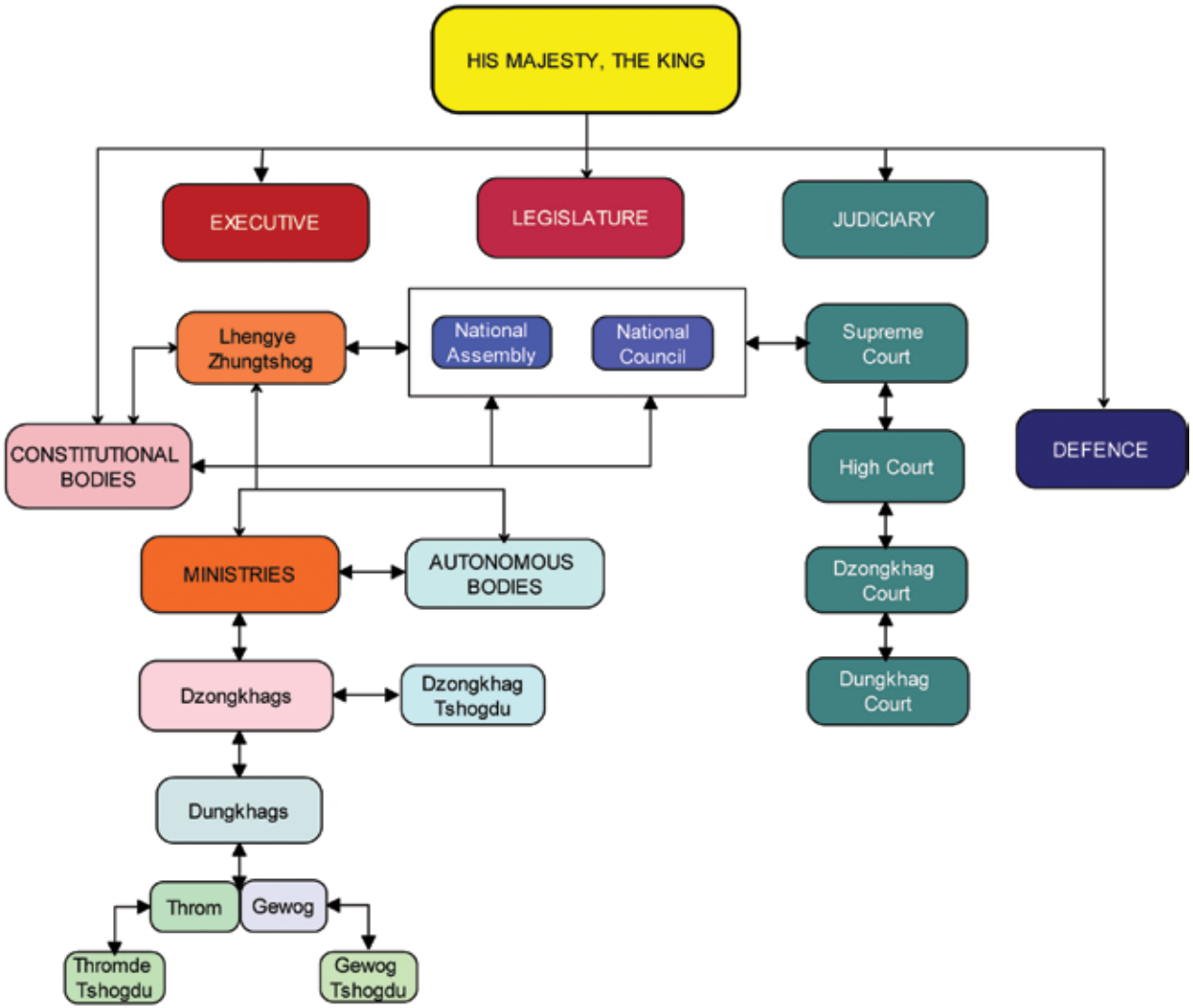
# Statistical Yearbook of Bhutan 2011

National Statistics Bureau
Royal Government of Bhutan

# ORGANOGRAM OF THE ROYAL GOVERNMENT OF BHUTAN
## POST CONSTITUTIONAL ENACTMENT 2009



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# FORWARD

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

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

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

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

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

# NOTES FOR USERS

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

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

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

# UNITS OF MEASUREMENT

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

2. Metric units

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

3. Conversion from British to Metric units (Area)

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

## C. Weight measurements

1. British units

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

2. Metric units

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

3. Conversion from British to metric units

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

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

# BHUTAN

## i. Location and Extent

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

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

## ii. Relief and Surface features

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

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

The Inner Himalayas are southward spurs of the Great 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.

## iii. Climate and Vegetation

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

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

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

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

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

## iv. Drainage Pattern

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

## v. Government

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

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

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

## vi. Administrative System

The country is governed through three levels of administration – the

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

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

## vii. The National Assembly

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

## viii. The National Council

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

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

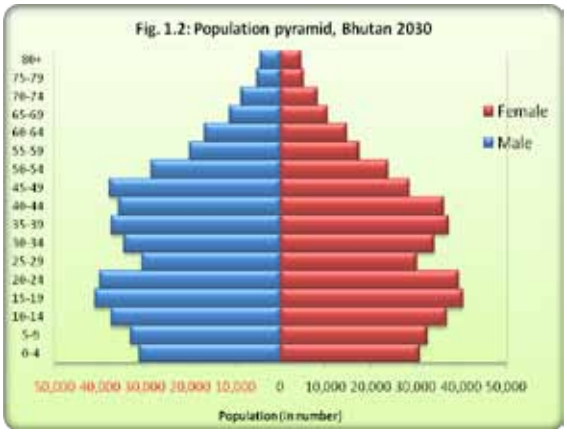
The National Council meets twice a year. However, special sessions may also be convened depending upon the needs. The chairperson, who is elected from 25 members of the National Council is the Presiding Officer of the House, and is assisted by a Deputy Chairperson in the smooth functioning and the conduct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

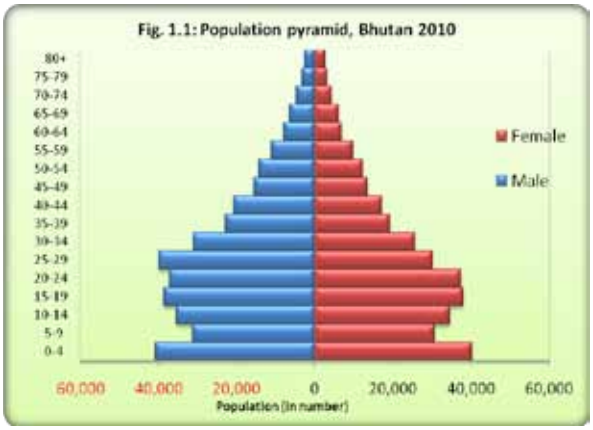
## ix. The Monastic Body

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

# CHAPTER 1
# POPULATION

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




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

## The interpretations of Demographic indicators are as follows:

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

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

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

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

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

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

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

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

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

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

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

(in numbers)

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

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

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

(in numbers)

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

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

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

(in numbers)

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

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

TABLE 1.4: PROJECTED POPULATION BY AGE GROUP AND SEX, BHUTAN 2016 - 2018

(in numbers)

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

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

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

(in numbers)

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

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

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

(in numbers)

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

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

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

(in numbers)

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

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

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

(in numbers)

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

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

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

(in numbers)

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

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

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

(in numbers)

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

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

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

(in numbers)

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

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

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

(in numbers)

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

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

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

(in numbers)

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

Source: Population Projections Bhutan, 2005-2030, NSB

# CHAPTER 2
# HEALTH

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

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

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

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

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

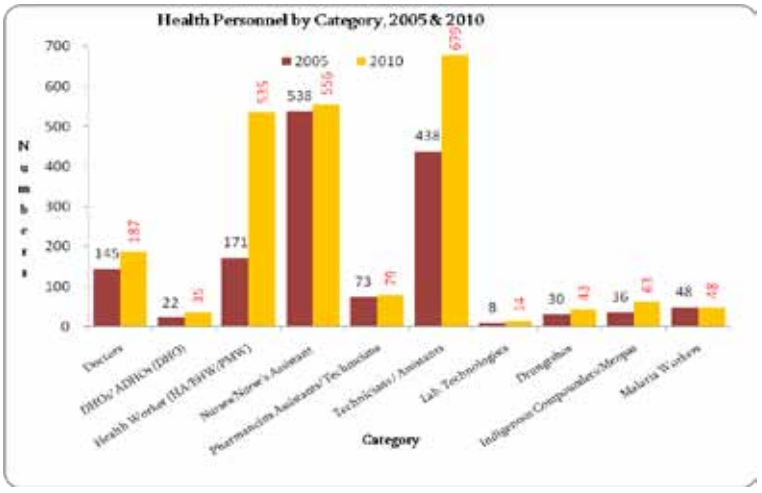


TABLE 2.1: SUMMARY OF THE HEALTH FACILITIES AND PERSONNEL, BHUTAN, 2005 TO 2010

(Number)

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

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

*Source: Annual Health Bulletin 2011, MoH, Thimphu.*

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

(Number)

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

Note: *Indigenous hospital included under hospital,**Satellite Clinic included under BHU
Source: *Annual Health Bulletin 2011, MoH, Thimphu.*

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

(Number)

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

Note: *Includes doctors in adminstrative services, Non-Bhutanese and attachments.
**Health workers for 2008 has been combined of HA/BHW/PMW
*Source: Annual Health Bulletin 2011, MoH, Thimphu.*

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

(Number)

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

*Source: Annual Health Bulletin 2011, MoH, Thimphu.*

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

(Number)

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

*Source: Annual Health Bulletin 2011, MoH, Thimphu.*

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

(Number)

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

*Table 2..6 contd...*

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

*Table 2..6 contd...*

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

*Table 2..6 contd...*

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

*Source: Annual Health Bulletin 2011, MoH, Thimphu.*

TABLE 2.7: TOTAL MORBIDITY BY SEX, BHUTAN, 2010

(Number)

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

*Table 2..7 contd...*

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

Table 2..7 contd...

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Other Ear Disorders | 163 | 159 | 490 | 474 | 1,603 | 1,563 | 3,289 | 3,535 | 594 | 553 | 315 | 279 | 13,017 |
| **Diseases of Circulatory System** | | | | | | | | | | | | | |
| Rheumatic Heart Disease | 30 | 11 | 18 | 19 | 45 | 22 | 174 | 274 | 97 | 88 | 61 | 60 | 899 |
| Hypertension | 0 | 0 | 0 | 0 | 39 | 47 | 4,877 | 7,249 | 3,232 | 3,746 | 2,352 | 2,311 | 23,853 |
| Ischaemic Heart Diseases | 0 | 0 | 0 | 0 | 5 | 3 | 62 | 60 | 30 | 38 | 32 | 38 | 268 |
| Cerebro-vascular Diseases | 2 | 1 | 1 | 1 | 5 | 4 | 47 | 52 | 55 | 48 | 89 | 49 | 354 |
| Other Circulatory Diseases | 43 | 32 | 92 | 72 | 324 | 350 | 1,280 | 1,771 | 493 | 499 | 427 | 420 | 5,803 |
| **Respiratory diseases** | | | | | | | | | | | | | |
| Common Cold | 10,375 | 10,244 | 21,875 | 21,663 | 45,470 | 42,564 | 67,119 | 75,024 | 9,885 | 10,220 | 4,775 | 4,495 | 323,709 |
| Acute Pharyngitis/Tonsilitis | 751 | 714 | 2,323 | 2,603 | 8,895 | 10,232 | 19,535 | 22,907 | 2,381 | 2,363 | 931 | 797 | 74,432 |
| Pneumonia | 2,262 | 1,925 | 2,650 | 2,367 | 715 | 668 | 656 | 643 | 172 | 163 | 182 | 170 | 12,573 |
| Other Respiratory & Nose Diseases | 1,559 | 1,453 | 2,626 | 2,645 | 4,761 | 4,652 | 11,630 | 13,547 | 2,678 | 2,704 | 1,837 | 1,769 | 51,861 |
| **Diseases of the Digestive system** | | | | | | | | | | | | | |
| Diseases of Teeth & Gums | 28 | 23 | 358 | 341 | 1,920 | 1,874 | 4,365 | 4,940 | 1,026 | 853 | 423 | 310 | 16,461 |
| Dental Caries | 29 | 39 | 599 | 735 | 4,202 | 4,145 | 9,101 | 11,797 | 2,140 | 2,024 | 955 | 690 | 36,456 |
| Peptic Ulcer Syndrome | 9 | 15 | 156 | 215 | 2,092 | 2,743 | 22,994 | 29,260 | 4,758 | 5,389 | 2,223 | 2,479 | 72,333 |
| Acute Appendicitis | 1 | 0 | 6 | 1 | 51 | 29 | 246 | 226 | 49 | 24 | 47 | 5 | 685 |
| Alcohol Liver Diseases | 0 | 0 | 0 | 0 | 0 | 0 | 601 | 516 | 337 | 244 | 154 | 91 | 1,943 |
| Gall Bladder Diseases | 0 | 1 | 2 | 5 | 1 | 6 | 148 | 434 | 79 | 118 | 32 | 53 | 879 |
| Other Diseases of the Digestive System | 675 | 776 | 2,403 | 2,530 | 6,150 | 6,793 | 17,235 | 21,443 | 3,532 | 3,230 | 1,773 | 1,676 | 68,216 |
| **Skin Diseases** | | | | | | | | | | | | | |
| Skin Infections | 2,240 | 2,251 | 6,303 | 5,725 | 13,438 | 11,098 | 23,297 | 18,880 | 3,489 | 2,584 | 1,634 | 1,084 | 92,023 |
| Other Disorders of Skin & Subcutaneous-tissues | 1,686 | 1,635 | 3,663 | 3,622 | 8,364 | 7,281 | 17,805 | 17,004 | 3,123 | 2,675 | 1,558 | 1,102 | 69,518 |
| **Diseases of Musculo-skeletal system & Cogenital Deformities** | | | | | | | | | | | | | |
| Arthritis & Arthrosis | 18 | 22 | 53 | 70 | 303 | 271 | 3,713 | 3,572 | 1,589 | 1,479 | 898 | 681 | 12,669 |
| Other Musculo-skeletal disorders | 49 | 65 | 360 | 371 | 2,693 | 2,434 | 25,699 | 26,633 | 7,246 | 6,616 | 3,417 | 2,917 | 78,500 |

*Table 2..7 contd...*

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

*Table 2..7 contd...*

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

*Source: Annual Health Bulletin 2011, MoH, Thimphu.*

TABLE 2.8: HOSPITAL INPATIENT MORBIDITY CASES, BHUTAN, 2010

(Number)

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

*Table 2..8 contd...*

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

*Table 2..8 contd...*

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

*Table 2..8 contd...*

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

*Table 2..8 contd...*

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

*Source: Annual Health Bulletin 2011, MoH, Thimphu.*

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

(Number)

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

*Source: Annual Health Bulletin 2011, MoH, Thimphu.*

TABLE 2.10: IMMUNIZATION STATUS BY DZONGKHAG, BHUTAN, 2010

(Numbers)

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

*Source: Annual Health Bulletin 2011, MoH, Thimphu.*

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

(Number)

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

Source: Annual Health Bulletin 2011, MoH, Thimphu.

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

(Number)

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

Notes: *All malnourished included over weight and under weight after 2008
Source: Annual Health Bulletin 2011, MoH, Thimphu.

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

(Number)

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

*Table 2..13 contd...*

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

*Table 2..13 contd...*

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

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

Source: Annual Health Bulletin 2011, MoH, Thimphu.

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

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

Source: Annual Health Bulletin 2011, MoH, Thimphu.

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

(Number)

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

*Note: IUD = No. inserted, Pills = No. of cycles, DMPA = No. of Injections and Condoms = No. of pieces distributed*
Source: Annual Health Bulletin 2011, MoH, Thimphu.

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

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

*Note: *DMPA = 1 user is equal to 4 injections*
***Oral pills = 1 user is equal to 13 cycles or 12 cycles*
*Source: Annual Health Bulletin 2011, MoH, Thimphu.*

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

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

*Source: Annual Health Bulletin 2011, MoH, Thimphu.*

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

(Person)

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

*Source: Annual Health Bulletin 2011, MoH, Thimphu.*

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

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

*Source: Annual Health Bulletin 2011, MoH, Thimphu.*

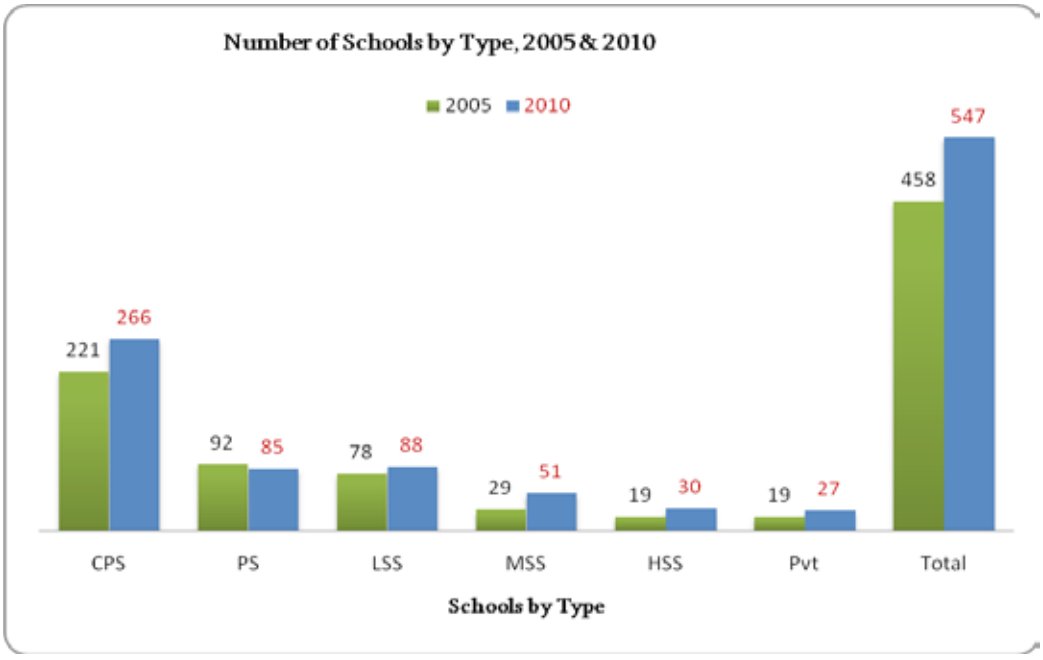
# CHAPTER 3
# EDUCATION

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

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

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

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



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

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

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

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

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

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

(Number)

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

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

*Source: Annual Education Statistics 2010*

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

(Number)

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

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

Source: Annual Education Statistics 2010

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

(Number)

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

*Source: Annual Education Statistics 2010*

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

(Number)

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

*Source: Annual Education Statistics 2010*

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

(Number)

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

*Source: Annual Education Statistics 2010*

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

(Number)

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

*Note: In the above table, Institutes and NFE and Day Care Centres are excluded*
*Source: Annual Education Statistics 2010*

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

(Number)

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

*Source: Annual Education Statistics 2010*

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

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

*Source: Annual Education Statistics 2010*

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

(Number)

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

*Source: Annual Education Statistics 2010*

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

(Number)

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

*Source: Annual Education Statistics 2010*

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

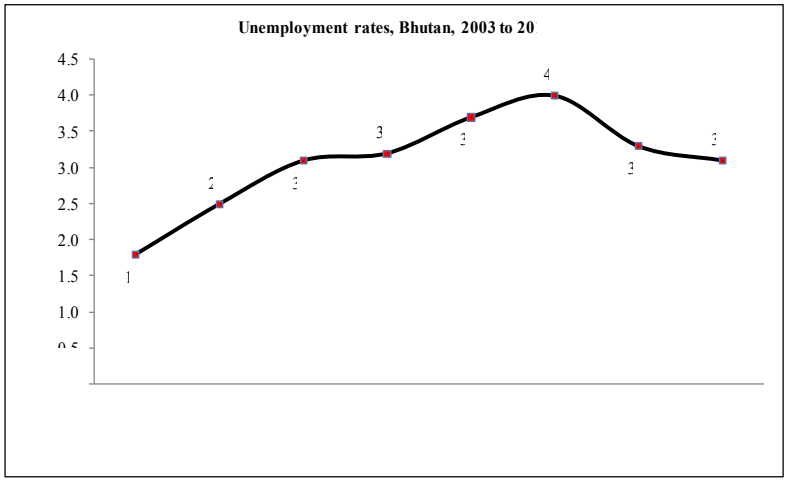
| Class | Number | | | | Percentage | | |
|---|---|---|---|---|---|---|---|
| | Enrolment | Promo-tees | Repeaters | Dropouts | Promotees | Repeaters | Dropouts |
| PP | 17,165 | 1,130 | 15,641 | 534 | 90.4 | 6.5 | 3.1 |
| I | 16,732 | 1,091 | 15,204 | 194 | 92.2 | 6.6 | 1.2 |
| II | 16,246 | 1,042 |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

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

*Source: Annual Education Statistics 2010*

# CHAPTER 4
# LABOUR AND EMPLOYMENT

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




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

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

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

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

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

(Number)

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

*Table 4.1 contd...*

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

Note: Information provided as of 30th June 2011

*Source: Royal Civil Servic Commission*

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

(Percent)

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

*Source: Labour Force Survey Report 2011, MoLHR*

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

(Percent)

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

*Source: Labour Force Survey Report 2011, MoLHR*

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

(Number)

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

*Source: Labour Force Survey Report 2011, MoLHR*

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

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

Note: Totals may not add up due to rounding. '0' indicates a sample estimate less than 100 persons
*Source: Labour Force Survey Report 2011, MoLHR*

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

(Number)

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

*Source: Labour Force Survey Report 2011, MoLHR*

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, 2011

(Number)

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

*Source: Labour Force Survey Report 2011, MoLHR*

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

(Number)

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

*Source: Labour Force Survey Report 2011, MoLHR*

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

(Number)

| Occupation | Nature of employment | | | | | | | | Total |
|---|---|---|---|---|---|---|---|---|---|
| | Regular 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 | |
| Legislators, sr. officials & managers | 3,900 | 200 | 100 | 100 | 300 | 0 | 0 | 0 | 4,500 |
| Professionals | 17,100 | 1,400 | 400 | 100 | 2,600 | 500 | 100 | 100 | 22,300 |
| Technicians & associated professionals | 12,900 | 1,100 | 100 | 300 | 1,100 | 300 | 100 | 800 | 16,600 |
| Clerks | 6,700 | 100 | 100 | 0 | 200 | 100 | 0 | 0 | 7,100 |
| Service workers & shop & market sales workers | 8,800 | 3,500 | 1,300 | 400 | 16,400 | 1,000 | 200 | 100 | 31,700 |
| Skilled agricultural & fishery workers | 1,500 | 3,200 | 7,200 | 80,400 | 6,100 | 92,700 | 100 | 100 | 191,300 |
| Craft & related workers | 4,800 | 2,500 | 1,000 | 1,200 | 7,900 | 1,400 | 100 | 700 | 19,600 |
| Plant & machine operators & assemblers | 6,700 | 800 | 200 | 300 | 3,000 | 200 | 100 | 100 | 11,500 |
| Elementary occupations | 8,800 | 700 | 400 | 400 | 900 | 500 | 0 | 100 | 12,000 |
| Armed force personnel | 6,800 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 7,100 |
| **Total** | **77,800** | **13,600** | **10,900** | **83,400** | **38,400** | **96,800** | **700** | **2,100** | **323,700** |

*Source: Labour Force Survey Report 2011, MoLHR*

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

(Number)

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

*Table 4.10 contd...*

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

*Source: Labour Force Survey Report 2011, MoLHR*

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

(Number)

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

*Table 4.11 contd...*

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

*Source: Labour Force Survey Report 2011, MoLHR*

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

(Number)

| Occupation | Monthly Earnings | | | | | | | Total |
|---|---|---|---|---|---|---|---|---|
| | <1000 | 1000-1999 | 2000-2999 | 3000-3999 | 4000-4999 | 5000-9999 | 10000+ | |
| Legislators, sr. officials & managers | 100 | 200 | 2,100 | 1,100 | 300 | 100 | 400 | 4,400 |
| Professionals | 1,200 | 1,400 | 9,600 | 4,900 | 1,200 | 1,300 | 1,500 | 21,100 |
| Technicians & associated professionals | 800 | 1,000 | 6,900 | 4,000 | 1,600 | 900 | 700 | 15,700 |
| Clerks | 200 | 300 | 3,000 | 1,600 | 500 | 300 | 200 | 6,000 |
| Service workers & shop & market sales workers | 1,800 | 900 | 4,300 | 4,700 | 2,400 | 5,200 | 5,800 | 25,000 |
| Skilled agricultural & fishery workers | 20,800 | 11,300 | 31,000 | 53,300 | 21,400 | 27,200 | 8,400 | 173,300 |
| Craft & related workers | 3,100 | 600 | 3,000 | 3,000 | 1,400 | 1,500 | 900 | 13,500 |
| Plant & machine operators & assemblers | 500 | 300 | 3,400 | 2,600 | 1,100 | 1,400 | 1,600 | 10,800 |
| Elementary occupations | 600 | 400 | 3,500 | 2,900 | 1,100 | 1,000 | 1,300 | 10,800 |
| Armed force personnel | 400 | 500 | 3,100 | 1,100 | 400 | 500 | 800 | 6,900 |
| **Total** | **29,700** | **16,800** | **69,700** | **79,000** | **31,200** | **39,300** | **21,600** | **287,400** |

*Source: Labour Force Survey Report 2011, MoLHR*

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

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

TABLE 4.13 (contd…)

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

Source: Bhutan Multibple Indicator Survey 2010, NSB

# CHAPTER 5
# LAND USE AND AGRICULTURE

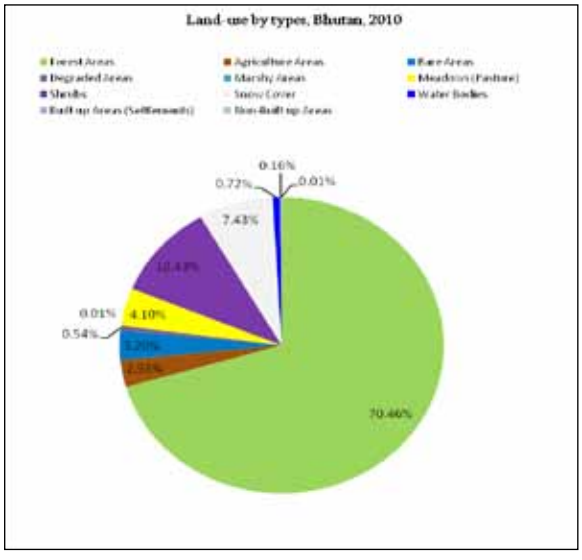
The Ministry of Agriculture and Forests, over the past four decades, was concerned about "how to grow" by establishing various agriculture infrastructures to produce and distribute the inputs. Currently the Ministry of Agriculture and Forests established 4 main Renewable Natural Resources (RNR) research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

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

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

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

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




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

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

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

(Numbers)

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

*Source: Policy & Planning Division, MoAF, Thimphu.*

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

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

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

*Source: Policy & Planning Division, MoAF, Thimphu.*

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

(Percent)

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

*Source: Policy & Planning Division, MoAF, Thimphu.*

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

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

*Source: Policy & Planning Division, MoAF, Thimphu.*

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

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

*Source: Policy & Planning Division, MoAF, Thimphu.*

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

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

*Source: Policy & Planning Division, MoAF, Thimphu.*

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

(Degree Celsius)

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

Table 5.7 contd...

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

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

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

(Millimeter)

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

*Table 5.8 contd...*

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

Table 5.8 contd...

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

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

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

(Kgs/Ltrs)

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

*Source: Policy & Planning Division, MoAF, Thimphu.*

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

(hectares)

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

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

*Source: Policy & Planning Division, MoAF, Thimphu.*

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

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

Table 5.11 contd...

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

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

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

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

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

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

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

(Metric tonns)

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

*Source: Food Corporation of Bhutan, Phuentsholing.*

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

(Metric tonns)

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

*Source: Food Corporation of Bhutan, Phuentsholing.*

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

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

*Table 5.15 contd...*

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

*Table 5.15 contd...*

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

*Table 5.15 contd...*

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

*Table 5.15 contd...*

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

*Source: Policy & Planning Division, MoAF, Thimphu.*

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

| Name of Area | Establishment year | Area (sq.Km) |
|---|---|---|
| Existing Protected Areas | | |
| Wangchuck 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.*

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

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

*Source: Policy & Planning Division, MoAF, Thimphu.*

# CHAPTER 6
# INDUSTRIES

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

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

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

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

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

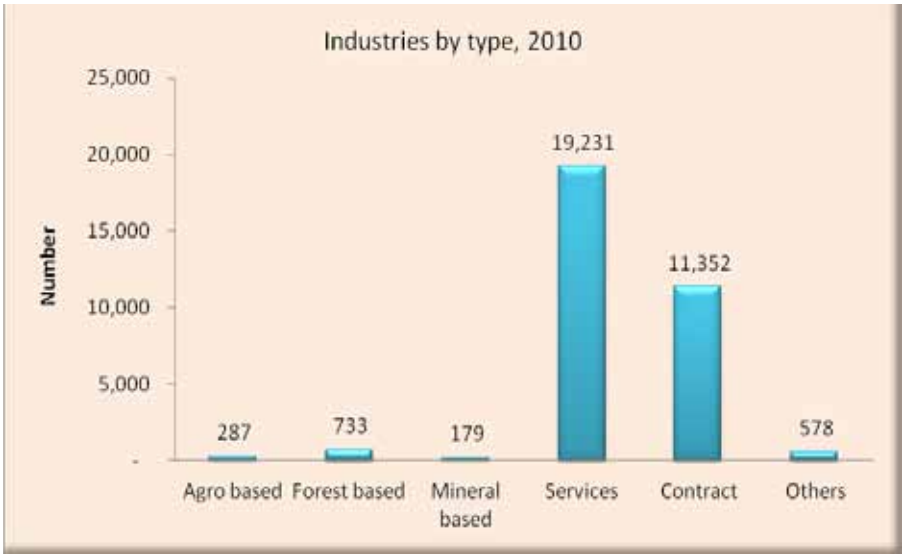


TABLE 6.1 NUMBER OF INDUSTRIAL ESTABLISHMENTS BY SECTOR, BHUTAN, 2006 TO 2010

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

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

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

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

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

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

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

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

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

| Dzongkhag | Class of contract firm | | | | Total |
|---|---|---|---|---|---|
| | A | B | C | Petty | |
| Bumthang | 2 | 2 | 11 | 270 | 285 |
| Chhukha | 43 | 19 | 139 | 701 | 902 |
| Dagana | 1 | 0 | 10 | 287 | 298 |
| Gasa | 0 | 0 | 0 | 42 | 42 |
| Haa | 0 | 5 | 44 | 234 | 283 |
| Lhuentse | 0 | 0 | 23 | 138 | 161 |
| Monggar | 1 | 4 | 63 | 374 | 442 |
| Paro | 0 | 10 | 68 | 503 | 581 |
| Pema Gatshel | 1 | 3 | 31 | 241 | 276 |
| Punakha | 1 | 2 | 8 | 294 | 305 |
| Samdrup Jongkhar | 18 | 7 | 78 | 256 | 359 |
| Samtse | 1 | 1 | 49 | 310 | 361 |
| Sarpang | 8 | 2 | 40 | 492 | 542 |
| Thimphu | 138 | 86 | 531 | 3,570 | 4,325 |
| Trashi Yangtse | 0 | 0 | 36 | 175 | 211 |
| Trashigang | 5 | 24 | 69 | 478 | 576 |
| Trongsa | 0 | 0 | 41 | 201 | 242 |
| Tsirang | 0 | 0 | 5 | 157 | 162 |
| Wangdue Phodrang | 0 | 0 | 22 | 682 | 704 |
| Zhemgang | 0 | 0 | 86 | 209 | 295 |
| **Bhutan** | **219** | **165** | **1,354** | **9,614** | **11,352** |

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

*Source: Establishment Census - 2010, MoLHR.*

TABLE 6.10 ESTABLISHMENTS BY DZONGKHAG, BHUTAN, 2010

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

*Source: Establishment Census - 2010, MoLHR.*

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

(numbers)

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

Source: *Establishment Census - 2010, MoLHR.*

## TABLE 6.12 ESTABLISHMENTS BY OWNERSHIP AND INVESTMENTS, BHUTAN, 2010

(numbers)

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

*Source: Establishment Census - 2010, MoLHR.*

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

(numbers)

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

*Source: Establishment Census - 2010, MoLHR.*

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

(numbers)

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

*Source: Establishment Census - 2010, MoLHR.*

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

(numbers)

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

*Source: Establishment Census - 2010, MoLHR.*

TABLE 6.16 ESTABLISHMENTS BY OWNERSHIP, BY DZONGKHAG, 2010

(numbers)

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

*Source: Establishment Census - 2010, MoLHR.*

TABLE 6.17 ESTABLISHMENTS BY LEGAL ORGANIZATION, BY DZONGKHAG, 2010

(numbers)

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

*Source: Establishment Census - 2010, MoLHR.*

TABLE 6.18 ESTABLISHMENTS BY NATIONALITY OF OWNERSHIP, BHUTAN, 2010

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

*Source: Establishment Census - 2010, MoLHR.*

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

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

*Source: Establishment Census - 2010, MoLHR.*

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

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

*Source: Establishment Census - 2010, MoLHR.*

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

(numbers)

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

*Source: Establishment Census - 2010, MoLHR.*

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

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

*Source: Establishment Census - 2010, MoLHR.*

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

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

*Source: Establishment Census - 2010, MoLHR.*

TABLE 6.24 NUMBER OF EMPLOYEES BY DZONGKHAG AND SEX, 2010

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

Source: Establishment Census - 2010, MoLHR.

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

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

*Source: Establishment Census - 2010, MoLHR.*

# 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 2010, there were 54,123 registered vehicles in Bhutan.

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

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

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

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

The national telecommunication network opened the path to global information network. On 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 205 Gewogs by the cellular services. As of December 2010, there were 26,361 telephone sets in use and 305,215 B-Mobile subscribers and 83,903 Tashicell subscribers respectively.

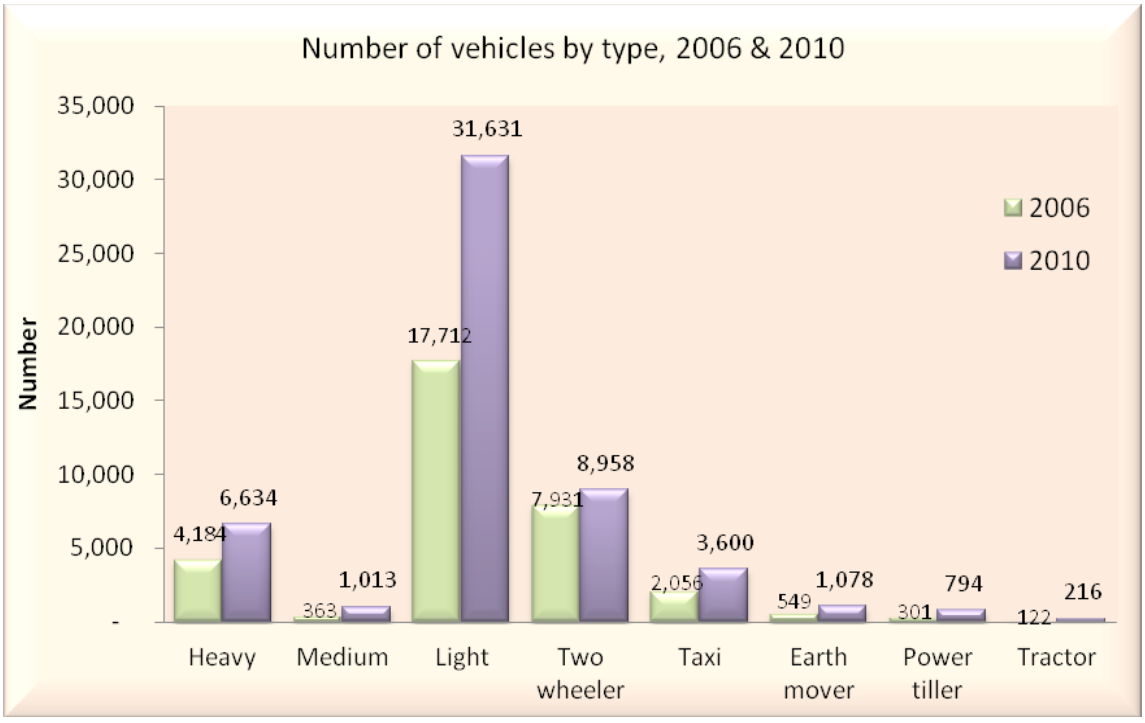


TABLE 7.1 LENGTH OF ROADS BY TYPE, BHUTAN, 2006 TO JUNE 2011

(Length in Km)

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

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

*Source: Department of Roads, MoWHS, Thimphu.*

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

(Length in Km)

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

*Source: Department of Roads,MoWHS, Thimphu.*

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

(Length in m)

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

*Source: Bridge Division, DoR , MoWHS, Thimphu.*

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

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

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.*

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

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

Table 7.5 contd...

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

*Table 7.5 contd...*

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

*Table 7.5 contd...*

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

Notes: 1. Excludes vehicles of armed forces.
2. "Earth Movers" include bull dozers, road rollers, pay loaders, excavators, cranes, etc.
3. The figures are in cumulative

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

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

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

Note: PDL includes the taxi driver licence holder, bus driver licence holder etc
*Source: Road Safety and Transport Authority, MOIC, Thimphu.*

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

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

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

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

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

*Source: Druk Air Corporation Ltd. Thimphu.*

TABLE 7.9 TELEPHONE CONNECTION CAPACITY BY EXCHANGE, 2006 TO 2010

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

*Table 7.9 contd...*

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

*Table 7.9 contd...*

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

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 Infocom Media Authority, Thimphu.*

TABLE 7.10 NUMBER OF TELEPHONE TRUNK CIRCUITS, BHUTAN, 2010

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

*Table 7.10 contd...*

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

*Table 7.10 contd...*

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

*Source: Bhutan Infocom Media Authority, Thimphu.*

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

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

*Source: Bhutan Infocom Media Authority, Thimphu.*

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

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

*Source: Bhutan Infocom Media Authority, Thimphu.*

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

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

Note: The figures mentioned here for the domestic and international calls are counts not minutes of calls.
And the figures includes both prepaid and postpaid calls made.
*Source: Tashi Infocomm Ltd. Thimphu.*

TABLE 7.14 NUMBER OF COMMUNICATION FACILITIES, 2006 TO 2010

| Postal infrastructure | 2006 | 2007 | 2008 | 2009 | 2010 |
|---|---|---|---|---|---|
| General Post Offices | 2 | 2 | 2 | 2 | 4 |
| Post Offices | 41 | 41 | 41 | 41 | 40 |
| Community Mail Offices | 47 | 47 | 47 | 32 | 30 |
| Fax Offices | 35 | 37 | 37 | 37 | 40 |
| **Total** | **125** | **127** | **127** | **112** | **114** |

Note: WT.Stations are merged with Telecommunication Division since july 1995, includes 3 stations installed at New Delhi, Dhaka and Kalingpong.
Fax Offices are Post Offices having fascimile services, they are not different establishment.
*Source:Bhutan Postal Corp. Ltd, Thimphu.*

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

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

*Source:Bhutan Postal Corp. Ltd, Thimphu.*

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

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

*Source:Bhutan Postal Corp. Ltd, Thimphu.*

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

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

*Source: White Pegion Courier Service, Thimphu.*

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

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

*Source: Tamu Courier Blue Dart, Thimphu.*

# CHAPTER 8
# ENERGY

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

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

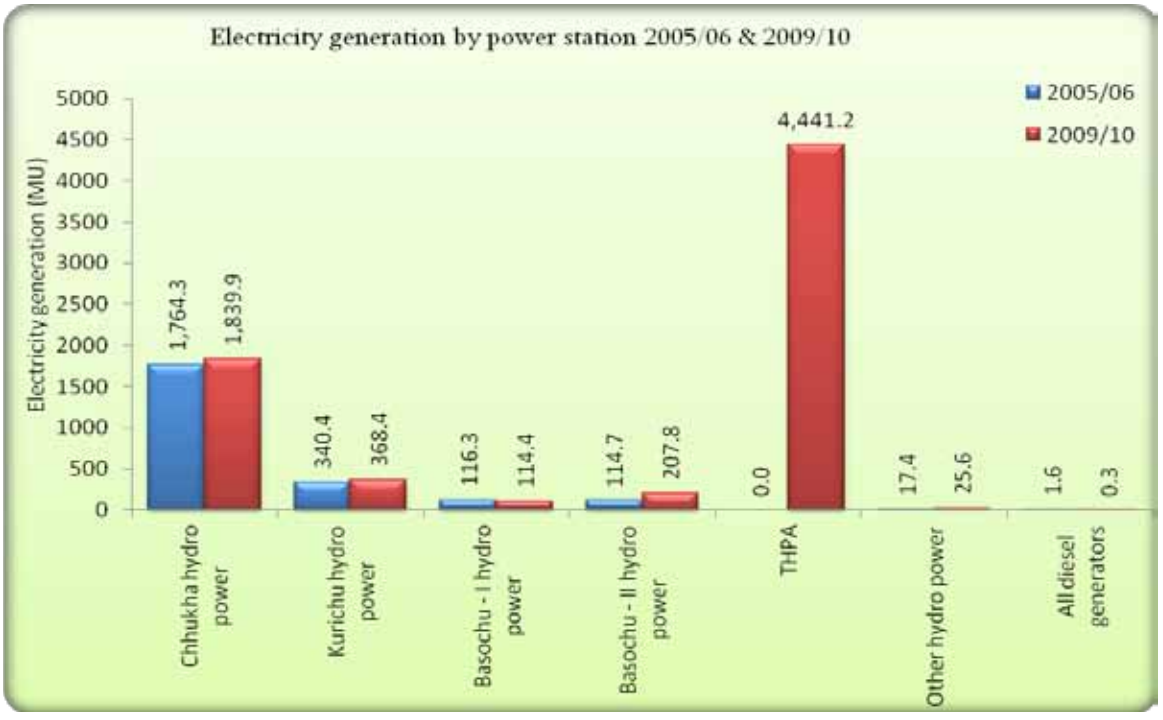


TABLE 8.1 HYDRO GENERATING STATIONS AND THEIR CAPACITIES, BHUTAN, 2008/09 & 2009/10

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

*Table 8.1 contd...*

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Bubja (Trongsa) | 1 x 30 | 30 | 0.028 | 0.145 | 1986-87 | 1 x 30 | 30 | 0.026 | 0.143 | 1986-87 |
| Tamzhing (Bumthang) | 1 x 30 | 30 | - | 0.085 | 1986-87 | 1 x 30 | 30 | - | 0.103 | 1986-87 |
| Ura (Bumthang) | 1 x 50 | 50 | - | 0.149 | 1986-87 | 1 x 50 | 50 | - | 0.153 | 1986-87 |
| Kekhar (Zhemgang) | 1 x 20 | 20 | - | 0.026 | 1986-87 | 1 x 20 | 20 | - | 0.026 | 1986-87 |
| Surey (Sarpang) | Dicommissioned | | | | 1986-87 | Discommissioned | | | | 1986-87 |
| Changchey (Tsirang) | 2 x 100 | 200 | 0.119 | 0.744 | 1991 | 2 x 100 | 200 | 0.114 | 1.049 | 1991 |
| Tingtibi (Zhemgang) | 2 x 100 | 200 | 0.120 | 0.118 | 1992 | 2 x 100 | 200 | 0.105 | 0.459 | 1992 |
| Darachhu ( Dagana) | 2 x 100 | 200 | 0.150 | 0.857 | 1992 | 2 x 100 | 200 | 0.125 | 0.053 | 1992 |
| Lingzhi (Thimphu) | 1 x 8 | 8 | - | - | 1999 | 1 x 8 | 8 | - | - | 1999 |
| Rangjung (Tashigang) | 2 x 1100 | 2200 | 1.020 | 5.917 | 1996 | 2 x 1100 | 2200 | 2.278 | 9.756 | 1996 |
| Rongchu (Lhuentse) | 2 x 100 | 200 | 0.210 | 0.634 | 2001 | 2 x 100 | 200 | 0.180 | 0.816 | 2001 |
| Chendebji (Trongsa) | 1 x 70 | 70 | - | 0.572 | 2005 | 1 x 70 | 70 | - | 0.089 | 2005 |
| Sengor (Mongar) | 1 x 100 | 100 | 0.030 | 0.206 | 2007 | 1 x 100 | 100 | - | 0.119 | 2007 |
| **Total** | **8098** | **6634** | | **21.777** | | **8,098** | **6144** | | **25.582** | |

*Source:Department of Energy, MoEA, Thimphu*

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

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

*Table 8.2 contd...*

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

*Source:Department of Energy, MoEA, Thimphu*

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

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

*Source:Department of Energy, MoEA, Thimphu*

TABLE 8.4 MAJOR TRANSMISSION LINES, 2010

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

*Table 8.4 contd...*

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| CHPC - Gedu | - | - | - | - | 20.400 | - | - | |
| Gedu - Phuntsholing | - | - | - | - | 16.700 | - | - | |
| Phuntsholing - Malbasse | - | - | - | - | 8.986 | - | - | |
| Phuntsholing - Gomtu | - | - | - | - | 26.900 | - | - | |
| CHPC - Chumdo | - | - | - | - | 36.980 | - | - | |
| Chumdo - Olakha | - | - | - | - | 17.520 | - | - | |
| Chumdo - Haa | - | - | - | - | 33.400 | - | - | |
| Chumdo - Paro | - | - | - | - | 24.010 | - | - | |
| Semtokha - Lobeysa | - | - | - | - | 24.330 | - | - | |
| Semtokha - Olakha | - | - | - | - | 1.700 | - | - | |
| Hebesa - Rurichu | - | - | - | - | 3.080 | - | - | |
| Semtokha - Dechenchholing | - | - | - | - | 11.450 | - | - | |
| Khasadrapchu - Jemina | - | - | - | - | - | 5.960 | - | |
| Lobeysa - Rurichhu | - | - | - | - | 20.300 | - | - | |
| Tie - Line - Watsa | - | - | - | - | 0.500 | - | - | |
| Yurmoo - Trongsa | - | - | - | - | 20.940 | - | - | Charged at 33 kv |
| Malbase Multi Circuit | - | - | - | - | - | - | 3.405 | |
| **Total** | **74.143** | **183.739** | **35.780** | **379.484** | **267.196** | **5.960** | **3.405** | |

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

*Source:Department of Energy, MoEA, Thimphu*

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

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

Note: Per capita energy consumption for 2009/10 is based on population of 695,822
Source:Department of Energy, MoEA, Thimphu

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

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

Source:Department of Energy, MoEA, Thimphu

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

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

Source:Department of Energy, MoEA, Thimphu

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

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

*Source:Department of Energy, MoEA, Thimphu*

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

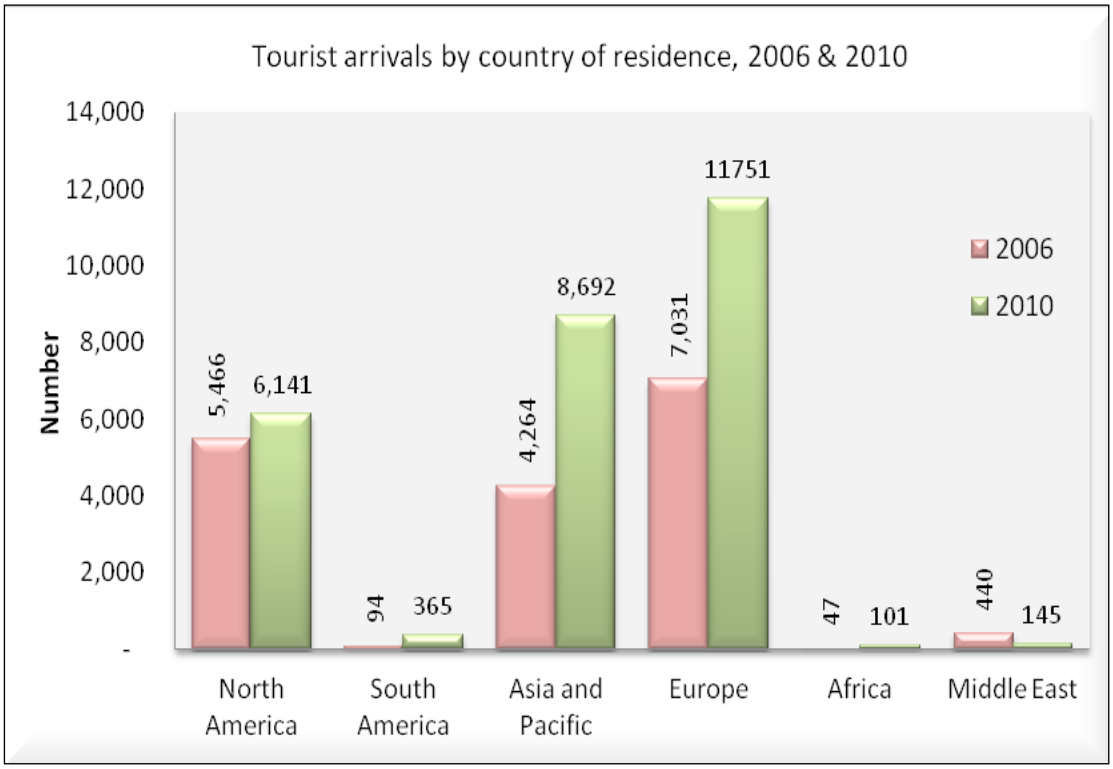
| Type of consumer | Energy sold (Mu) | Percentage of total sales | No. of consumers |
|---|---|---|---|
| **Total consumption (MU)** | **1,498.01** | **100.00** | **95,544** |
| Domestic | 147.85 | 9.87 | 80,810 |
| Commercial | 40.70 | 2.72 | 8,786 |
| Government Offices | 43.58 | 2.91 | 4,152 |
|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

*Source:Department of Energy, MoEA, Thimphu*

# CHAPTER 9
# TOURISM

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

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




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

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

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

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

(numbers)

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

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

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

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

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

*Source: Tourism Council of Bhutan, Thimphu.*

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

(Number)

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

*Source: Tourism Council of Bhutan, Thimphu.*

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

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

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

*Source: Tourism Council of Bhutan, Thimphu.*

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

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

*Source: Tourism Council of Bhutan, Thimphu.*

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

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

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

*Source: Tourism Council of Bhutan, Thimphu.*

TABLE 9.6 TOTAL NUMBER OF TOURIST ARRIVALS BY DZONGKHAG, 2010

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

*Source: Tourism Council of Bhutan, Thimphu.*

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

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

*Source: Tourism Council of Bhutan, Thimphu.*

## TABLE 9.8 ACCOMODATION PROVIDERS BY BED NIGHTS 2010

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

*Source: Tourism Council of Bhutan, Thimphu.*

# CHAPTER 10
# FOREIGN TRADE

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

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

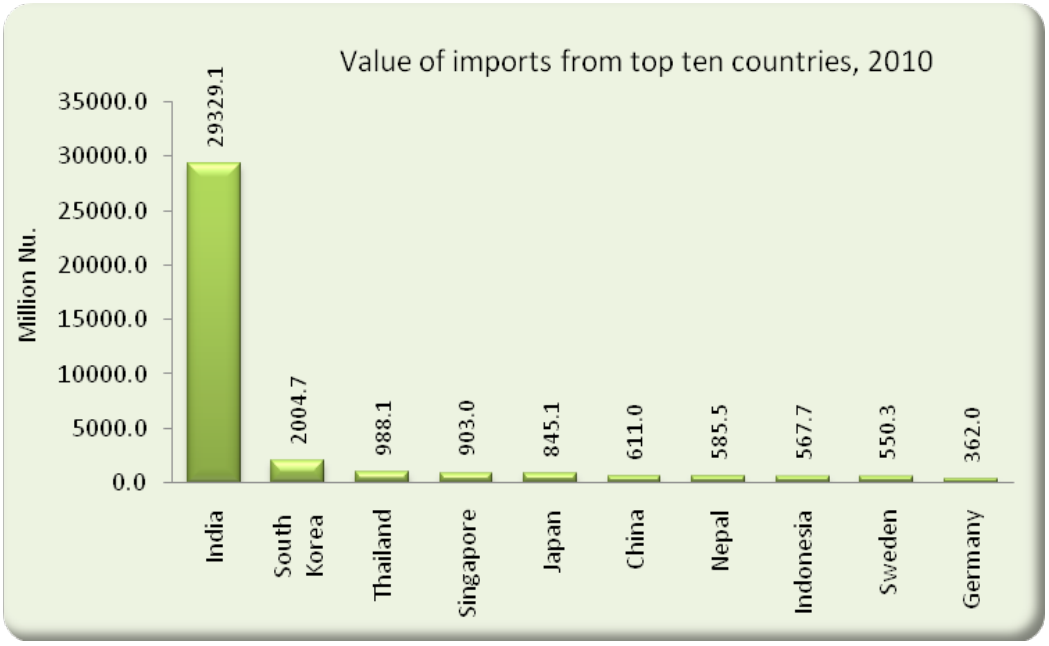


TABLE 10.1: VALUE OF EXPORTS AND IMPORTS WITH TRADE IN ELECTRICITY, BHUTAN, 2006 TO 2010

(Nu. In Million)

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

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

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

| Commodity | Million Nu. | Percent share |
|---|---|---|
| Ferro-silicon | 5,653.42 | 39.45 |
| Other (Disc, tapes, solid-state non-volitile storage devices,smart cards and other media for the recordingof sound or of other phenomena, whether or notrecorded, including the production of discs,matrices and masters for the production of discs) | 2,145.97 | 14.98 |
| Other (Copper wire) | 1,723.88 | 12.03 |
| Of calcium | 965.82 | 6.74 |
| Portland pozzolana cement | 813.23 | 5.67 |
| Manganese and articles thereof, including waste and scrap | 765.61 | 5.34 |
| Bars and rods of iron or non alloy steel, twisted | 738.70 | 5.15 |
| Ingots | 595.06 | 4.15 |
| Portland slag cement | 478.83 | 3.34 |
| Of silicon | 449.77 | 3.14 |
| **Total** | **14,330.3** | **100.00** |

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

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

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

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

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

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

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

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

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

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

(Nu. In Million)

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

Notes: Figures within bracket indicate deficit (-).

*Source : Royal Monetary Authority of Bhutan, Thimphu*

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

End of Period

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

Note: (a) Includes reserve tranche position in the fund. From March 2004, the 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.

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

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

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

# CHAPTER 11
# MONEY, BANKING AND FINANCE

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

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

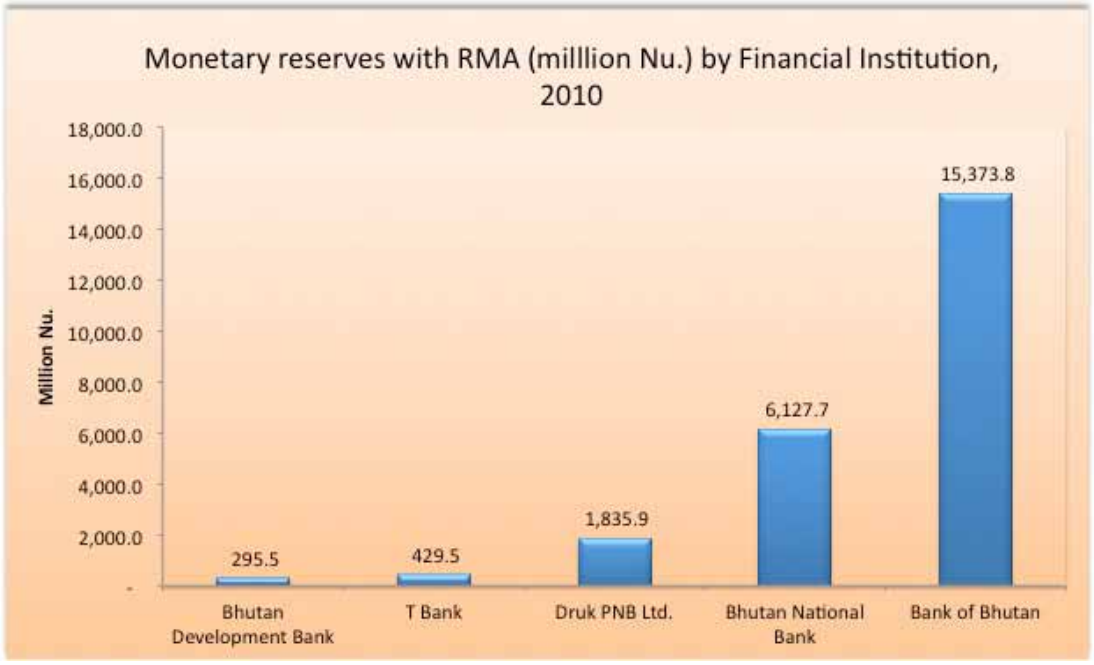


TABLE 11.1: MONETARY SURVEY: ROYAL MONETARY AUTHORITY, BHUTAN NATIONAL BANK AND BANK OF BHUTAN, 2006 TO 2010

(Nu. in Million)

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

Notes: Starting from January 2003 onwards, a 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.*

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

(Nu. in Million)

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

Notes: NFIs = Non Monetary Financial Institutions, Including Bhutan National bank. NBFIs = Non Bank Financial Institutions.
**Domestic credit excluding the claims on DMBs

*Source: Royal Monetary Authority of Bhutan, Thimphu.*

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

(Nu. in Million)

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

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

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

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

(Nu. in Million)

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

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

* Domestic Credit excluding claims on DMBs and NMFIs

*Source: Royal Monetary Authority of Bhutan, Thimphu.*

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

( In Million Nu.)

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

*Source: Royal Monetary Authority of Bhutan, Thimphu.*

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

(Nu. in Million)

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

*Source: Royal Monetary Authority of Bhutan, Thimphu.*

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

(In Million Nu.)

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

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

*Source: Royal Monetary Authority of Bhutan, Thimphu.*

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

(In Million Nu.)

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

*Source: Royal Monetary Authority, Thimphu.*

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

(In Million Nu.)

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

*Source: Royal Monetary Authority, Thimphu.*

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

( In Million Nu.)

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

Notes: NBFIs stands for Non Bank Financial Institutions.

*Source: Royal Monetary Authority of Bhutan, Thimphu.*

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

(In Million Nu.)

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

*Table 11.10 contd...*

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

*Table 11.10 contd...*

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

Note: Loan availed by Ministry of Finance has been reported under Service and Tourism in case of BoB Manufacturing and Industry in case of BNB.
*Source: Royal Monetary Authority of Bhutan, Thimphu.*

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

| Type of deposit | 2006 | 2007 | 2008 | 2009 | 2010 |
|---|---|---|---|---|---|
| Savings | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Fixed deposit | | | | | |
| a) 3 months to less than 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) | 2.0 | 2.0 | 2.0 | 2.0 | n.a |

Note: "* "Data for the year 2010 Temporarily suspended
*Source: Bank of Bhutan, Main Branch, Phuntsholing*

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

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

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

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

(In Numbers)

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

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

*Source: Royal Securities exchange of Bhutan Ltd, Thimphu.*

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

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

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

*Source: Royal Securities exchange of Bhutan Ltd, Thimphu.*

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

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

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

*Source: Royal Securities Exchange of Bhutan Ltd.*

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

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

*Table 11.16 contd...*

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

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

*Source: Royal Securities Exchange of Bhutan Ltd.*

# CHAPTER 12
# PUBLIC FINANCE

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

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

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

(Nu. in Million)

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

*Table 12.1 contd...*

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

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

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

(Nu. in Million)

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

*Table 12.2 contd...*

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

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

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

Nu. in million

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

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

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

(Nu. in Million)

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

Note: Figure in the brackets are negative

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

# CHAPTER 13
# PLAN OUTLAYS

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

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

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

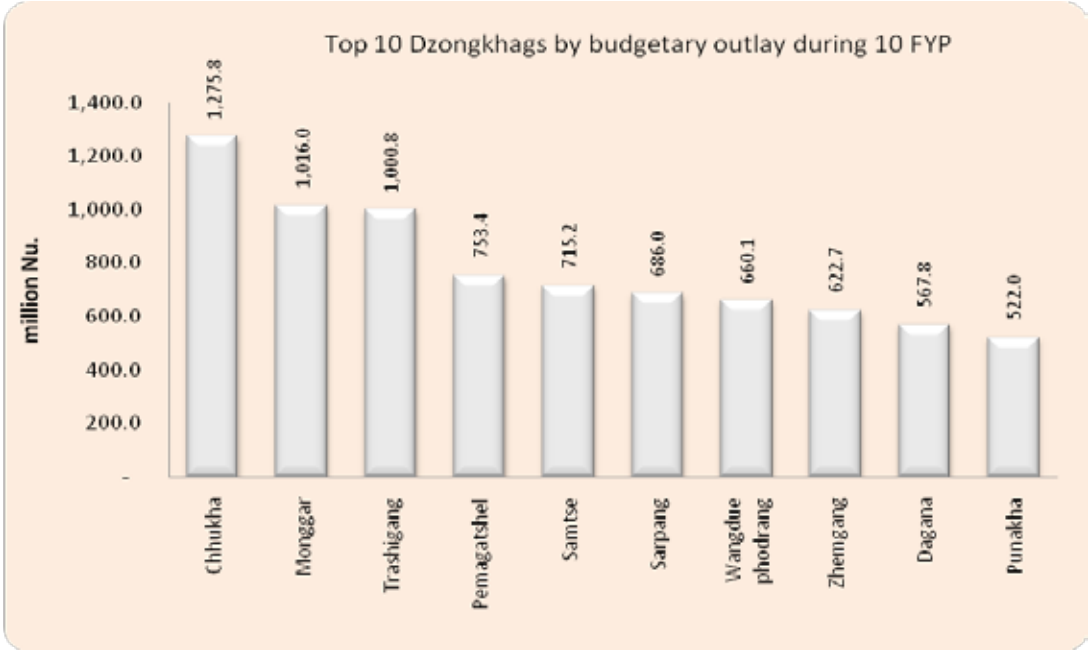


TABLE 13.1: TENTH PLAN BUDGETARY OUTLAY AND ALLOCATION, BHUTAN, 2008/2013

(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 |

*Table 13.1 contd...*

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

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

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

| Organization | Ninth Plan (%) | Tenth Plan (%) |
|---|---|---|
| Constitutional Bodies | 5.40 | 4.62 |
| Judiciary | 0.70 | 0.91 |
| Royal Audit Authority | 0.30 | 0.23 |
| Election Commission Of Bhutan | na | 0.41 |
| Anti Corruption Commission | na | 0.13 |
| Royal Civil Service Commission | 4.40 | 2.94 |
| Autonomous Agencies | 3.40 | 8.40 |
| His Majesty's Secretariat | 0.10 | 0.17 |
| Secretariat of His Majesty the Fourth King | .. | 0.10 |
| National Assembly Secretariat | 0.10 | 0.20 |
| Royal Advisory council (National Council) | 0.10 | 0.14 |
| Cabinet Secretariat | 0.00 | 0.11 |
| Office of the Attorney General | 0.10 | 0.08 |
| GNH Commission | 0.20 | 0.83 |
| National Land Commission | na | 0.57 |
| National Environment Commission | 0.10 | 0.13 |
| Dzongkha Development 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 |

*Table 13.2 contd...*

| | | |
|---|---|---|
| Drug Regulatory Authority | .. | 0.01 |
| Tourism Council ob Bhutan | 0.30 | 0.49 |
| Ministries | | 67.56 |
| Ministry of Agriculture | 6.5 | 5.55 |
| Ministry of Education | 3.7 | 7.09 |
| Ministry of Finance | 2.3 | 20.74 |
| Ministry of Foreign Affairs | 2.1 | 1.21 |
| Ministry of Health | 6.4 | 5.86 |
| Ministry of Home and Cultural Affairs | 0.9 & 0.6 | 4.99 |
| Ministry of Information and Communication | 14.8 | 2.97 |
| Ministry of labour and Human Resources | 0.4 | 1.50 |
| Ministry of 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) | | 68.22 |
| Dzongkhags and Gewogs | .. | 18.75 |
| Dzongkhags | .. | 4.92 |
| Gewogs | .. | 3.28 |
| **Total Outlay** | | **87.0** |

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

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

(Nu.in Million)

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

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

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

(Nu.in Million)

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

*Note:. Capital budget does not include the gewogs capital budget*

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

# CHAPTER 14
# NATIONAL ACCOUNTS

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

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

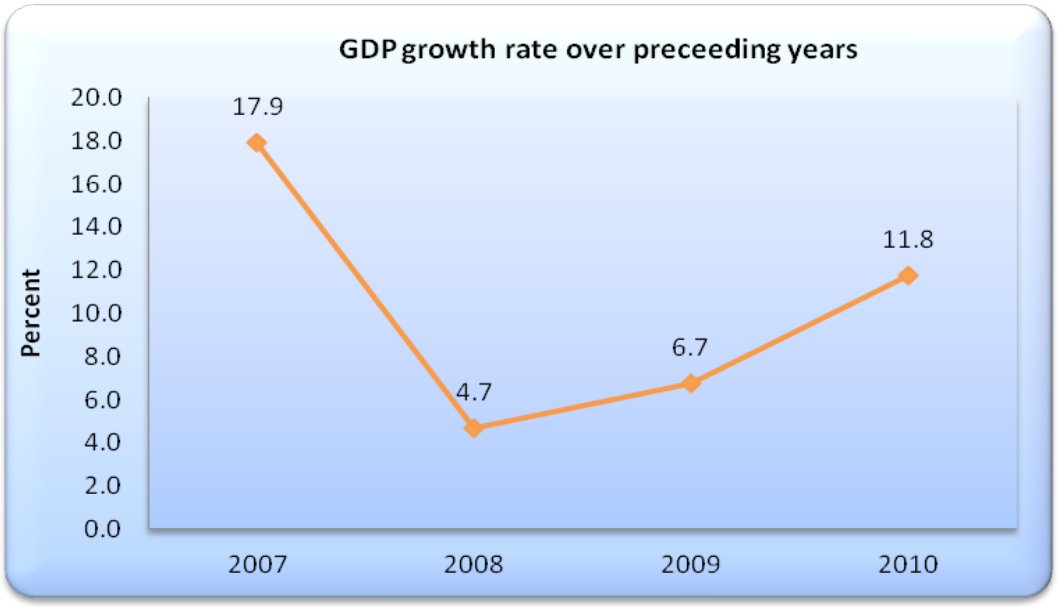


TABLE 14.1: GROSS DOMESTIC PRODUCT BY KIND OF ACTIVITY AT CURRENT PRICES, 2007 - 2010

(million Nu.)

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

*Source: National Accounts Division, NSB*

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

(in percent)

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

*Source: National Accounts Division, NSB*

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

(in percent)

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

*Source: National Accounts Division, NSB*

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

(Million Nu.)

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

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

(in percent)

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

TABLE 14.6: GDP GROWT RATES OVER PRECEEDING YEARS, 2007 - 2010

(in percent)

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

*Source: National Accounts Division, NSB*

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

(Million Nu.)

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

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

(in percent)

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

*Source: National Accounts Division, NSB*

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

(Million Nu.)

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

*Source: National Accounts Division, NSB*

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

(in percent)

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

*Source: National Accounts Division, NSB*

# CHAPTER 15
# PRICES

The only price statistics currently compiled in Bhutan relate to Consumer Price Indices, often referred to as the CPI. Since 1979, the CPI had been produced by the NSB twice a year till 2003. From 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.

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

(3rd Qtr. 2003=100)

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

*Source: National Statistics Bureau, Thimphu*

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

(3rd Qtr. 2003=100)

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

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

*Source: National Statistics Bureau, Thimphu*

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

(3rd Qtr. 2003=100)

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

*Source: National Statistics Bureau, Thimphu*

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

(3rd Qtr. 2003=100)

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

*Source: National Statistics Bureau, Thimphu*

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

(3rd Qtr. 2003=100)

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

*Source: National Statistics Bureau, Thimphu*

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

(3rd Qtr. 2003=100)

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

*Source: National Statistics Bureau, Thimphu*

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

QUARTER TO QUARTER INFLATION RATE (%) (3rd Qtr. 2003=100)

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

Source: National Statistics Bureau, Thimphu

# CHAPTER 16
# CRIMES

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

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

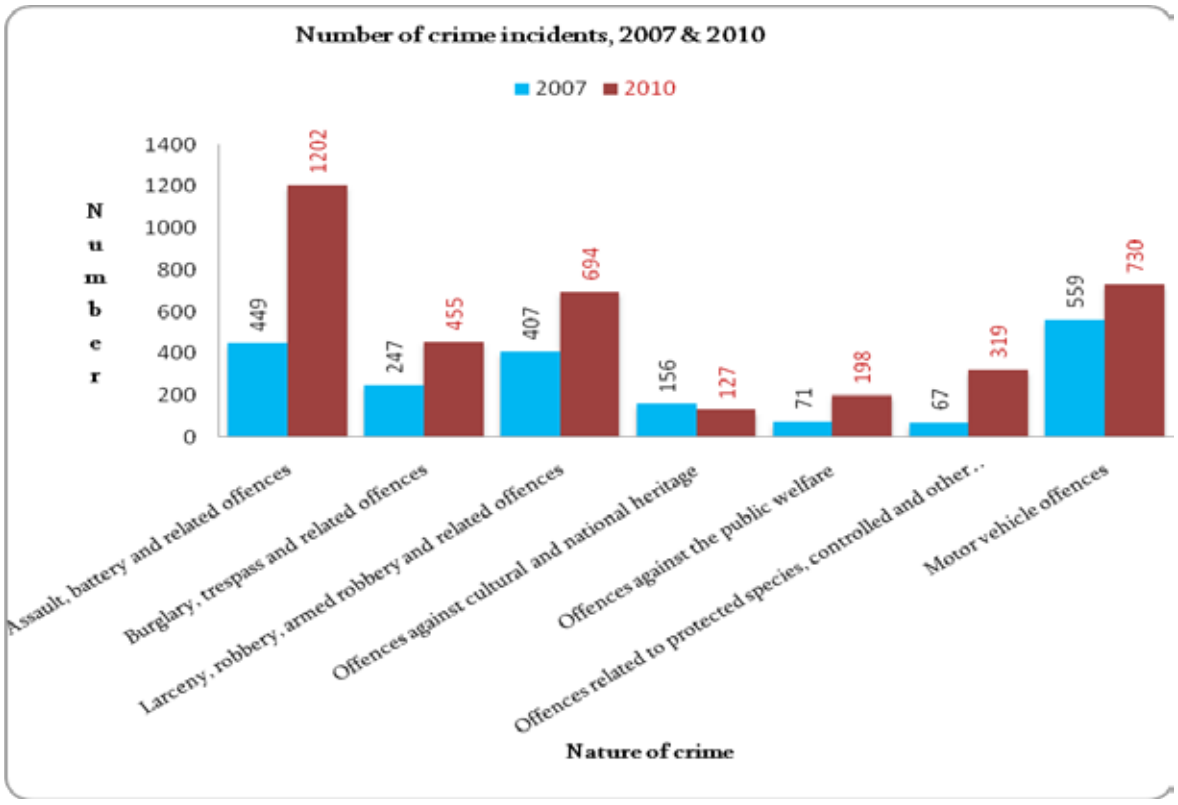


TABLE 16.1: TOTAL NUMBER OF CRIME INCIDENTS BY TYPE OF OFFENCE, BHUTAN, 2007 TO 2010

(Number of Incidents)

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

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

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

(Number of Incidents)

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

*Table 16.2 contd...*

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

*Table 16.2 contd...*

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

*Table 16.2 contd...*

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

*Table 16.2 contd...*

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

*Table 16.2 contd...*

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

*Table 16.2 contd...*

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

*Table 16.2 contd...*

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

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

## TABLE 16.3: MONTHLY MOTOR VEHICLE ACCIDENTS BY TRAFFIC DIVISION, BHUTAN, 2010

(Number of Incidents)

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

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

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

(Number of Incidents)

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

*Table 16.4 contd...*

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

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