX Trashigang	2	2	3	3	1	0	1	1	0	1	0	6	20
Div-X Mongar	3			1		0		1	0	1	1	0	7
TOTAL	**31**	**32**	**29**	**28**	**28**	**19**	**35**	**37**	**35**	**42**	**27**	**32**	**375**

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

TABLE 16.4 CAUSES OF MOTOR VEHICLE ACCIDENTS BY TRAFFIC DIVISION, BHUTAN, 2009

(incident)

Traffic division/ Type of Vehicle	Mechanical fault	Drunk driving	Bad weather	Without licence	Unknown causes	Other causes	All causes
Thimphu							
Truck	0	2	1	1	0	18	22
Buses	0	0	0	1	0	0	1
Light Vehicle	1	2	0	13	0	55	71
Two wheeler	0	1	0	4	0	8	13
Total	**1**	**5**	**1**	**19**	**0**	**81**	**107**
Paro							
Truck	1	0	2	0	0	1	4
Buses	0	0	0	0	0	0	0
Light Vehicle		1	2	3		5	11
Two wheeler	0	0	0	2	0	0	2
Total	**1**	**1**	**4**	**5**	**0**	**6**	**17**

Contd.

TABLE 16.4 (contd.): CAUSES OF MOTOR VEHICLE ACCIDENTS BY TRAFFIC DIVISION, BHUTAN, 2009

(incident)

Traffic division/ Type of Vehicle	Mechanical fault	Drunk driving	Bad weather	Without licence	Unknown causes	Other causes	All causes
Punakha							
Truck	1	0	0	3	0	4	8
Buses	0	0	0	1	0	0	1
Light Vehicle	1	0	1	4		15	21
Two wheeler	0	0	0	0	0	1	1
Total	**2**	**0**	**1**	**8**	**0**	**20**	**31**
Phuentsholing							
Truck	10	8	4	11	0	77	110
Buses	1	1		2	0	4	8
Light Vehicle	2	18	5	16	0	89	130
Two wheeler		1		2	0	3	6
Total	**13**	**28**	**9**	**31**	**0**	**173**	**254**
Samtse							
Truck	1	0	1	0	0	2	4
Buses	0	0	0	0	0	0	0
Light Vehicle	0	0	0	1	0	0	1
Two wheeler	0	0	0	0	0	0	0
Total	**1**	**0**	**1**	**1**	**0**	**2**	**5**
Gelephu							
Truck	1	0	0	0	0	0	1
Buses		0	0		0	0	0
Light Vehicle	0	0	0	1	0	0	1
Two wheeler	0	0	0	0	0	0	0
Total	**1**	**0**	**0**	**1**	**0**	**0**	**2**
Tsirang							
Truck	0	0	1	0	0	5	6
Buses	0	0	0	0	0	0	0
Light Vehicle	0	0	0	0	0	5	5
Two wheeler	0	0	0	0	0		0
Total	**0**	**0**	**1**	**0**	**0**	**10**	**11**

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

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TABLE 16.4 (contd.): CAUSES OF MOTOR VEHICLE ACCIDENTS BY TRAFFIC DIVISION, BHUTAN, 2009

(incident)

Traffic division/ Type of Vehicle	Mechanical fault	Drunk driving	Bad weather	Without lience	Un-known causes	Other causes	All causes
Trongsa							
Truck	1	0	0	1	0	2	4
Buses	0	0	0	0	0	0	0
Light Vehicle	0	0	0	1	0	3	4
Two wheeler	0	0	0	0	0	1	1
Total	1	0	0	2	0	6	9
Samdrup Jongkhar							
Truck	2	0	1	0	0	1	4
Buses	0	0	0	0	0	0	0
Light Vehicle	1	0	0	0	0	0	1
Two wheeler	0	0	0	0	0	0	0
Total	**3**	**0**	**1**	**0**	**0**	**1**	**5**
Trashigang							
Truck	1	0	0	0	0	2	3
Buses	0	0	0	0	0	0	0
Light Vehicle	0	0	2	1	0	8	11
Two wheeler	0	0	0	0	0	0	0
Total	**1**	**0**	**2**	**1**	**0**	**10**	**14**
Mongar							
Truck	0	0	0	0	0	3	3
Buses	0	0	0	0	0	0	0
Light Vehicle	1		1			1	3
Two wheeler	0	0	0	0	0	0	0
Total	**1**	**0**	**1**	**0**	**0**	**4**	**6**
Bhutan	25	34	21	68	0	313	461

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

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