ཀྲུལ་ཡོངས་རྩིས་དཔྱད་བཀོད་འཛིན།

OCTOBER 2009

Statistical Yearbook of Bhutan 2009

National Statistics Bureau
ROYAL GOVERNMENT OF BHUTAN

FOREWORD

This Statistical Yearbook publication is the 27th edition in series. It is a comprehensive and systematic compendium of basic statistical information on Bhutan illustrating time series data about the Country's economy and social conditions.

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

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

This 27th issue of statistical yearbook of Bhutan features the detailed information on the population parameters based on the PHCB 2005 and it has 16 different chapters of general interest to meet the need of a wide range of data users.

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

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

We value the contribution of different ministries and agencies that provided data and information for SYB 2009. In our desire to be more effective in serving the needs of the users for statistical information, we view our readers as key partners in publishing the SYB annually. We solicit comments and suggestions from the users of this yearbook, in order to improve the quality of the forthcoming issues.

(Kuenga Tshering)
DIRECTOR

C M Y K

NOTES FOR USERS

1. Unless otherwise indicated, the present issue of the Yearbook contains those statistics available as of December 2008
2. At the beginning of each chapter, general description of the statistics contained therein is given.
3. For every table, there is footnote indicating information specific to each figure in the table.
4. Unless otherwise indicated, "Year" refers to the calendar year, and "fiscal year" refers to the 12 months begining from July to June.

n.a	not available
N.A.	not applicable
..	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 othewise indicated.

5. In some cases, minor discrepancies may occur between sums of component items and totals because of rounding.
6. Dzongkhags given in some tables differ from those given in Annex I. This is because of changes, following the creation of new Dzongkhags.
7. Names of the Ministries/Agencies both in tables and footnotes may differ. This is because of changes, following the creation of new Ministries/agencies.
8. Detail figures in the tables may not add up to the totals because of rounding.
9. Singular term is most often used to represent plural terms, example: agency for agencies etc.
10. When contents of this book are to be quoted or copied in other publication/report, please give a due credit by refering the title of this yearbook
    (Example) Source: Bhutan Statistical Yearbook 2009, National Statistics Bureau
11. For additional information on data or for any other queries, please refer to the original source or National Statistics Bureau.

SOME UNITS OF MEASUREMENT

Numbering and Scientific notations (US & scientific Community)

Hundred	= 102
Thousand	= 103
Million	= 106
Billion	= 109
Trillion	= 1012

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

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

Abbreviations

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

C M Y K

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 m	= 10.764
1 square cm	= 0.155 square inch
1 square mile	= 2.590 square km
1 square km	= 0.386 square mile

C. Weight measurements

1. British units

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

2. Metric units

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

3. Conversion from British to metric units

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

D. Conversion of air temperatures

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

C M Y K

KEY FACTS ABOUT BHUTAN

Land area	38,394 sq. km.
Forest cover	72.5%
Population, 2008	671,083
Average Household size, (BLSS, 2007)	5.0
National Language	Dzongkha
National Currency	Ngultrum (Nu.)
Hospitals, 2008	30
Doctors, 2008	171
Civil servants, 2008	19,848
Schools, Institutes & NFE centres, 2008	1,299
Teachers (including in institutes & NFE), 2008	7,231
Students (including in institutes & NFE), 2008	176,778
Labour Force Participation rate, (BLSS, 2007)	67.3%
Unemployment rate, (BLSS, 2007)	3.7 %
Cellular Mobile subscriber, 2008	149,439
Postal infrastructure, 2008	127
Total road length, 2008	4,946.6 km
Registered vehicles, 2008	35,703
Electricity generation, 2008	6,422.6 MU
Electricity exports, 2007/2008	3643.71 MU
Tourist arrivals, 2008	21,094
Revenue earned from tourism, 2008	29.85 Mn US $
Total establishments, 2008	26,261
Balance of trade, 2008	6113.62 Mn. Nu.
Exchange rate, Nu. Per US $, 2008	41.4
Gross international money reserves, 2008/09	694.5 Mn US $
Total Ninth Plan budgetary outlay (2002-07)	70,000 Mn Nu.
GDP, 2008 (Current Price)	51,521.6 Mn. Nu.
Average inflation rate, 2008	5.15 %
Purchasing Power of Nu. 2008 (base year =2003)	0.82 Nu.

C M Y K

BHUTAN

I. Location and Extent

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

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

II. The Geologic Setting*

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

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

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

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

The MCT is slightly warped plane dipping northwards and separating the cover rocks of the underlying Indian shield from the highly deformed and thermally altered (metamorphosed) overlying wedge of the HHC. The plane intersects the rough topographic surface of the Himalayas, forming a line of intersection that can be followed across the ground surface. This line of intersection crosses the road several times near Barshong, crosses at the pass between Kanglung and Barshong, goes below the road from Kanglung to Trashigang and crosses the

C M Y K

Gamrichu about 2km below Rolong. From there it goes along the east side of the Kurichu valley until it crosses the river, about 10 km below Lhuentse; from there it crosses back along the west side to Trashigang and crosses the Gamrichu about 2km below Rolong. From there it goes along the east side of the Kurichu valley until it crosses the river, about 10 km below Lhuntse; from there it crosses back along the west side of the Kurichu valley and recrosses the road between Monggar and Sengor. It continues northwesterly through Bhutan, Sikkim, Nepal, Ladakh, and Kashmir and into Pakistan. To the east it continues through the Northern Frontier of India.

III. Relief and Surface features

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

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

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

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

IV. Climate and Vegetation

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

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

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

C M Y K

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

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

V. Drainage Pattern

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

VI. Government

On 17 December 1907, the civil and monastic representatives unanimously crowned Ugyen Wangchuck as the first hereditary monarch of Bhutan. It was as a result of the influence of the strength and the farsightedness of Ugyen Wangchuck that for the first time Bhutan was united under a central authority, which provided the country with stability and opportunity for development. In 1926 his son Jigme Wangchuck, who ruled until his death in 1952, succeeded Ugyen Wangchuck. The third Druk Gyalpo, Jigme Dorji Wangchuck began a campaign of modernization and expansion of Bhutan's government and society based on the accomplishments of his two predecessors in uniting the country under a strong central authority. Hence, the National Assembly consisting of representatives of the people, the Monastic order and civil administration was reestablished in 1953. The fourth Druk Gyalpo, His Majesty King Jigme Singye Wangchuck acceded to the throne in 1972. There had been steady decentralization of decision-making and institute building since His Majesty the King was enthroned. The most momentous change in the structure of the government came in 1998 after the devolution of

the executive power by His Majesty the King to the Council of Ministers. The change set off a process of adaptation in the relationship between the various branches of the government.

The present Druk Gyalpo, Jigme Khesar Namgyel Wangchuk acceded to the throne in December 2006. His Majesty the king is the head of state. The historic change of the governance came with the introduction of Democratic Constitutional Monarchy in 2008. The head of government is Prime Minister. The organogram reflects the logical delineation in the separation of powers along with the establishment of Council of Ministers with full executive powers. It shows the apparatus of all the important aspects of the Bhutanese system of governance like the executive, legislative and judiciary going down from the central to the district levels.

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

VII.The National Assembly

The National Assembly (Gyelyong Tshogdu) consists of 47 members who are representatives from the 47 Constituencies directly elected by the people of their respective constituencies. The main functions of the National Assembly are to enact, amend or repeal laws, endorse appointments of senior government officials, and approve the national budget. The National Assembly also approves the Five-Year Plans which are formulated by the government in consultation with the people of every district, initially through the Block Development Committees and District Development Committees, and finally in large public meetings with the King and sectoral heads of the Government. It also deliberates on issues that affect the security and well-being of the country and promote the welfare and happiness of the people. The National Assembly normally meets twice a year. However, if important and emergency matters so require, special sessions of the National Assembly may be convened by the Speaker. The duration of a National Assembly session is governed by the nature and scope of the points for discussion received from the people. A session normally lasts about three weeks. The Speaker is the presiding officer of the House. He is assisted by the Deputy Speaker in the conduct and smooth functioning of the house. The day to day administrative functions of the National Assembly rest with the Secretariat which is headed by a Secretary.

VIII.The National Council

The National Council is established in 2008 under Article 11 of the Constitution of Bhutan. There are 25 members; 20 are directly elected by the people from 20 Dzongkhags and the other 5 are nominated by His Majesty, the Druk Gyalpo. Their tenure is five years which commences from the date of the National Council first sitting. The main functions of the National Council are to i) ensure that the government safeguards the interest of the nation and fulfils the aspirations of the people through public review of policies and issues, bills and other legislation, and scrutiny of State functions, and 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 at least twice a year; special sessions may also be convened. The duration of the session is fixed according to the length and issue of the agenda. The Chairperson, elected from the 25 members of the National Council is the Presiding Officer of the House. The Chairperson is assisted by a Deputy Chairperson in the conduct and smooth function of the House. The National Council has seven Standing Committees; namely, the House Committee, the Legislative Committee, the New Economics & Trade Committee, the Environment & Natural Resources 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.

C M Y K

IX. The Monastic Body

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

X. Local Government

Local administration has been strengthened to meet the requirements of decentralized administration and development. There are twenty Dzongkhags (Districts), governed by a Dzongkhag administrator (Dzongda) who is responsible for civil administration and developmental activities. Dzongda is assisted by a Dzongrab who is responsible for planning, development and civil administration. The larger Dzongkhags are sub divided into Dungkhags headed by a Dungpa. A Group of villages, from a Gewog, the lowest administrative unit, each Gewog has a headman called the Gup (in the north) or Mandal (in the south). In each Dzongkhag the Dzongda is assisted in his development function by the Dzongkhag Yargye Tshogchung (District Development Committee), which consists of people's representatives and government officials.

XI. The Judiciary

Bhutan's Legal Code is based on that laid down by Zhabdrung Ngawang Namgyal who arrived Bhutan in 1616. Traditional Buddhist precepts are significantly maintained in the legal processes. The High Court consists of eight judges. There is a court in each Dzongkhag headed by a Drangpoen and assisted by Ramjams but minor disputes are settled by village heads (gups). As the final arbiter of law, the judiciary has been independent from other branches of the government since its inception.

C M Y K

Foreword i
Notes for users ii
Key Facts about Bhutan iv
Bhutan v

CHAPTER 1: POPULATION 1
TABLE 1.1 Projected Population (Number) by Sex, Bhutan 2005 - 2030 3
1.2: Projected Population (Number) by Age Group and Sex, Bhutan 2005 & 2006 4
1.3: Projected Population (Number) by Age Group and Sex, Bhutan 2007 & 2008 4
1.4: Projected Population (Number) by Age Group and Sex, Bhutan 2009 & 2010 5
1.5: Projected Population (Number) by Age Group and Sex, Bhutan 2011 & 2012 5
1.6: Projected Population (Number) by Age Group and Sex, Bhutan 2013 & 2014 6
1.7: Projected Population (Number) by Age Group and Sex, Bhutan 2015 & 2016 6
1.8: Projected Population (Number) by Age Group and Sex, Bhutan 2017 & 2018 7
1.9: Projected Population (Number) by Age Group and Sex, Bhutan 2019 & 2020 8
1.10: Projected Population (Number) by Age Group and Sex, Bhutan 2021 & 2022 8
1.11: Projected Population (Number) by Age Group and Sex, Bhutan 2023 & 2024 9
1.12: Projected Population (Number) by Age Group and Sex, Bhutan 2025 & 2026 9
1.13: Projected Population (Number) by Age Group and Sex, Bhutan 2027 & 2028 10
1.14: Projected Population (Number) by Age Group and Sex, Bhutan 2029 & 2030 10
1.15: Projected Population (Number) by Sex and Single Year of Age, Bhutan 2008 11
1.16: Projected Population (Number) by Sex and Single Year of Age, Bhutan 2010 12
1.17: Projected Population (Number) by Sex and Single Year of Age, Bhutan 2015 13
1.18: Projected Population (Number) by Sex and Single Year of Age, Bhutan 2020 14
1.19: Projected Population (Number) by Sex and Single Year of Age, Bhutan 2025 15
1.20: Projected Population (Number) by Sex and Single Year of Age, Bhutan 2030 16

CHAPTER 2: HEALTH 17
TABLE 2.1: Summary of Health facilities and personal, Bhutan, 2004 to 2008 19
2.2: Type of Health facilities in Dzongkhags, Bhutan, 2008. 19
2.3: Health personnel by category, Bhutan 2004 to 2008 20
2.4: Top ten morbidity, Bhutan, 2008 20
2.5: Top ten indoor hospital mortality, Bhutan, 2008 20
2.6: Morbidity cases reported from basic health units, Bhutan, 2008 21
2.7: Hospital morbidity cases reported, Bhutan, 2008 23
2.8: Hospital Indoor morbidity report, Bhutan, 2008 26
2.9: Number of patients reported in different hospitals, Bhutan, 2004 to 2008 29
2.10: EPI coverage in percentage by Dzongkhags, Bhutan, 2008 30
2.11: Details of child growth monitoring in immunization clinics, Bhutan, 2004 to 2008 30
2.12: Details of maternal and child health care services, 2004 to 2008 31
2.13: Deatails of maternal health care activities by Dzongkhag, 2004 to 2008 31
2.14: Detail of complications during pregnancy, and during labour/deliveries, Bhutan, 2004 to2008 33
2.15: Family planning acceptors by type of method, Bhutan, 2004 to 2008 34
2.16: Number of users of family planning methods by type by Dzongkhag, Bhutan, 2008 34

C M Y K

2.17: Number of blood slide examinations for malaria and malariomatric indices, Bhutan, 2004 to 2008 35
2.18: Number of Tuberculosis cases by type, Bhutan, 2004 to 2008 35
2.19: Water and sanitation facilities type by Dzongkhags, Bhutan, 2008 35

CHAPTER 3: EDUCATION 36
TABLE 3.1: Number of schools and institutions, staff and students, Bhutan, 2008 38
3.2: Number of educational institution, teachers and students Bhutan, 2004 to 2008 38
3.3: Number of enrolment and teaching staff in schools, institutes, NFE centres and day care centres, 200 39
3.4: Number of educational facilities by type and Dzongkhag, 2008 40
3.5: Number of teachers in educational institutions by nationality, Bhutan, 2004 to 2008 41
3.6: Number of educational facilities and students by Dzongkhag, 2008 42
3.7: Number of enrolment in educational institutions, Bhutan, 2004 to 2008 43
3.8: Number of students in high schools and below by Dzongkhag and type of school, 2008 44
3.9: Number of students by grade and type of school, Bhutan, 2008 45
3.10: Number of students by grade, 2004 to 2008 46
3.11: Number of students enrolled, promoters, repeaters and dropouts by grade, Bhutan, 2008 46

CHAPTER 4: LABOUR AND EMPLOYMENT 47
TABLE 4.1: Employment in civil service, Bhutan, 2004 to 2008 49
4.2: Population 15 years and over by activity status, participation rates and unemployment rate by sex and area, 2008 50
4.3: Population 15 years and over by age-sex specific activity status and labour force participation rates and unemployment rates, Bhutan, 2008 50
4.4: Labour force participation and unemployment rates by dzongkhag and by sex, 2008 51
4.5: Distribution of employed persons by major sector, sex and area (percent), 2008 52
4.6: Distribution of employed persons by status in main occupation by area and sex, 2008 52
4.7: Distribution of unemployed persons by reasons of unemployment by age and sex, Bhutan (percent), 2008 53
4.8: All employed persons worked during survey period by economic activity and hours of work,2009, Bhutan 54
4.9: All employed persons worked during survey period by nature of employment and hours of work, 2009, Bhutan 54
4.10: All employed persons by nature of employment and occuptation, 2009, Bhutan 55
4.11: Number of children aged 13-17 years old who performed domestic chores during past one week by Dzongkhags, 2009 56
4.12 Percentage of unemployment rate, Bhutan 2003 to 2009 56

CHAPTER 5: LAND USE AND AGRICULTURE 57
TABLE 5.1: Land use and vegetation types as percentage of total area, Bhutan, 1995 59
5.2: Percentage of area by Dzongkhag, by type of land cover, Bhutan, 1995 60
5.3: Altitude Zones of Dzongkhag as percentage of total area, 1995 60
5.4: Percentage of total area of Bhutan by Dzongkhag, by altitude Zones 1995. 62
5.5: Average temperature by Dzongkhag, Bhutan, 1996 to 2008 64
5.6: Total monthly rainfall at existing stations in each Dzongkhag, 2008 66
5.7: Number of agriculture research and extension facilities, Bhutan, June 2009 68
5.8: Irrigation channel constructed in Dzongkhags from 2004/05 to 2007/08 69
5.9: Power tiller tracks development and achievements, 2008 70
5.10: Wet land converted to dry land, 2005 70
5.11: Quantity of pesticides supplied to farmers, Bhutan 2004/05 to 2008/09 70
5.12: Arable agricultural land, sokzhing and tsamdrog by land type and Dzongkhag,Bhutan, 2008 71
5.13: Cultivated area, production and yield of major crops by Dzongkhag, Bhutan, 2008 72
5.14: Quantity of potato seed planted and production by variety anD region, Bhutan, 1992/93 to 1994/95 73
5.15: Number of livestock by type and Dzongkhag, Bhutan. 2005 74
5.16: Imports and distribution of food items by food corporation of Bhutan, 2002 to 2008 75
5.17: Quantity of Agricultural produce handled by food corporation of Bhutan, 2003 to 2008 75
5.18: Quantity and value of forest products supplied by type and users, Bhutan, 2005/06 to 2007/08 76
5.19: Details of protected areas in Bhutan by year of establishment and area 2006 79
5.20: Disposal of logwood by forestry development corporation limited, 2003 to 2005 79

CHAPTER 6: INDUSTRIES 80
TABLE 6.1: Number of industrial establishments by sector, Bhutan, 2004 to 2008 81
6.2: Number of licensed firms in manufacturing and mining industries by sector, Bhutan, 2004 to 2008 81
6.3: Number of industries by sector, size and type, Bhutan, 2004 to 2008 82
6.4: Number of contract firms by type, by Dzongkhag, Bhutan, 2008 82
6.5: Number of industries firms by type, by Dzongkhag, Bhutan, 2008 83
6.6: Number of industries by type, by Dzongkhag, Bhutan, 2008 83
6.7: Mineral production from mines in Bhutan, 2003 to 2008 84
6.8: Mineral production, Bhutan, 2004 to 2008 85
6.9: Number of establishments by type of industry and sector, 2000 86

C M Y K

6.10: Distribution of establishments by Dzongkhags, Bhutan, 2000 86
6.11: Number of establishments by sector and size of employment, Bhutan 2000 87
6.12: Number of persons engaged in industries by employment status and sex, Bhutan, 2000 88
6.13: Number of persons engaged in industries by employment statusand sex, Bhutan, 2000 88
6.14: Number of persons engaged in industrial sectors by employment status and sex, Bhutan, 2000 88
6.15: Number of persons engaged in industrial sectors by employment status and sex, Bhutan, 2000 88

CHAPTER 7: TRANSPORT AND COMMUNICATION 89
TABLE 7.1: Length of roads by type, Bhutan, 2004 to June 2009 91
7.2: Length of roads by type and Dzongkhag, Bhutan, June 2008 92
7.3: Number and length of motorable bridges by type, Bhutan, 2008 93
7.4: Number of suspension bridges completed during IV to IX five year plan periods by Dzongkhags, Bhutan 94
7.5: Number of registered vehicles by type and region, 2004 to 2008 95
7.6: Number of driving licences issued by region, 2008 95
7.7: Number of passengers carried and revenue earned by Druk air flights by sector, 2004 to 2008 96
7.8: Number of flights made by Druk air by sector, 2004 to 2008 97
7.9: Telephone connection capacity by exchange, Bhutan, 2004 to 2008 98
7.10: Number of telephone trunk circuits, Bhutan, 2008 100
7.11: Number of trunk lines, connection capacities and sets in use, 2004 to 2008 103
7.12: Number of telephone trunk calls by type, 2004 to 2008 103
7.13: Telecommunication traffic in minutes and revenue earnings,Bhutan 2004 to 2008 103
7.14: Number of communication facilities, 2004 to 2008 104
7.15: Volume of postal mail traffic by destination, Bhutan, 2004 to 2008 104
7.16: Volume of mail, by type of article and destination, Bhutan, 2008 104
7.17: Number of value of money order by type, Bhutan, 2004 to 2008105

CHAPTER 8: ENERGY 106
TABLE 8.1: Electricity generating stations and their capacities, Bhutan, FY 2006/07 & 2007/08 107
8.2: Total electricity generation and supply, 2004/04 to 2008/08 109
8.3: Major transmission lines for evacuating hydropower from Major Power Plant, 2007 to 2008 110
8.4: Details of domestic electrical energy consumption, Bhutan,2004/04 to 2007/08 111
8.5: Monthly revenue from sale of energy from Chhukha hydropower,2005 to 2008 111
8.6: Consumption of electricity by type of consumer, 2004/04 to 2007/08 112

CHAPTER 9: TOURISM 113
TABLE 9.1: Annual tourist arrivals by region /continent, 2004 to 2008 114
9.2: Tourist arrivals by country of residence and revenu receipts,Bhutan, 2004 to 2008 116
9.3: Number of tourist arrivals by season and month, 2004 to 2008 116
9.4: Number of tourist arrivals by purpose of visit, 2004 to 2008 117
9.5: Number of tourist arrivals by mode of transport, 2004 to 2008 117

CHAPTER 10: FOREIGN TRADE AND BALANCE OF PAYMENTS 118
ABLE 10.1: Value of exports and imports, Bhutan, 2004 to 2008 119
10.2:(a) Top ten commodities of export, Bhutan, 2008 119
10.2: (b) Top ten commodities of imports, Bhutan, 2008 119
10.3: Value and its percentage share of imports from top ten selected countries,Bhutan, 2008 120
10.4: Value and its percentage share of exports from top ten selectedcountries, Bhutan, 2008 120
10.5: Overall balance of payments estimates, Bhutan, FY 2003/04 to 2007/08 121
10.6: Gross International reserves, Bhutan, 2004/05 to 2007/08 122
10.7: Monthly average exchange rates, Ngultrums per US $, 2004 to 2008 122

CHAPTER 11: MONEY, BANKING AND FINANCE 123
TABLE 11.1: Monetary survey, Royal Monetary Authority, Bhutan National Bank and Bank of Bhutan, 2004 to 2008 124
11.2: Financial details of Royal Insurance Corporation of Bhutan, 2004 to 2008 125
11.3: Financial details of Bhutan National Bank, 2004 to 2008 125
11.4: Money and Banking details of Bhutan Development Finance Corporation, 2004 to 2008 126
11.5: Money and Banking of Royal Monetary Authority of Bhutan,2004 to 2008 126
11.6: Money and Banking, Bank of Bhutan, 2004 to 2008 127
11.7: Investments of financial institutions by industry, amounts outstanding, 2004 to 2008 127
11.8: Interest rates for deposits in financial institutions, 2004 to 2008 129
11.9: Interest rates and repayment period by sector and type of loan, financial Institutions (a), 2005 to 2008 130
11.10: Royal Securites Exchange of Bhutan, Number of shareholders 2004 to 2008 131
11.11: Royal Securities Exchange of Bhutan, Market information at the end of December 2008 132
11.12: Royal Securities Exchange of Bhutan, Volume Traded, Bhutan, 2004 to 2008 133
11.13: Royal Securities Exchange of Bhutan, Traded values, Bhutan 2004 to 2008 134

C M Y K

CHAPTER 12: PUBLIC FINANCE 135
TABLE 12.1: Recurrent budgetary expenditure of the government by ministry/agency Bhutan,2003/04 to 2007/08 136
12.2: Capital budgetary expenditure of the government by ministry/agency, Bhutan, 2003/04 to 2007/08 137
12.3: Budgetary receipts of the government by source, 2003/04 to 2007/08 138
12.4: Summary of budgetary operations, 2003/04 to 2007/08 138

CHAPTER 13: PLAN OUTLAYS 139
TABLE 13.1: Ninth Plan Bugetary Outlay and Allocation, Bhutan, 2002-2007 140
13.2: Outlays of development plans, percentage by category, fifth plan to ninth plan 141
13.4: Dzongkhag wise eight five year plan outlay, Bhutan, 1997 to 2002 142
13.5: Dzongkhag wise ninth five year plan outlay, Bhutan, 2002 to 2007 142

CHAPTER 14: NATIONAL ACCOUNTS 143
TABLE 14.1: Gross domestic product by kind of activity at current prices, 2004 to 2008 144
14.2: Gross domestic product by kind of activity in 2000 prices, 2004 to 2008 144
14.3: Share of Gross domestic product in current prices, 2004 to 2008 145
14.4: Gross domestic product growth rates over the preceeding years in current prices, 2004 to 2008 145
14.5: Gross domestic product growth rates over the preceeding years in 2000 prices,2004 to 2008 146
14.6: Gross domestic product by major sectors in current prices, 2004 to 2008 146
14.7: Gross domestic product by major sectors in 2000 prices, 2004 to 2008 146
14.8: Sectoral share to Gross domestic product in current prices, 2004 to 2008 147
14.9: Gross domestic capital formation in current and constant 2000 prices, 2004 to 2008 147
14.10: Expenditures on Gross domestic product in current prices, 2004 to 2008 148
14.11: Expenditures on Gross domestic product at constant 2000 prices,2004 to 2008 148

CHAPTER 15: PRICES 149
TABLE 15.1: Consumer price indexes for food and non-food components,Bhutan, 1st Qtr. 2007 to 2nd Qtr. 2009 150
15.2: Consumer price Indexes for major components, Bhutan, 1st Qtr. 2007 to 2nd Qtr. 2009 151
15.3: Consumer price indexes - major components, Bhutan,1st Qtr. 2007 to 2nd Qtr. 2009 152
15.4: Consumer price indexes - major components, Bhutan,1st Qtr. 2007 to 2nd Qtr. 2009 152
15.5: Consumer price indexes for food items, sub - components,Bhutan, 1st Qtr. 2007 to 2nd Qtr. 2009 153

15.6: Consumer price indexes for food items, sub - components, Bhutan,1st Qtr. 2007 to 2nd Qtr. 2009 155
15.7: Consumer price indexes, sub - components, Bhutan, 1st Qtr. 2007 to 2nd Qtr. 2009 156

CHAPTER 16: CRIME 157
TABLE 16.1: Summary of crime reports by nature of crime, Bhutan, 2008 158
16.2: Details of crime reports by nature of crime, Bhutan, 2008 159
16.3: Monthly motor vehicle accidents by traffic division, Bhutan, 2008 165
16.4: Causes of motor vehicle accidents by traffic division, Bhutan, 2008 165

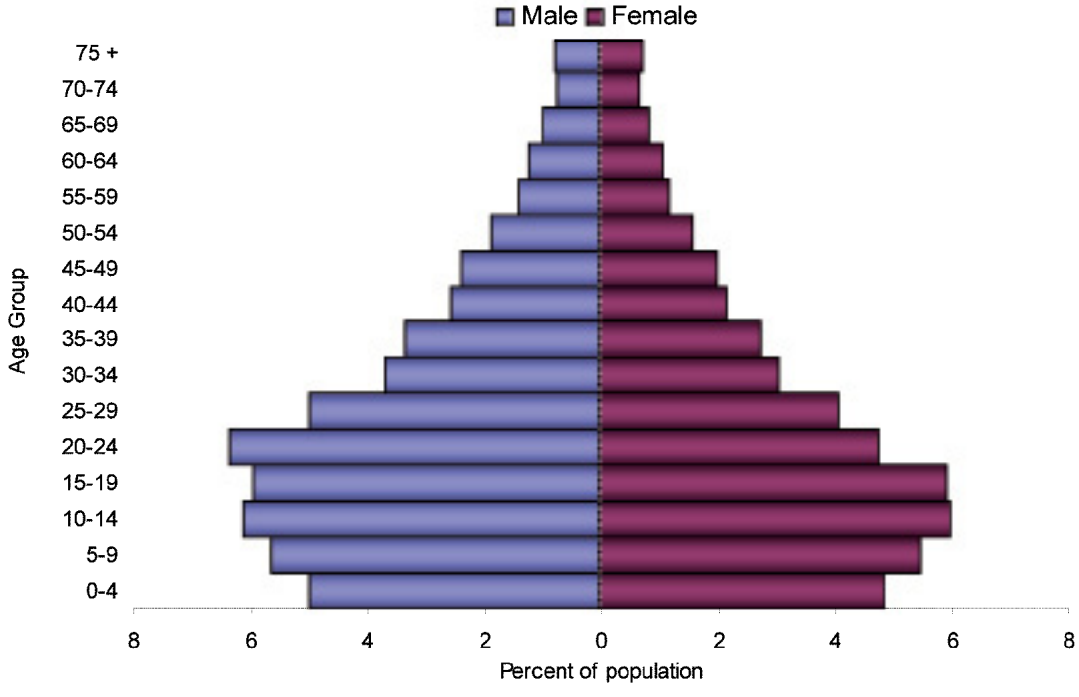
FIGURES
1.1 Population pyramid, Bhutan, 2005 1
2.1: Health personnel by category, Bhutan, 2004 - 2008 18
3.1: Number of educational facilities by type, Bhutan, 2004 - 2008 37
4.1: Population 15 years and over by employment & activity status by sex and area, Bhutan, 2008… 48
5.1: Land use by type, Bhutan, 1995 58
6.1: Industries by Type, Bhutan, 2008 80
7.1: Driving licenses issued by region, Bhutan, 2008 90
8.1: Electricity generation, Bhutan, 2008 106
9.1: Tourists arrivals by region, Bhutan, 2008 113
10.1: Value of exports and imports (2004 - 2008) 118
12.1: Recurrent budgetary expenditure of the government by ministry, 2006/2008 135
14.1: Percent of share to GDP in 2000 prices 143
16.1: Motor vehicle accidents by traffice division, Bhutan, 2004 & 2008 157

C M Y K

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.

Figure 1.1: Population Pyramid, Bhutan, 2005



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 population enumerated as of 30th and 31st May 2005 is 634,982 persons out of which 333,595 persons are male and 301,387 are females. The urban population consists

C M Y K

of 196,111 persons while 438,871 are in the rural areas. Based on the population projection derived from PHCB 2005, the population for 2008 was calculated at 671,083.

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.

C M Y K

TABLE 1.1: PROJECTED POPULATION (NUMBER) BY SEX, BHUTAN 2005 - 2030

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

Source: Population Projections Bhutan 2005 - 2030, NSB

C M Y K

TABLE 1.2: PROJECTED POPULATION (NUMBER) BY AGE GROUP AND SEX, BHUTAN 2005

Age Group	2005(observed)			Age Group	2006		
	Total	Male	Female		Total	Male	Female
0-4	62,553	31,489	31,064	0-4	65,100	32,702	32,398
5-9	70,399	35,547	34,852	5-9	68,780	34,808	33,972
10-14	77,007	38,728	38,279	10-14	76,190	38,420	37,770
15-19	75,236	37,504	37,732	15-19	75,810	37,404	38,406
20-24	70,574	40,254	30,320	20-24	72,016	40,330	31,686
25-29	57,358	31,386	25,972	25-29	60,311	33,428	26,883
30-34	42,806	23,208	19,598	30-34	44,844	24,282	20,562
35-39	38,729	21,124	17,605	35-39	39,547	21,568	17,979
40-44	29,900	16,022	13,878	40-44	31,182	16,759	14,423
45-49	27,662	14,895	12,767	45-49	27,970	15,037	12,933
50-54	22,047	11,779	10,268	50-54	23,088	12,340	10,748
55-59	16,392	8,764	7,628	55-59	16,973	9,074	7,899
60-64	14,574	7,564	7,010	60-64	14,593	7,582	7,011
65-69	11,361	5,999	5,362	65-69	11,581	6,079	5,502
70-74	8,742	4,493	4,249	70-74	8,865	4,567	4,298
75-79	5,245	2,677	2,568	75-79	5,469	2,794	2,675
80+	4,397	2,162	2,235	80+	4,532	2,229	2,303
Total	**634,982**	**333,595**	**301,387**	**Total**	**646,851**	**339,403**	**307,448**

Source: Population Projections Bhutan 2005 - 2030, NSB

TABLE 1.3: PROJECTED POPULATION (NUMBER) BY AGE GROUP AND SEX, BHUTAN 2007 & 2008

Age Group	2007			Age Group	2008		
	Total	Male	Female		Total	Male	Female
0-4	68,180	34,183	33,997	0-4	71,833	35,985	35,848
5-9	67,205	34,102	33,103	5-9	65,610	33,346	32,264
10-14	74,948	37,823	37,125	10-14	73,412	37,037	36,375
15-19	76,381	37,672	38,709	15-19	76,824	38,125	38,699
20-24	73,004	39,722	33,282	20-24	73,669	38,736	34,933
25-29	63,148	35,554	27,594	25-29	65,769	37,527	28,242
30-34	47,480	25,672	21,808	30-34	50,524	27,324	23,200
35-39	39,956	21,764	18,192	35-39	40,269	21,893	18,376
40-44	32,929	17,777	15,152	40-44	34,875	18,913	15,962
45-49	28,039	15,037	13,002	45-49	28,074	15,018	13,056
50-54	24,140	12,919	11,221	50-54	25,122	13,464	11,658
55-59	17,764	9,479	8,285	55-59	18,704	9,953	8,751
60-64	14,525	7,579	6,946	60-64	14,470	7,594	6,876
65-69	11,870	6,178	5,692	65-69	12,171	6,280	5,891
70-74	8,913	4,611	4,302	70-74	8,936	4,641	4,295
75-79	5,712	2,908	2,804	75-79	5,942	3,013	2,929
80+	4,694	2,318	2,376	80+	4,879	2,420	2,459
Total	**658,888**	**345,298**	**313,590**	**Total**	**671,083**	**351,269**	**319,814**

Source: Population Projections Bhutan 2005 - 2030, NSB

C M Y K

TABLE 1.4: PROJECTED POPULATION (NUMBER) BY AGE GROUP AND SEX, BHUTAN 2009 & 2010

Age Group	2009			Age Group	2010		
	Total	Male	Female		Total	Male	Female
0-4	76,103	38,177	37,926	0-4	81,063	40,853	40,210
5-9	63,888	32,424	31,464	5-9	61,901	31,204	30,697
10-14	71,756	36,199	35,557	10-14	70,108	35,404	34,704
15-19	76,949	38,479	38,470	15-19	76,636	38,536	38,100
20-24	74,201	37,806	36,395	20-24	74,730	37,240	37,490
25-29	68,070	39,045	29,025	25-29	69,980	39,907	30,073
30-34	53,693	29,149	24,544	30-34	56,767	31,061	25,706
35-39	40,924	22,208	18,716	35-39	42,226	22,888	19,338
40-44	36,647	19,940	16,707	40-44	38,000	20,708	17,292
45-49	28,362	15,153	13,209	45-49	29,087	15,553	13,534
50-54	25,937	13,912	12,025	50-54	26,535	14,229	12,306
55-59	19,704	10,463	9,241	55-59	20,697	10,980	9,717
60-64	14,558	7,679	6,879	60-64	14,873	7,867	7,006
65-69	12,416	6,366	6,050	65-69	12,566	6,425	6,141
70-74	8,992	4,677	4,315	70-74	9,113	4,729	4,384
75-79	6,126	3,099	3,027	75-79	6,253	3,163	3,090
80+	5,081	2,529	2,552	80+	5,287	2,636	2,651
Total	**683,407**	**357,305**	**326,102**	**Total**	**695,822**	**363,383**	**332,439**

Source: Population Projections Bhutan 2005 - 2030, NSB

TABLE 1.5: PROJECTED POPULATION (NUMBER) BY AGE GROUP AND SEX, BHUTAN 2011 & 2012

Age Group	2011			Age Group	2012		
	Total	Male	Female		Total	Male	Female
0-4	81,918	41,285	40,633	0-4	82,559	41,610	40,949
5-9	64,406	32,399	32,007	5-9	67,467	33,872	33,595
10-14	68,504	34,672	33,832	10-14	66,946	33,974	32,972
15-19	75,834	38,234	37,600	15-19	74,607	37,645	36,962
20-24	75,316	37,149	38,167	20-24	75,899	37,422	38,477
25-29	71,427	39,991	31,436	25-29	72,426	39,398	33,028
30-34	59,707	33,091	26,616	30-34	62,533	35,205	27,328
35-39	44,255	23,957	20,298	35-39	46,873	25,337	21,536
40-44	38,818	21,152	17,666	40-44	39,237	21,354	17,883
45-49	30,353	16,280	14,073	45-49	32,072	17,280	14,792
50-54	26,848	14,375	12,473	50-54	26,931	14,384	12,547
55-59	21,696	11,516	10,180	55-59	22,705	12,068	10,637
60-64	15,424	8,158	7,266	60-64	16,167	8,535	7,632
65-69	12,600	6,451	6,149	65-69	12,560	6,460	6,100
70-74	9,314	4,804	4,510	70-74	9,570	4,894	4,676
75-79	6,350	3,221	3,129	75-79	6,397	3,259	3,138
80+	5,495	2,741	2,754	80+	5,730	2,857	2,873
Total	**708,265**	**369,476**	**338,789**	**Total**	**720,679**	**375,554**	**345,125**

Source: Population Projections Bhutan 2005 - 2030, NSB

C M Y K

TABLE 1.6: PROJECTED POPULATION (NUMBER) BY AGE GROUP AND SEX, BHUTAN 2013 & 2014

Age Group	2013			Age Group	2014		
	Total	Male	Female		Total	Male	Female
0-4	82,936	41,801	41,135	0-4	83,001	41,835	41,166
5-9	71,111	35,670	35,441	5-9	75,377	37,859	37,518
10-14	65,365	33,224	32,141	10-14	63,657	32,309	31,348
15-19	73,090	36,868	36,222	15-19	71,452	36,039	35,413
20-24	76,354	37,879	38,475	20-24	76,495	38,239	38,256
25-29	73,105	38,429	34,676	25-29	73,652	37,516	36,136
30-34	65,147	37,169	27,978	30-34	67,446	38,683	28,763
35-39	49,896	26,978	22,918	35-39	53,044	28,790	24,254
40-44	39,561	21,490	18,071	40-44	40,225	21,811	18,414
45-49	33,987	18,396	15,591	45-49	35,732	19,405	16,327
50-54	26,987	14,379	12,608	50-54	27,287	14,522	12,765
55-59	23,651	12,590	11,061	55-59	24,440	13,021	11,419
60-64	17,044	8,974	8,070	60-64	17,978	9,447	8,531
65-69	12,534	6,485	6,049	65-69	12,636	6,572	6,064
70-74	9,836	4,986	4,850	70-74	10,054	5,065	4,989
75-79	6,430	3,289	3,141	75-79	6,488	3,323	3,165
80+	5,970	2,975	2,995	80+	6,189	3,084	3,105
Total	**733,004**	**381,582**	**351,422**	**Total**	**745,153**	**387,520**	**357,633**

Source: Population Projections Bhutan 2005 - 2030, NSB

TABLE 1.7: PROJECTED POPULATION (NUMBER) BY AGE GROUP AND SEX, BHUTAN 2015 & 2016

Age Group	2015			Age Group	2016		
	Total	Male	Female		Total	Male	Female
0-4	82,716	41,693	41,023	0-4	82,041	41,354	40,687
5-9	80,336	40,533	39,803	5-9	81,213	40,975	40,238
10-14	61,685	31,097	30,588	10-14	64,190	32,292	31,898
15-19	69,822	35,253	34,569	15-19	68,236	34,530	33,706
20-24	76,199	38,303	37,896	20-24	75,416	38,010	37,406
25-29	74,196	36,963	37,233	25-29	74,797	36,881	37,916
30-34	69,358	39,547	29,811	30-34	70,813	39,641	31,172
35-39	56,100	30,689	25,411	35-39	59,026	32,706	26,320
40-44	41,526	22,491	19,035	40-44	43,542	23,553	19,989
45-49	37,069	20,163	16,906	45-49	37,885	20,606	17,279
50-54	28,007	14,919	13,088	50-54	29,253	15,633	13,620
55-59	25,023	13,329	11,694	55-59	25,338	13,477	11,861
60-64	18,908	9,927	8,981	60-64	19,844	10,425	9,419
65-69	12,936	6,747	6,189	65-69	13,443	7,012	6,431
70-74	10,192	5,122	5,070	70-74	10,238	5,153	5,085
75-79	6,594	3,368	3,226	75-79	6,759	3,430	3,329
80+	6,375	3,180	3,195	80+	6,543	3,270	3,273
Total	**757,042**	**393,324**	**363,718**	**Total**	**768,577**	**398,948**	**369,629**

Source: Population Projections Bhutan 2005 - 2030, NSB

C M Y K

TABLE 1.8: PROJECTED POPULATION (NUMBER) BY AGE GROUP AND SEX, BHUTAN 2017 & 2018

Age Group	2017			Age Group	2018		
	Total	Male	Female		Total	Male	Female
0-4	80,944	40,804	40,140	0-4	79,405	40,032	39,373
5-9	81,877	41,310	40,567	5-9	82,279	41,513	40,766
10-14	67,250	33,765	33,485	10-14	70,890	35,561	35,329
15-19	66,693	33,839	32,854	15-19	65,126	33,096	32,030
20-24	74,212	37,432	36,780	20-24	72,716	36,666	36,050
25-29	75,395	37,162	38,233	25-29	75,864	37,625	38,239
30-34	71,824	39,063	32,761	30-34	72,518	38,113	34,405
35-39	61,841	34,808	27,033	35-39	64,448	36,763	27,685
40-44	46,139	24,922	21,217	40-44	49,135	26,548	22,587
45-49	38,313	20,814	17,499	45-49	38,653	20,960	17,693
50-54	30,933	16,607	14,326	50-54	32,802	17,693	15,109
55-59	25,441	13,499	11,942	55-59	25,520	13,509	12,011
60-64	20,794	10,940	9,854	60-64	21,686	11,428	10,258
65-69	14,118	7,351	6,767	65-69	14,911	7,743	7,168
70-74	10,226	5,171	5,055	70-74	10,229	5,205	5,024
75-79	6,966	3,504	3,462	75-79	7,178	3,579	3,599
80+	6,700	3,356	3,344	80+	6,855	3,440	3,415
Total	**779,666**	**404,347**	**375,319**	**Total**	**790,215**	**409,474**	**380,741**

Source: Population Projections Bhutan 2005 - 2030, NSB

C M Y K

TABLE 1.9: PROJECTED POPULATION (NUMBER) BY AGE GROUP AND SEX, BHUTAN 2019 & 2020

Age Group	2019			Age Group	2020		
	Total	Male	Female		Total	Male	Female
0-4	77,429	39,040	38,389	0-4	75,031	37,835	37,196
5-9	82,373	41,561	40,812	5-9	82,115	41,432	40,683
10-14	75,152	37,749	37,403	10-14	80,105	40,419	39,686
15-19	63,434	32,190	31,244	15-19	61,477	30,987	30,490
20-24	71,100	35,849	35,251	20-24	69,490	35,074	34,416
25-29	76,021	37,991	38,030	25-29	75,742	38,063	37,679
30-34	73,081	37,219	35,862	30-34	73,640	36,681	36,959
35-39	66,743	38,272	28,471	35-39	68,657	39,140	29,517
40-44	52,257	28,344	23,913	40-44	55,288	30,227	25,061
45-49	39,326	21,288	18,038	45-49	40,622	21,967	18,655
50-54	34,508	18,677	15,831	50-54	35,820	19,419	16,401
55-59	25,832	13,660	12,172	55-59	26,546	14,053	12,493
60-64	22,435	11,834	10,601	60-64	22,994	12,127	10,867
65-69	15,754	8,165	7,589	65-69	16,596	8,595	8,001
70-74	10,339	5,289	5,050	70-74	10,615	5,445	5,170
75-79	7,352	3,643	3,709	75-79	7,466	3,691	3,775
80+	7,018	3,522	3,496	80+	7,193	3,605	3,588
Total	**800,154**	**414,293**	**385,861**	**Total**	**809,397**	**418,760**	**390,637**

Source: Population Projections Bhutan 2005 - 2030, NSB

TABLE 1.10: PROJECTED POPULATION (NUMBER) BY AGE GROUP AND SEX, BHUTAN 2021 & 2022

Age Group	2021			Age Group	2022		
	Total	Male	Female		Total	Male	Female
0-4	72,746	36,686	36,060	0-4	70,635	35,623	35,012
5-9	81,469	41,108	40,361	5-9	80,400	40,571	39,829
10-14	80,987	40,864	40,123	10-14	81,657	41,202	40,455
15-19	63,982	32,183	31,799	15-19	67,039	33,654	33,385
20-24	67,921	34,360	33,561	20-24	66,394	33,677	32,717
25-29	74,979	37,780	37,199	25-29	73,794	37,212	36,582
30-34	74,253	36,609	37,644	30-34	74,862	36,896	37,966
35-39	70,118	39,244	30,874	35-39	71,137	38,682	32,455
40-44	58,193	32,228	25,965	40-44	60,988	34,311	26,677
45-49	42,617	23,018	19,599	45-49	45,181	24,369	20,812
50-54	36,628	19,857	16,771	50-54	37,063	20,070	16,993
55-59	27,754	14,742	13,012	55-59	29,376	15,678	13,698
60-64	23,309	12,275	11,034	60-64	23,427	12,308	11,119
65-69	17,446	9,042	8,404	65-69	18,308	9,504	8,804
70-74	11,060	5,673	5,387	70-74	11,642	5,961	5,681
75-79	7,512	3,721	3,791	75-79	7,517	3,742	3,775
80+	7,396	3,695	3,701	80+	7,618	3,790	3,828
Total	**818,370**	**423,085**	**395,285**	**Total**	**827,038**	**427,250**	**399,788**

Source: Population Projections Bhutan 2005 - 2030, NSB

C M Y K

TABLE 1.11: PROJECTED POPULATION (NUMBER) BY AGE GROUP AND SEX, BHUTAN 2023 & 2024

Age Group	2023			Age Group	2024		
	Total	Male	Female		Total	Male	Female
0-4	68,763	34,679	34,084	0-4	67,192	33,887	33,305
5-9	78,894	39,814	39,080	5-9	76,946	38,834	38,112
10-14	82,065	41,408	40,657	10-14	82,163	41,458	40,705
15-19	70,676	35,449	35,227	15-19	74,929	37,632	37,297
20-24	64,843	32,943	31,900	20-24	63,165	32,044	31,121
25-29	72,317	36,457	35,860	25-29	70,720	35,649	35,071
30-34	75,343	37,363	37,980	30-34	75,511	37,733	37,778
35-39	71,841	37,750	34,091	35-39	72,414	36,872	35,542
40-44	63,577	36,249	27,328	40-44	65,858	37,747	28,111
45-49	48,135	25,971	22,164	45-49	51,211	27,739	23,472
50-54	37,414	20,224	17,190	50-54	38,087	20,553	17,534
55-59	31,172	16,716	14,456	55-59	32,810	17,655	15,155
60-64	23,525	12,331	11,194	60-64	23,841	12,485	11,356
65-69	19,117	9,941	9,176	65-69	19,799	10,306	9,493
70-74	12,320	6,292	6,028	70-74	13,038	6,646	6,392
75-79	7,538	3,776	3,762	75-79	7,642	3,848	3,794
80+	7,839	3,884	3,955	80+	8,037	3,970	4,067
Total	**835,379**	**431,247**	**404,132**	**Total**	**843,363**	**435,058**	**408,305**

Source: Population Projections Bhutan 2005 - 2030, NSB

TABLE 1.12: PROJECTED POPULATION (NUMBER) BY AGE GROUP AND SEX, BHUTAN 2025 & 2026

Age Group	2025			Age Group	2026		
	Total	Male	Female		Total	Male	Female
0-4	65,982	33,276	32,706	0-4	64,877	32,718	32,159
5-9	74,575	37,641	36,934	5-9	72,314	36,501	35,813
10-14	81,911	41,331	40,580	10-14	81,271	41,010	40,261
15-19	79,870	40,295	39,575	15-19	80,757	40,742	40,015
20-24	61,222	30,849	30,373	20-24	63,725	32,044	31,681
25-29	69,126	34,882	34,244	25-29	67,574	34,176	33,398
30-34	75,244	37,809	37,435	30-34	74,496	37,533	36,963
35-39	72,983	36,347	36,636	35-39	73,604	36,283	37,321
40-44	67,761	38,610	29,151	40-44	69,219	38,720	30,499
45-49	54,197	29,592	24,605	45-49	57,062	31,562	25,500
50-54	39,366	21,222	18,144	50-54	41,323	22,252	19,071
55-59	34,072	18,365	15,707	55-59	34,858	18,789	16,069
60-64	24,529	12,862	11,667	60-64	25,676	13,511	12,165
65-69	20,311	10,572	9,739	65-69	20,607	10,710	9,897
70-74	13,756	7,008	6,748	70-74	14,482	7,384	7,098
75-79	7,869	3,973	3,896	75-79	8,224	4,151	4,073
80+	8,202	4,045	4,157	80+	8,341	4,114	4,227
Total	**850,976**	**438,679**	**412,297**	**Total**	**858,410**	**442,200**	**416,210**

Source: Population Projections Bhutan 2005 - 2030, NSB

C M Y K

TABLE 1.13: PROJECTED POPULATION (NUMBER) BY AGE GROUP AND SEX, BHUTAN 2027 & 2028

Age Group	2027			Age Group	2028		
	Total	Male	Female		Total	Male	Female
0-4	63,920	32,235	31,685	0-4	63,154	31,848	31,306
5-9	70,225	35,448	34,777	5-9	68,372	34,512	33,860
10-14	80,209	40,476	39,733	10-14	78,710	39,722	38,988
15-19	81,430	41,081	40,349	15-19	81,842	41,289	40,553
20-24	66,778	33,513	33,265	20-24	70,408	35,304	35,104
25-29	66,063	33,501	32,562	25-29	64,527	32,774	31,753
30-34	73,329	36,974	36,355	30-34	71,872	36,228	35,644
35-39	74,222	36,575	37,647	35-39	74,711	37,044	37,667
40-44	70,241	38,173	32,068	40-44	70,955	37,263	33,692
45-49	59,819	33,614	26,205	45-49	62,376	35,523	26,853
50-54	43,831	23,571	20,260	50-54	46,717	25,132	21,585
55-59	35,291	19,001	16,290	55-59	35,649	19,161	16,488
60-64	27,201	14,384	12,817	60-64	28,887	15,350	13,537
65-69	20,734	10,751	9,983	65-69	20,849	10,787	10,062
70-74	15,221	7,775	7,446	70-74	15,918	8,146	7,772
75-79	8,678	4,372	4,306	75-79	9,201	4,624	4,577
80+	8,470	4,182	4,288	80+	8,611	4,258	4,353
Total	**865,662**	**445,626**	**420,036**	**Total**	**872,759**	**448,965**	**423,794**

Source: Population Projections Bhutan 2005 - 2030, NSB

TABLE 1.14: PROJECTED POPULATION (NUMBER) BY AGE GROUP AND SEX, BHUTAN 2029 & 2030

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

Source: Population Projections Bhutan 2005 - 2030, NSB

C M Y K

TABLE 1.15: PROJECTED POPULATION (NUMBER) BY SEX AND SINGLE YEAR OF AGE, BHUTAN 2008

Age	Total	Male	Female	Age	Total	Male	Female
0	15,697	7,699	7,998	41	7,243	3,936	3,307
1	14,914	7,426	7,488	42	7,044	3,823	3,221
2	14,243	7,167	7,076	43	6,764	3,663	3,101
3	13,697	6,940	6,757	44	6,431	3,471	2,960
4	13,282	6,753	6,529	45	6,078	3,267	2,811
5	13,016	6,624	6,392	46	5,761	3,084	2,677
6	12,908	6,566	6,342	47	5,521	2,947	2,574
7	12,965	6,588	6,377	48	5,387	2,874	2,513
8	13,183	6,694	6,489	49	5,327	2,846	2,481
9	13,538	6,874	6,664	50	5,301	2,838	2,463
10	13,978	7,097	6,881	51	5,245	2,812	2,433
11	14,425	7,317	7,108	52	5,117	2,745	2,372
12	14,799	7,483	7,316	53	4,883	2,619	2,264
13	15,039	7,563	7,476	54	4,576	2,450	2,126
14	15,171	7,577	7,594	55	4,250	2,271	1,979
15	15,281	7,574	7,707	56	3,955	2,109	1,846
16	15,393	7,590	7,803	57	3,694	1,965	1,729
17	15,437	7,611	7,826	58	3,485	1,850	1,635
18	15,406	7,651	7,755	59	3,320	1,758	1,562
19	15,307	7,699	7,608	60	3,160	1,669	1,491
20	15,152	7,721	7,431	61	3,000	1,580	1,420
21	14,962	7,721	7,241	62	2,865	1,504	1,361
22	14,750	7,733	7,017	63	2,762	1,444	1,318
23	14,526	7,765	6,761	64	2,683	1,397	1,286
24	14,279	7,796	6,483	65	2,617	1,356	1,261
25	14,024	7,843	6,181	66	2,551	1,316	1,235
26	13,715	7,838	5,877	67	2,461	1,267	1,194
27	13,287	7,682	5,605	68	2,343	1,206	1,137
28	12,711	7,329	5,382	69	2,199	1,135	1,064
29	12,032	6,835	5,197	70	2,049	1,061	988
30	11,309	6,283	5,026	71	1,905	990	915
31	10,618	5,772	4,846	72	1,774	923	851
32	10,003	5,346	4,657	73	1,658	863	795
33	9,501	5,055	4,446	74	1,550	804	746
34	9,093	4,868	4,225	75	1,446	746	700
35	8,700	4,698	4,002	76	1,336	684	652
36	8,310	4,513	3,797	77	1,210	614	596
37	7,984	4,353	3,631	78	1,064	533	531
38	7,735	4,222	3,513	79	886	436	450
39	7,540	4,107	3,433	80 +	4,879	2,420	2,459
40	7,393	4,020	3,373				
				Total	**671,083**	**351,269**	**319,814**

Source: Population Projections Bhutan 2005 - 2030, NSB

C M Y K

TABLE 1.16: PROJECTED POPULATION (NUMBER) BY SEX AND SINGLE YEAR OF AGE, BHUTAN 2010

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

Source: Population Projections Bhutan 2005 - 2030, NSB

TABLE 1.17: PROJECTED POPULATION (NUMBER) BY SEX AND SINGLE YEAR OF AGE, BHUTAN 2015

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

Source: Population Projections Bhutan 2005 - 2030, NSB

C M Y K

TABLE 1.18: PROJECTED POPULATION (NUMBER) BY SEX AND SINGLE YEAR OF AGE, BHUTAN 2020

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

Source: Population Projections Bhutan 2005 - 2030, NSB

C M Y K

TABLE 1.19: PROJECTED POPULATION (NUMBER) BY SEX AND SINGLE YEAR OF AGE, BHUTAN 2025

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

Source: Population Projections Bhutan 2005 - 2030, NSB

C M Y K

TABLE 1.20: PROJECTED POPULATION (NUMBER) BY SEX AND SINGLE YEAR OF AGE, BHUTAN 2030

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

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 90% of the total population. Institutional health facilities were earlier concentrated in the urban centres, but today the emphasis has shifted to the rural areas where the majority of the population live.

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

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

As of 2008, there were 31 hospitals, 178 BHUs and over 519 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 Department of Public Health has been conducting the National Health Surveys every five years, which is the source for mortality statistics. After Population and Housing Census of Bhutan 2005 (PHCB 2005) the mortality have been estimated from 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", published by Ministry of Health. The available morbidity statistics are based on patients treated by hospitals, BHUs and ORCs.

C M Y K

Figure 2.1: Top ten morbidity, Bhutan, 2008

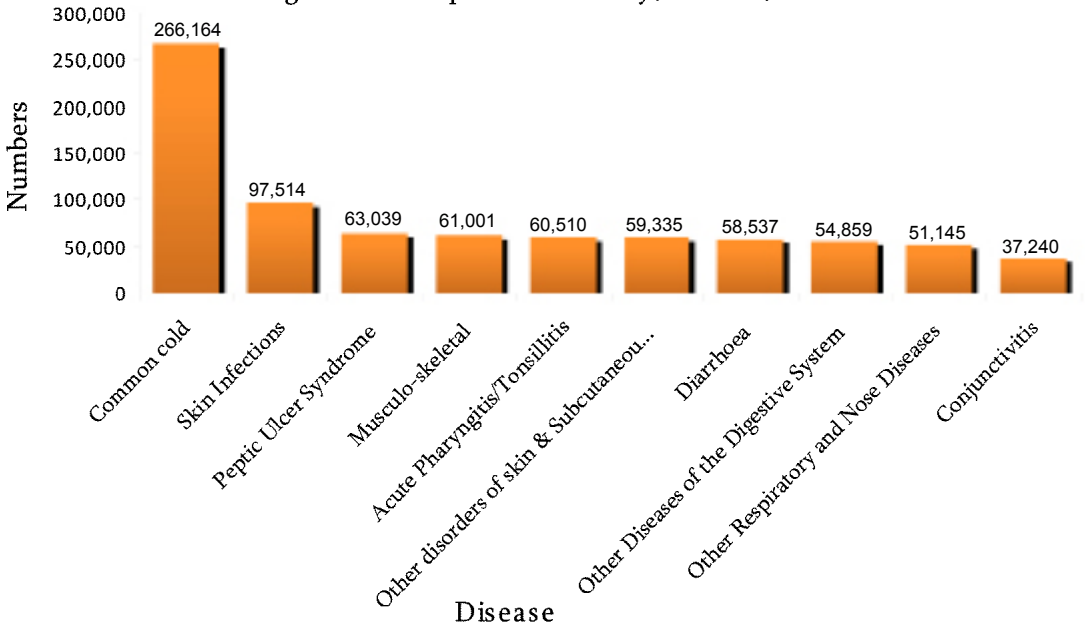
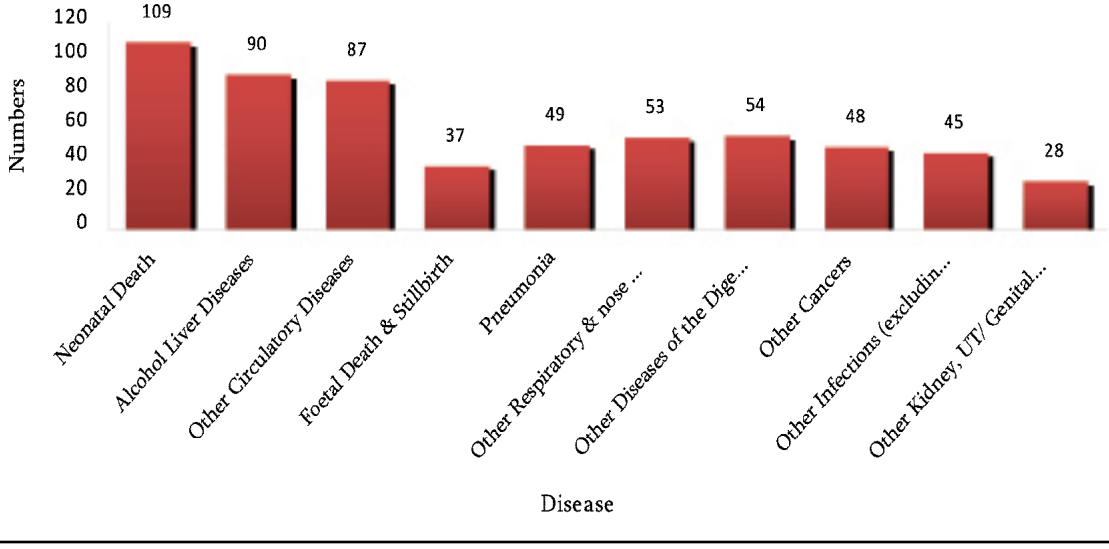


Figure 2.2: Top ten indoor hospital mortality, Bhutan, 2008



C M Y K

TABLE 2.1: SUMMARY OF THE HEALTH FACILITIES AND PERSONNEL, BHUTAN, 2004 TO 2008

Facilities	2004	2005	2006	2007	2008
Number of hospitals	29	29	29	29	30
Number of basic health units	176	176	176	178	178
Number of dispensaries/outreach clinic	476	485	514	519	519
Number of indigenous hospitals	1	1	1	1	1
Number of indigenous dispensaries	21	21	21	26	35
Persons per doctor*	5227	4379	4312	4197	3924
Number of hospital beds**	1113	1078	1133	1159	1159
Persons per hospital bed**	676	589	570.9	568	568
Doctors per 10,000 persons	1.9	2.3	2.3	2.4	2.5
Hospital bed per 10,000 persons**	15	17	17.5	17.6	17.6
Population covered by health care (%)	90	90	90	90	90
Population access to safe drinking water (%)	n.a	84	81.4	82.3	83.2
Women attended by trained personnel during child birth(%)	53.6	52.3	57.1	53.6	66.3

Source: Annual Health Bulletin (AHB) 2009, MOH
Note: Includes doctors in adminstrative services, non-nationals and attachments.
* The Persons per doctor for the year 2005 and thereafter is calculated based on the projected population figures. while earlier ones were based on the NSB estimates.
** Data remains the same for 2008 since the data was not available in AHB 2009.

TABLE 2.2: TYPE OF HEALTH FACILITIES IN DZONGKHAGS,BHUTAN,2008

(Number)

Dzongkhag	Hospitals	Basic health unit	Outreach clinic
Bumthang	1	4	14
Chhukha	3	8	47
Dagana	1	8	16
Gasa	0	4	13
Ha	1	4	15
Lhuentse	1	11	33
Monggar	1	24	57
Paro	1	3	27
Pemagatshel	1	12	33
Punakha	1	6	9
Samdrupjongkhar	2	8	36
Samtse	3	9	18
Sarpang	2	10	11
Thimphu*	5	7	19
Trashigang	3	19	57
Trashiyangtse	1	7	23
Trongsa	1	6	19
Tsirang	1	4	13
Wangdue	1	10	23
Zhemgang	1	14	38
Bhutan	**31**	**178**	**519**

Source: Annual Health Bulletin (AHB) 2009, MOH
Note: BHU's figure excludes those which are not functioning.
*Indigenous hospital included under hospital

TABLE 2.3: HEALTH PERSONNEL BY CATEGORY, BHUTAN, 2004 TO 2008

Number

Health personnel	2004	2005	2006	2007	2008
Doctors	135	145	150	154	171
DHOs/ ADHOs	23	22	22	37	38
Health Workers(HA/BHW/PMW)*	201	171	229	232	425
Basic Health Workers	171	210	173	173	n.a
Sister and Nurses / B.Sc Nurses**	522	538	587	559	567
General Nurse Midwife/Staff Nurses (GNM)	183	202	200	255	n.a
Auxiliary Nurse Midwife (ANM)	140	134	134	123	n.a
Assistant Nurses	175	174	174	176	99
Other Technicians	368	438	420	510	552
Indigenous Physicians	31	30	30	38	n.a
Indigenous Compounders/Menpas	26	36	42	43	54
Malaria Workers	47	48	48	48	48
Village Health Workers (VHW)	1,201	1,200	1,087	1,200	1,200

Source: Annual Health Bulletin (AHB) 2009, MOH
*Note: *Health workers for 2008 has been combined of HA/BHW/PMW*
*** GNM and ANM are combined in Nurses for 2008*

TABLE 2.4: TOP TEN MORBIDITY, BHUTAN, 2008

Priority health problem/Disease	Number
Common cold	266,164
Skin Infections	97,514
Peptic Ulcer Syndrome	63,039
Musculo-skeletal	61,001
Acute Pharyngitis/Tonsilitis	60,510
Other disorders of skin & Subcutaneous-tissues	59,335
Diarrhoea	58,537
Other Diseases of the Digestive System	54,859
Other Respiratory and Nose Deseases	51,145
Conjunctivitis	37,240

Source: Annual Health Bulletin (AHB) 2009, MOH

TABLE 2.5: TOP TEN INDOOR HOSPITAL MORTALITY, BHUTAN, 2008

Priority health problem/Disease	Number
Neonatal Death	109
Alcohol Liver Diseases	90
Other Circulatory Diseases	87
Feotal Death & Stillbirth	37
Pneumonia	49
Other Respiratory & nose Diseases	53
Other Diseases of the Digestive System	54
Other Cancers	48
Other Infections (excluding ear, brain, STI)	45
Other Kidney, UT/ Genital Disorders	28

Source: Annual Health Bulletin (AHB) 2009, MOH

C M Y K

TABLE 2.6: MORBIDITY CASES REPORTED FROM BASIC HEALTH UNITS, BHUTAN, 2008

Number

Disease Name/Infections	Under 5 years		5 years & older		Total
	Male	Female	Male	Female	
Cholera	3	2	3	4	12
Typhoid	26	28	177	183	414
Diarrhoea	4,493	4,130	10,093	10,053	28,769
Dysentery	1,730	1,641	4,851	4,446	12,668
Tetanus	0	0	6	1	7
Diphtheria	0	0	0	0	0
Pertussis	0	0	0	0	0
Early Syphilis	0	0	12	7	19
Sexually Transmitted Disease, excluding HIV/AIDS	1	1	291	263	556
Polio	0	0	0	0	0
Rabies	0	0	0	0	0
Viral, Protozoal & Helminthic disease					
Measels	0	1	3	1	5
Viral Hepatitis	11	10	82	87	190
Plasmodium falciparum malaria	0	1	40	21	62
Other malaria	1	2	44	24	71
Intestinal Worms	848	868	2,866	3,408	7,990
Scabies	334	391	2,902	2,312	5,939
Other Infections (excluding ear, brain, STI)	192	182	1,051	1,240	2,665
Blood diseases					
Nutritional Anaemia	93	100	1,516	4,226	5,935
Blood & Immune Disorders	21	27	208	345	601
Endocrine, Metabolic & Nutritional					
Malnutrition (exclude child clinic attendance)	44	77	126	201	448
Mental disorders					
Other Mental Disorders	3	12	146	103	264
Disease of Nervous syatem					
Meningitis/Encephalitis	3	0	7	10	20
Other Nervous including Peripheral Disorders	125	161	6,467	11,823	18,576
Eye & Ear Diseses					
Conjunctivities	1,252	1,336	7,169	9,925	19,682
Cataract	440	458	5,398	7,766	14,062
Other Eye Disorders	1,066	1,113	2,838	3,049	8,066
Otitis Media	259	257	1,586	1,864	3,966
Disease of Circulatory System					
Hypertension	0	0	2,362	3,502	5,864
Other Circulatory Diseases	34	31	683	1,127	1,875
Respiratory diseases					
Common Cold	13,223	13,652	51,143	64,946	142,964
Acute Pharyngitis/Tonsilitis	935	1,098	10,034	13,713	25,780
Pneumonia	2,331	2,131	570	678	5,710
Other Respiratory & Nose Disesses	1,337	1,253	6,346	8,190	17,126

(Contd..)

C M Y K

TABLE 2.6 (contd..): MORBIDITY CASES REPORTED FROM BASIC HEALTH UNITS, BHUTAN, 2008

Number

Disease Name/Infections	Under 5 years		5 years & older		Total
	Male	Female	Male	Female	
Disease of the Digestive system					
Dental Caries	162	223	3,578	4,685	8,648
Diseases of Teeth & Gums	131	172	3,076	3,570	6,949
Peptic Ulcer Syndrome	71	133	11,630	16,939	28,773
Alcohol Liver Diseases	0	0	86	110	196
Other Diseases of the Digestive System	998	1,099	8,350	10,455	20,902
Skin Diseases					
Skin Infections	4,490	4,387	21,916	18,903	49,696
Other Disorders of Skin & Subcutaneous	1,795	1,774	11,032	10,819	25,420
Diseases of Musculo-skeletal system & Cogenital deformities					
Arthritis & Arthrosis	23	13	2,705	3,071	5,812
Other Musculo-skeletal disorders	158	174	12,707	14,679	27,718
Genito-Urinary diseases					
Infection of Breasts including Puerperium	0	0	4	311	315
Other Disease of the Breast	0	3	19	708	730
Menstrual Distrubances	0	0	0	1,959	1,959
Other Kidney, UT/ Genital Disorders	217	213	2,692	6,958	10,080
Pregnancy, Childbirth and Puerperium					
Abortions	0	0	0	68	68
Pregnancy Included Hypertension	0	0	0	29	29
Ante-Partum Haemorrhage & Placenta Previa	0	0	0	15	15
Malpresentation	0	0	0	21	21
Prolonged Labour	0	0	0	63	63
Obstructed Labour	0	0	0	12	12
Post Partum Haemorrhage	0	0	0	57	57
Retained Placenta	0	0	0	75	75
Puerperal Sepsis	0	0	0	27	27
Other complications of pregnancy	0	0	0	237	237
Perinatal Conditions					
Low Birth Weight	4	9	0	0	13
Foetal Death & Stillbirth	14	10	0	0	24
Noenatal Death	9	3	0	0	12
Conditions Orginating in the Perinatal Period	12	5	0	0	17
Malformations					
Malformations	0	0	2	3	5
Injuries & Trauma					
Burns & Corrosions	347	250	799	583	1,979
Injuries & Poisoning	357	283	6,285	2,933	9,858
Transport Accidents	20	11	300	104	435
Bites & Stings	171	149	1,615	1,215	3,150
Other External cause of Injury	265	221	1,016	1,984	6,486
Work related injuries	91	125	4,752	1,922	6,890
Complications of Health Care	6	11	122	163	302
ANC, Immunisation & Other counselling	2,215	1,892	3,538	9,786	17,431
Total	**40,361**	**40,123**	**215,244**	**265,982**	**564,710**

Source: Annual Health Bulletin (AHB) 2009, MOH

C M Y K

TABLE 2.7: HOSPITAL MORBIDITY CASES REPORTED, BHUTAN, 2008

Number

Disease Name/Infections	Under 5 years		5 years & older		Total
	Male	Female	Male	Female	
Cholera	1	1	2	1	5
Typhoid	47	32	367	427	873
Diarrhoea	5,344	4,913	9,932	8,524	28,713
Dysentery	1,825	1,874	4,142	3,441	11,282
Tuberclosis	17	15	114	117	263
Tetanus	0	0	0	0	0
Diphtheria	0	0	0	0	0
Pertussis	0	0	0	0	0
Early Syphilis	0	0	19	10	29
Sexually Transmitted Disease, excluding HIV/AIDS	1	0	407	258	666
Rabies	0	0	0	0	0
Viral, Protozoal & Helminthic disease					
Measels	0	0	2	1	3
Viral Hepatitis	21	39	126	98	284
Plasmodium falciparum malaria	1	1	29	28	59
Other malaria	3	4	59	25	91
Intestinal Worms	954	937	1,899	1,784	5,574
Scabies	652	682	2,578	1,841	5,753
Other Infections (excluding ear, brain, STI)	439	391	1,887	2,050	4,767
Neoplasm					
Cervical Cancer	0	0	0	14	14
Other Cancers	0	0	0	0	0
Neoplasm (benign + CIS)	0	0	4	28	32
Blood diseases					
Nutritional Anaemia	129	160	1,390	3,564	5,243
Blood & Immune Disorders	6	4	32	56	98
Endocrine, Metabolic & Nutritional					
Diabetes	5	1	1,155	1,046	2,207
Malnutrition (exclude child clinic attendance)	22	29	58	67	176
Other Nutritional & Metabolic Disorders	126	149	751	758	1,784
Mental Disorders					
Psychosis	0	0	31	35	66
Depression	0	0	307	312	619
Anxiety	0	0	128	151	279
Other Mental Disorders	5	3	118	165	291
Disease of Nervous system					
Meningitis/Encephalitis	3	0	42	37	82
Epilepsy	25	13	500	467	1,005
Other Nervous including Peripheral Disorders	82	134	2,411	4,690	7,317

(Contd...)

C M Y K

TABLE 2.7 (contd..): HOSPITAL MORBIDITY CASES REPORTED, BHUTAN, 2008

Number

Disease Name/Infections	Under 5 years		5 years & older		Total
	Male	Female	Male	Female	
Eye & Ear Diseases					
Conjunctivities	1,609	1,567	7,235	7,110	17,521
Cataract	12	9	342	310	673
Other Eye Disorders	683	735	7,496	8,341	17,255
Otitis Media	1,080	1,001	3,320	3,159	8,560
Other Ear Disorders	602	625	3,321	3,256	7,804
Diseases of Circulatory System					
Rheumatic Heart Diseases	16	23	554	526	1,119
Hypertension	0	0	6,091	7,166	13,257
Ischaemic Heart Diseases	0	0	93	66	159
Cerebro-vascular Diseases	1	0	38	54	93
Other Circulatory Diseases	146	131	666	763	1,706
Respiratory diseases					
Common Cold	17,413	16,914	43,520	44,166	122,013
Acute Pharyngitis/Tonsilitis	2,929	2,960	13,495	14,764	34,148
Pneumonia	1,910	1,700	1,111	1,119	5,840
Other Respiratory & Nose Disesses	4,108	4,020	10,694	12,213	31,035
Disease of the Digestive system					
Dental Caries	801	888	9,474	10,421	21,584
Diseases of Teeth & Gums	422	447	3,948	3,774	8,591
Peptic Ulcer Syndrome	234	278	14,477	18,078	33,067
Acute Appendicitis	4	7	43	46	100
Alcohol Liver Diseases	0	0	211	180	391
Gall Bladder Diseases	5	6	161	262	434
Other Diseases of the Digestive system	1,901	2,003	13,062	14,492	31,458
Skin Diseases					
Skin Infections	5,349	5,129	20,128	16,284	46,890
Other Disorders of Skin & Subcutaneous	3,095	3,247	14,007	12,462	32,811
Diseases of Musculo-skeletal system & Cogenital deformities					0
Arthritis & Arthrosis	52	73	3,587	3,293	7,005
Other Musculo-skeletal disorders	292	306	16,469	15,182	32,249
Genito-Urinary Diseases					0
Cystitis	13	21	310	742	1,086
Infection of Breasts, including Puerperium	0	0	3	371	374
Other Disease of the Breast	0	0	32	724	756
Pelvic Inflammatory Disease	0	0	0	1,148	1,148
Menstrual Disturbances	0	0	0	2,450	2,450
Other Kidney, UT/Genital Disorders	252	282	3,829	9,058	13,421
Pregnancy, Childbirth and Puerperium					
Abortions	0	0	0	61	61

(Contd...)

C M Y K

TABLE 2.7(contd.): HOSPITAL MORBIDITY CASES REPORTED, BHUTAN, 2008

Number

Disease Name/Infections	Under 5 years		5 years & older		Total
	Male	Female	Male	Female	
Pregnancy Included Hypertension	0	0	0	113	113
Ante-Partum Haemorrhage & Placenta Previa	0	0	0	6	6
Malpresentation	0	0	0	1	1
Prolonged Labour	0	0	0	6	6
Obstructed Labour	0	0	0	2	2
Post Partum Haemorrhage	0	0	0	3	3
Retained Placenta	0	0	0	5	5
Puerperal Sepsis	0	0	0	10	10
Other complications of pregnancy				310	310
Perinatal Conditions					
Low Birth Weight	3	2	0	0	5
Foetal Death & Stillbirth	0	0	0	0	0
Noenatal Death	1	1	0	0	2
Conditions Orginating in the Perinatal Period	11	2	0	0	13
Malformations					
Malformations	7	0	6	3	16
Injuries & Trauma					
Burns & Corrosions	198	212	622	444	1,476
Injuries & Poisoning	656	526	8,738	4,411	14,331
Transport Accidents	29	29	395	173	626
Bites & Stings	277	249	2,014	1,373	3,913
Other External cause of Injury	322	281	3,836	2,103	6,542
Work related injuries	24	30	2,023	1,043	3,120
Complications of Health Care	4	5	52	59	120
ANC, Immunisation & Other counselling	900	810	3,575	8,188	13,473
Total	**55,069**	**53,901**	**247,468**	**260,289**	**616,727**

Source: Annual Health Bulletin (AHB) 2009, MOH
Note: Data from morbidity cases reported in JDWNR hospoital is not included

C M Y K

TABLE 2.8: HOSPITAL INDOOR MORBIDITY REPORT, BHUTAN, 2008

Number

Disease Name/Infections	Under 5 years		5 years & older		Total	Deaths
	Male	Female	Male	Female		
Cholera	0	0	1	0	1	0
Typhoid	13	14	268	345	640	0
Diarrhoea	241	205	297	312	1,055	5
Dysentery	94	80	147	140	461	1
Tuberculosis	13	8	373	264	658	20
Tetanus	0	0	0	0	0	0
Diphtheria	0	0	0	0	0	0
Pertussis	0	0	0	0	0	0
Early Syphilis	2	1	0	2	5	0
Sexually Transmitted Disease, excluding HIV/AIDS	2	3	6	10	21	0
Polio	0	0	0	0	0	0
Rabies	0	0	1	1	2	1
Viral, Protozoal & Helminthic disease						
Measels	4	1	1	0	6	0
Viral Hepatitis	10	17	76	43	146	2
Plasmodium falciparum malaria	3	8	79	40	130	4
Other malaria	12	7	59	32	110	0
Intestinal Worms	2	3	8	8	21	0
Scabies	7	8	21	5	41	0
Other Infections (excluding ear, brain, STI)	153	89	223	225	690	45
Neoplasm						
Cervical Cancer	0	0	0	36	36	10
Other Cancers	1	0	199	205	405	48
Neoplasm (benign+CIS)	6	8	85	99	198	8
Blood diseases						
Nutritional Anaemia	23	17	146	229	415	1
Blood & Immune Disorders	13	10	57	71	151	12
Endocrine, Metabolic & Nutritional						
Diabetes	1	0	181	152	334	15
Malnutrition (exclude child clinic attendance)	24	24	8	14	70	0
Other Nutritional & Metabolic Disorders	16	9	40	42	107	2
Mental Disorders						
Psychosis	0	0	36	24	60	0
Depression	1	1	61	57	120	1
Anxiety	1	1	34	77	113	0
Other Mental Disorders	0	1	109	90	200	0

(Contd...)

C M Y K

TABLE 2.8: HOSPITAL INDOOR MORBIDITY REPORT, BHUTAN, 2008

Number

Disease Name/Infections	Under 5 years		5 years & older		Total	Deaths
	Male	Female	Male	Female		
Disease of Nervous system						
Meningitis/Encephalitis	34	23	62	35	154	16
Epilepsy	18	8	59	66	151	0
Other Nervous including Peripheral Disorders	41	28	215	146	430	8
Eye & Ear Diseses						
Conjunctivities	8	7	14	8	37	0
Cataract	5	1	289	283	578	0
Other Eye Disorders	11	14	196	183	404	0
Otitis Media	23	24	39	50	136	0
Other Ear Disorders	11	8	33	20	72	0
Diseases of Circulatory System						
Rheumatic Heart Diseases	6	3	82	146	237	9
Hypertension	0	0	625	601	1,226	21
Ischaemic Heart Diseases	0	0	25	26	51	4
Cerebro-vascular Diseases	1	5	70	58	134	22
Other Circulatory Diseases	20	20	321	335	696	87
Respiratory diseases						
Common Cold	233	182	380	392	1,187	0
Acute Pharyngitis/Tonsilitis	50	56	228	248	582	0
Pneumonia	1,384	1,170	338	332	3,224	49
Other Respiratory & Nose Disesses	576	455	950	1,003	2,984	53
Disease of the Digestive system						
Dental Caries	0	3	49	44	96	0
Diseases of Teeth & Gums	3	5	27	40	75	1
Peptic Ulcer Syndrome	12	21	470	693	1,196	2
Acute Appendicitis	3	4	208	163	378	5
Alcohol Liver Diseases	0	0	409	333	742	90
Gall Bladder Diseases	2	0	141	419	562	5
Other Diseases of the Digestive system	200	131	1,200	968	2,499	54
Skin Diseases						
Skin Infections	145	125	382	276	928	2
Other Disorders of Skin & Subcutaneous	118	92	534	360	1,104	1
Diseases of Musculo-skeletal system & Cogenital deformities						
Arthritis & Arthrosis	5	2	152	121	280	0
Other Musculo-skeletal disorders	21	27	572	414	1,034	1

(Contd...)

C M Y K

TABLE 2.8: HOSPITAL INDOOR MORBIDITY REPORT, BHUTAN, 2008

Number

Disease Name/Infections	Under 5 years		5 years & older		Total	Deaths
	Male	Female	Male	Female		
Genito-Urinary Diseases						
Cystitis	8	4	77	192	281	0
Infection of Breasts, including Puerperium	0	0	0	69	69	0
Other Disease of the Breast	3	1	5	77	86	0
Pelvic Inflammatory Disease	0	0	0	160	160	0
Menstrual Disturbances	0	0	0	193	193	1
Other Kidney, UT/Genital Disorders	78	49	825	1,668	2,620	28
Pregnancy, Childbirth and Puerperium						
Abortions	0	0	0	799	799	0
Pregnancy Included Hypertension	0	0	0	309	309	2
Ante-Partum Haemorrhage & Placenta Previa	0	0	0	142	142	0
Malpresentation	0	0	0	111	111	0
Prolonged Labour	0	0	0	312	312	0
Obstructed Labour	0	0	0	142	142	1
Post Partum Haemorrhage	0	0	0	94	94	0
Retained Placenta	0	0	0	359	359	0
Puerperal Sepsis	0	0	0	59	59	0
Other complications of pregnancy	0	0	0	4,060	4,060	2
Perinatal Conditions						
Low Birth Weight	98	78	0	0	176	3
Foetal Death & Stillbirth	20	18	0	0	38	37
Noenatal Death	66	41	0	0	107	109
Conditions Orginating in the Perinatal Period	400	268	0	0	668	14
Malformations						
Malformations	54	37	22	24	137	3
Injuries & Trauma						
Burns & Corrosions	45	29	137	89	300	9
Injuries & Poisoning	82	76	1,331	652	2,141	25
Transport Accidents	16	16	394	125	551	9
Bites & Stings	9	6	99	72	186	2
Other External cause of Injury	35	15	425	209	684	3
Work related injuries	2	5	186	57	250	0
Complications of Health Care	2	2	14	17	35	0
ANC, Immunisation & Other counselling	28	18	140	941	1,127	0
Total	**4,518**	**3,592**	**14,241**	**21,218**	**43,569**	**853**

Source: Annual Health Bulletin (AHB) 2009, MOH

C M Y K

TABLE 2.9: NUMBER OF PATIENTS REPORTED IN DIFFERENT HOSPITALS, BHUTAN, 2004 TO 2008

Persons ('000)

Hospital	2004	2005	2006	2007	2008
Government hospitals	**318.30**	**345.40**	**419.67**	**428.93**	**522.97**
Bumthang	14.40	19.30	17.01	18.88	20.43
Geylegphug	30.40	39.70	43.26	41.45	60.99
Lhuentse	8.20	10.10	9.93	7.54	12.43
Monggar	21.70	19.80	38.38	27.94	43.98
Paro	27.30	48.50	46.32	58.49	60.54
Pemagatshel	17.30	15.70	17.27	15.86	12.91
Phuentsholing	29.20	26.90	46.57	37.57	56.60
Punakha	27.00	27.50	30.76	37.29	49.71
Samdrup Jongkhar	18.30	14.80	19.46	17.20	19.40
Samtse	18.80	20.70	26.98	26.77	33.32
Sarpang	26.10	19.10	19.10	20.13	20.51
Sibsoo	13.20	13.00	15.33	14.24	17.20
Trashi Yangtse	8.70	8.30	9.71	14.20	15.65
Thimphu	0.00	0.00	10.19	10.15	9.90
Trashigang	12.90	17.60	22.42	16.67	22.42
Trongsa	5.00	8.30	11.93	12.77	14.48
Tshimalakha	19.40	19.40	13.36	13.78	17.02
Tsirang	20.40	16.70	21.69	38.00	35.48
Leprosy mission hospitals	**28.90**	**28.30**	**67.70**	**69.61**	**90.24**
Gidakom	11.40	11.50	12.47	14.26	16.57
Riserboo	8.20	9.20	10.54	10.03	11.84
Yebilaptsa (Zhemgang)	9.30	7.60	9.39	8.96	10.99
Gedu*	n.a	n.a	35.30	36.35	50.84
Army hospitals	**39.90**	**25.50**	**35.67**	**27.80**	**63.09**
Lungtenphug	10.30	9.20	21.14	17.61	23.26
Wangdiphodrang	29.60	16.30	14.53	10.24	22.04
Yonphula	n.a	n.a	n.a	n.a	n.a
Imtrat (Ha)	n.a	n.a	n.a	n.a	17.79
Others	**14.00**	**11.80**	**15.31**	**10.87**	**16.88**
Dantak (Deothang)	14.00	11.80	15.31	10.87	16.88
IBFH (Thimphu)	n.a	n.a	n.a	n.a	n.a
Project hospitals	27.70	25.20	26.55	27.10	35.13
Gomtu	27.70	25.20	26.55	27.10	35.13
Indigenous hospital	**32.40**	**n.a**	**n.a**	**41.30**	**n.a**
Indigenous dispensary	**68.30**	**n.a**	**n.a**	**67.00**	**n.a**
All hospitals (b)	**529.5**	**436.2**	**566.0**	**672.6**	**780.3**

Source: Annual Health Bulletin (AHB) 2009, MOH
Note: **OPD cases not included Comparisons over time may be affected by different coverage in each year*
**Gedu:- It was BHU before 2006*

TABLE 2.10: EPI COVERAGE IN PERCENTAGE BY DZONGKHAG, BHUTAN, 2008

Dzongkhag	BCG	MEASLES	DPT3/HEP 3	OPV 3	* OPV 0
Bumthang	278	332	338	344	224
Chhukha	1,411	1,748	1,436	1,436	1,432
Dagana	350	528	513	513	285
Gasa	50	63	46	36	31
Ha	195	196	210	216	154
Lhuentse	307	319	324	341	280
Monggar	979	856	847	847	909
Paro	718	685	687	687	663
Pemagatshel	346	413	390	390	280
Punakha	361	406	390	390	298
Samdrupjongkhar	747	880	769	769	567
Samtse	1,127	1,338	1,302	1,301	854
Sarpang	877	723	772	772	812
Thimphu	3,232	2,045	2,100	2,100	3,252
Trashigang	870	887	903	903	1,444
Trashiyangtse	373	416	389	385	298
Trongsa	190	246	224	224	142
Tsirang	291	382	377	377	266
Wangdue	516	719	670	672	388
Zhemgang	325	447	385	388	236
Bhutan	**13,543**	**13,629**	**13,072**	**13,091**	**12,815**

Source: Annual Health Bulletin (AHB) 2009, MOH

TABLE 2.11: DETAILS OF CHILD GROWTH MONITORING IN IMMUNIZATION CLINICS, BHUTAN, 2004 TO 2008

Details	2004	2005	2006	2007	2008
Children weighed(nos)	150,416	161,004	174,149	172,955	184,250
Child malnutrition(nos)	13,915	44,176	16,788	17,018	n.a
Degree I	11,616	12,592	14,240	14,450	n.a
Degree II	1,902	2,093	2,120	2,089	n.a
Degree III	397	410	428	479	n.a
Over weight	n.a	29,081	39,926	38,032	28,905

Source: Annual Health Bulletin (AHB) 2009, MOH

C M Y K

TABLE 2.12: DETAILS OF MATERNAL AND CHILD HEALTH CARE SERVICES, BHUTAN, 2004 TO 2007

Type of care	2004	2005	2006	2007	2008
Maternal health care attendence(a)	58,804	54,142	48,859	49,004	53,352
Antenatal	58,804	54,142	48,859	49,004	53,352
Deliveries attended	7,284	6,957	7,675	7,422	8,621
Home	2,125	1,629	1,317	1,064	927
Hospital/Basic Health Units	5,159	5,328	6,358	6,358	7,694
Child health care attendance	150,416	161,004	171,135	172,955	187,342
First visit	15,231	15,090	14,589	13,285	14,575
Re-visit	135,185	145,914	156,546	159,670	172,767
Malnourished children (b)	14,312	15,095	16,788	55,529	17,342
All malnourished	13,915	15,095	16,788	55,050	17,342
Third degree	397	n.a	428	479	n.a

Source: Annual Health Bulletin (AHB) 2009, MOH
*N*otes:
(a) Refers to total attendance, not comprehensive cases
(b)Children attending health units are classified according to three degrees of malnourishment; Third degree malnourishment refers to the most severe cases.

TABLE 2.13: DETAILS OF MATERNAL HEALTH CARE ACTIVITIES BY DZONGKHAG, BHUTAN, 2004 TO 2008

(Number)

Dzongkhag	2004	2005	2006	2007	2008
Bumthang					
Antenatal	1,233	1,289	1,141	345	1,352
Reported deliveries	280	281	233	345	298
Trained deliveries	148	169	154	131	147
Chhukha					
Antenatal	7,778	6,651	5,508	1,076	7,669
Reported deliveries	1,641	1,701	1,330	1,076	825
Trained deliveries	672	477	539	542	1,048
Dagana					
Antenatal	936	971	1,003	1,209	1,452
Reported deliveries	405	411	396	555	537
Trained deliveries	166	82	58	111	132
Gasa					
Antenatal	134	134	188	200	175
Reported deliveries	49	50	47	51	43
Trained deliveries	17	21	28	30	35
Ha					
Antenatal	495	502	579	562	759
Reported deliveries	177	178	189	196	182
Trained deliveries	53	52	46	47	66
Lhuentse					
Antenatal	963	1,154	1,098	1,079	1,189
Reported deliveries	343	347	403	366	320
Trained deliveries	9	138	178	202	171

(Contd..)

C M Y K

TABLE 2.13 (contd..): DETAILS OF MATERNAL HEALTH CARE ACTIVITIES BY DZONGKHAG, BHUTAN, 2004 TO 2008

(Number)

Dzongkhag	2004	2005	2006	2007	2008
Mongar					
Antenatal	2,422	2,395	3,021	3,269	3,401
Reported deliveries	926	935	886	897	797
Trained deliveries	406	452	553	574	763
Paro					
Antenatal	2,809	3,184	2,653	2,517	2,701
Reported deliveries	585	592	567	678	531
Trained deliveries	359	418	376	501	543
Pemagatshel					
Antenatal	886	767	791	1,484	1,364
Reported deliveries	268	274	255	392	402
Trained deliveries	84	43	51	255	144
Punakha					
Antenatal	1,798	1,687	1,528	1,165	1,393
Reported deliveries	355	356	354	347	339
Trained deliveries	147	182	299	300	299
Samdrupjongkhar					
Antenatal	3,379	3,529	3,344	2,618	2,532
Reported deliveries	884	909	990	679	710
Trained deliveries	404	453	489	381	330
Samtse					
Antenatal	5,536	5,078	4,760	4,827	4,950
Reported deliveries	887	898	1,238	1,267	1,208
Trained deliveries	557	763	758	565	495
Sarpang					
Antenatal	4,240	3,793	3,411	2,700	3,359
Reported deliveries	893	915	1,099	808	833
Trained deliveries	527	747	696	489	632
Thimphu					
Antenatal	15,700	12,689	10,068	10,112	10,708
Reported deliveries	455	1,989	2,594	3,122	3,324
Trained deliveries	2,070	1,584	2,202	2,131	2,549
Trashigang					
Antenatal	3,597	3,275	3,082	4,103	3,725
Reported deliveries	1,167	1,181	1,008	987	776
Trained deliveries	545	490	481	462	591
Trashiyangtse					
Antenatal	953	949	1,093	1,102	1,240
Reported deliveries	392	399	431	438	404
Trained deliveries	156	107	111	108	118
Trongsa					
Antenatal	651	824	937	720	771
Reported deliveries	298	299	243	255	226
Trained deliveries	160	140	106	34	68
Tsirang					
Antenatal	1,469	1,441	1,192	1,230	1,213
Reported deliveries	444	449	352	448	323
Trained deliveries	233	295	227	191	104

(Contd...)

C M Y K

TABLE 2.13 (contd.): DETAILS OF MATERNAL HEALTH CARE ACTIVITIES BY DZONGKHAG, BHUTAN, 2004 TO 2008

(Number)

Dzongkhag	2004	2005	2006	2007	2008
Wangduephodrang					2,148
Antenatal	2,182	2,559	2,296	1,913	509
Reported deliveries	733	737	429	551	230
Trained deliveries	181	161	161	182	
Zhemgang					
Antenatal	1,443	1,251	1,166	1,253	1,251
Reported deliveries	392	401	405	393	409
Trained deliveries	254	183	162	216	156

Source: Annual Health Bulletin (AHB) 2009, MOH
Note: Trained delivery refers to deliveries attended by trained health personnels in hospitals/BHUs and at home

TABLE 2.14: DETAILS OF COMPLICATIONS DURING PREGNANCY AND DURING LABOUR/ DELIVERIES, BHUTAN, 2004 TO 2008

Complications	2004		2005		2006		2007		2008	
	Nos.	%	Nos.	%	Nos.	%	Nos.	%	Nos.	%
Pregnancy of mothers	2,725	100	5,022	100	5,851	100	5,885	100	6,149	100
Abortions	579	21.24	657	13.08	811	13.86	913	15.51	928	15.09
Antepartum haemorrhage	118	4.33	125	2.49	131	2.24	97	1.65	163	2.65
P.I.H	365	13.39	514	10.23	453	7.74	392	6.66	451	7.33
Others	1,663	61.02	3,726	74.19	4,456	76.16	4,483	76.18	4,607	74.92
Labour/delivery	1,117	100	983	100	977	100	1,019	100	1,359	100
Obstructed labour	222	8.14	155	15.77	78	7.98	149	14.62	156	11.48
Mal presentation	113	4.14	148	15.05	120	12.28	105	10.30	133	9.79
Prolonged labour/ Ruptured uterus	267	9.79	235	23.91	257	26.31	289	28.36	381	28.04
Post partum haemorrhage	183	6.71	197	20.04	168	17.20	142	13.95	154	11.33
Retained Placenta	332	12.18	248	25.23	248	25.38	218	21.39	439	32.30
Puerperal Sepsis	..	..	..	..	106	10.85	116	11.38	96	7.06
All complications	**3,842**	**..**	**6,005**	**..**	**6,828**	**..**	**6,904**	**..**	**7,508**	**..**

Source: Annual Health Bulletin (AHB) 2009, MOH

C M Y K

TABLE 2.15: FAMILY PLANNING ACCEPTORS BY TYPE OF METHOD, BHUTAN, 2004 TO 2008

Method	2004	2005	2006	2007	2008
Tubectomy	1,364	1,364	1,844	2,808	2,733
Vasectomy	4,919	4,919	7,202	8,927	9,433
Intra uterine device (IUD)	2,111	1,305	1,598	2,610	1,970
Pills (OCP)	18,807	20,210	32,074	34,688	40,274
Condoms	1,000,679	1,163,234	1,517,705	1,607,790	1,462,467
Injection DMPA	40,745	41,005	57,985	67,965	71,738
All methods	**1,068,625**	**1,232,037**	**1,618,408**	**1,724,788**	**1,588,615**

Source: Annual Health Bulletin (AHB) 2009, MOH
Note: IUD = No. inserted, Pills = No. of cycles, DMPA = No. of Injections and Condoms = No. of pieces distributed
Minilap*=merged into tubectomy after 2004

TABLE 2.16: NUMBER OF USERS OF FAMILY PLANNING METHODS BY TYPE, BY DZONGKHAG, BHUTAN, 2008

Dzongkhag	Family planning methods						Total
	Vasec.	Tubec.	IUD	DMPA*	Pills**	Condom***	
Bumthang	133	53	15	2,034	1,537	70,277	74,049
Chhukha	950	209	133	7,806	4,413	165,667	179,178
Dagana	620	63	0	3,319	2,623	47,308	53,933
Gasa	14	9	2	572	179	9,386	10,162
Ha	238	191	6	1,887	1,065	23,966	27,353
Lhuentse	300	49	8	2,011	920	59,435	62,723
Monggar	661	299	50	6,083	1,530	294,641	303,264
Paro	525	340	60	3,342	1,014	48,897	54,178
Pemagatshel	374	32	26	1,912	943	31,923	35,210
Punakha	16	16	13	2,323	1,563	29,006	32,937
Samdrup Jongkhar	468	83	48	3,879	2,884	39,997	47,359
Samtse	2,168	437	82	5,464	5,704	63,662	77,517
Sarpang	815	291	158	5,747	3,845	50,902	61,758
Thimphu	314	232	1,230	8,672	3,705	173,278	187,431
Trashi Yangtse	327	67	15	1,678	626	50,023	52,736
Trashigang	535	90	63	5,358	2,235	138,171	146,452
Trongsa	73	25	8	1,350	669	27,341	29,466
Tsirang	343	116	14	2,701	1,910	14,320	19,404
Wangdue Phodrang	387	89	6	2,692	1,341	54,142	58,657
Zhemgang	172	42	33	2,908	1,568	70,125	74,848
Bhutan	**9,433**	**2,733**	**1,970**	**71,738**	**40,274**	**1,462,467**	**1,588,615**

Source: Annual Health Bulletin (AHB) 2009, MOH
Note: *DMPA-injected
**Pills-Cycles
***Condom-Pieces

TABLE 2.17: NUMBER OF BLOOD SLIDE EXAMINATIONS FOR MALARIA AND MALARIOMATRIC INDICES, BHUTAN, 2004 TO 2008

Details	2004	2005	2006	2007	2008
Total blood films examined (numbers)	54,892	n.a	66,079	51,446	n.a
Blood film detected negative	52,222	n.a	64,210	50,653	n.a
Blood films detected positive	2,670	n.a	1,869	793	n.a
Plasmodium vivax	1,580	n.a	963	414	n.a
Plasmodium falciparum	966	n.a	761	379	n.a
Mixed infections	124	n.a	144	n.a	n.a
Deaths due to malaria (numbers)	15	n.a	6	2	n.a

Source: Annual Health Bulletin (AHB) 2009, MOH

TABLE 2.18: NUMBER OF TUBERCULOSIS CASES BY TYPE, BHUTAN, 2004 TO 2008

(Person)

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

Source: Annual Health Bulletin (AHB) 2009, MOH

TABLE 2.19: WATER AND SANITATION FACILITY TYPE BY DZONGKHAG, BHUTAN, 2008

Dzongkhag	Percentage Coverage				
	Sanitary facility	Safe water supply	Drainage & foot path	Vegetable garden	Garbage disposal bins
Bumthang	95.3	98.8	83.4	87.9	89.5
Chhukha	78.6	61.1	71.6	72.7	63.7
Dagana	90.6	71.4	41.1	74.4	74.2
Gasa	84.4	47.0	35.9	78.9	61.6
Ha	93.7	90.8	78.2	71.6	84.3
Lhuentse	93.4	95.6	63.7	87.5	79.2
Monggar	94.2	85.6	63.7	66.7	81.9
Paro	97.3	96.8	74.3	73.6	83.3
Pemagatshel	90.4	77.7	35.1	81.2	61.0
Punakha	94.3	87.4	64.5	94.3	86.3
Samdrupjongkhar	96.5	93.8	66.1	75.1	78.8
Samtse	89.1	80.6	43.4	71.6	67.5
Sarpang	90.1	80.4	47.3	59.6	68.9
Thimphu	92.5	82.5	84.1	78.7	76.7
Trashigang	93.1	85.5	51.0	84.4	70.4
Trashiyangtse	89.2	94.1	51.4	84.3	61.3
Trongsa	97.6	87.8	67.0	83.6	68.6
Tsirang	82.3	86.8	34.2	84.7	67.9
Wangduephodrang	94.1	82.6	78.0	88.2	90.7
Zhemgang	82.7	75.9	40.9	77.2	59.5
Total % coverage	**90.8**	**83.2**	**57.7**	**76.5**	**73.2**

Source: Annual Health Bulletin (AHB) 2009, MOH

C M Y K

CHAPTER 3 EDUCATION

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

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

Entry into the formal education system starts at the age of six when the children are admitted into pre-primary classes. The medium of instruction in the schools is both Dzongkha-'the national language' and English. School curricula also include training in traditional arts, crafts, and agriculture. Besides the modern education system, there is large number of traditional institutions offering education to children in monasteries, Drupdas and Shedras, for which the Ministry of Education does not maintain data.

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 2008, there were 176,778 students enrolled in 542 schools/institutes, 10 daycare centers and 747 NFE centers. Of 542 schools and institutes, 36 are privately run while the government runs the rest.

In 2008, there were 261 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.

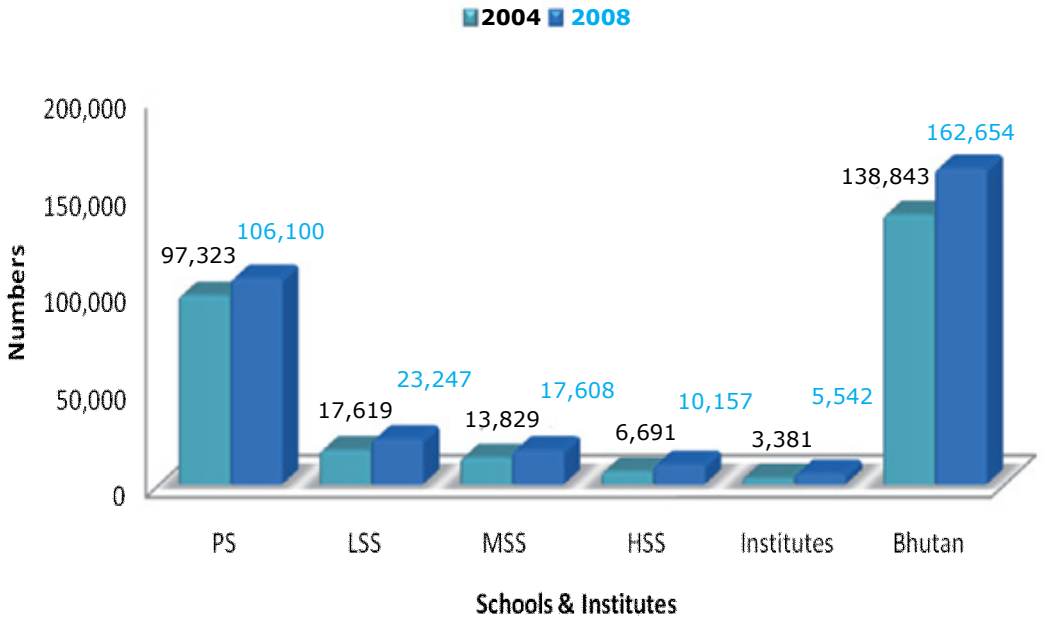
Number of NFE centers expanded from 6 in 1992 with 300 learners to 747 centers with 13,830 learners in 2008. The NFE centers provide only basic literacy courses of reading and writing.

The size of enrolment till Higher Secondary Schools was highest in Thimphu Dzongkhag with 23,009 students followed by Chukha with 16,070 & Trashigang with 12,559, and least was Gasa with 592.

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 dayscholar or as boarders. This is made possible largely through the provision of meals through the World Food Programme (WFP).

C M Y K

Figure 3.1: Number of students by schools & Institutes, Bhutan 2004 & 2008



C M Y K

TABLE 3.1: NUMBER OF SCHOOLS AND INSTITUTIONS, STAFF AND STUDENTS, BHUTAN, 2008

Details	CPS	PS	LSS	MSS	HSS	Pvt.	Other Inst.*	NFE Centres	Daycare Centres	Total
Number of school and Institutions	261	81	89	44	24	24	19	747	10	1,299
Teaching staff	1,000	799	1,627	1,177	754	298	814	736	26	7,231
Bhutanese	998	792	1,537	982	510	189	737	736	26	6,507
Non-Bhutanese	2	7	90	195	244	109	77	0	0	724
Number of students	29,702	22,813	48,706	32,292	16,155	7,444	5,542	13,830	294	176,778
Male	15,174	11,516	24,113	16,481	8,491	3,752	3,702	4,183	143	87,555
Female	14,528	11,297	24,593	15,811	7,664	3,692	1,840	9,647	151	89,223
Student to teacher ratio	30	29	30	27	21	25	7	19	11	24

Source: General Statistics 2008, MoE
Note: CPS-Community Primary School, PS-Primary School, LSS-Lower Secondary School, MSS-Middle Secondary School, HSS-Higher Secondary School, Pvt-Private School.
* Other inst. Includes tertiary education,vocational institutes,NID and Sanskrit Pathshala
* Tertiary education doesn't include students studying abroad

TABLE 3.2: NUMBER OF EDUCATIONAL INSTITUTIONS, TEACHERS AND STUDENTS, BHUTAN,2004 TO 2008

Year	Infrastructure			Teacher			Student		
	School	Inst.*	Total	School	Inst.*	Total	School	Inst.*	Total
2004	447	14	461	4,376	321	4,697	135,462	3,381	138,843
2005	458	18	476	4,604	566	5,170	141,388	4,429	145,817
2006	489	18	507	4,963	449	5,412	146,524	4,433	150,957
2007	502	19	521	5,372	457	5,829	152,194	4,739	156,933
2008	523	19	542	5,655	814	6,469	157,112	5,542	162,654

Source: General Statistics 2008, MoE
Note:*Excludes NFE & DCC

TABLE 3.3: NUMBER OF ENROLMENT AND TEACHING STAFF IN SCHOOLS, INSTITUTES, NFE CENTRES AND DAY CARE CENTRES, 2008

Type of Schools, Centres & Institutes	Enrolment			Teachers		
	Male	Female	Total	Bht	N/Bht	Total
School Education						
Community Primary Schools	15,174	14,528	29,702	998	2	1,000
Primary Schools	11,516	11,297	22,813	792	7	799
Pvt.Primary Schools	917	843	1,760	108	15	123
Lower Secondary Schools	24,113	24,593	48,706	1,537	90	1,627
Pvt. Lower Seconodary School	486	428	914	51	13	64
Middle Secondary Schools	16,481	15,811	32,292	982	195	1,177
Higher Secondary Schools	8,491	7,664	16,155	510	244	754
Pvt.Higher Secondary Schools	2,349	2,421	4,770	120	81	201
Sub-Total	**79,527**	**77,585**	**157,112**	**5,098**	**647**	**5,745**
Institutes						
Sherubtse College	741	350	1,091	88	42	130
Institute for Language & Cultural Studies	213	125	338	56	1	57
Samtse College of Education, Samtse	425	234	659	78	9	87
Paro College of Education, Paro	537	302	839	77	3	80
Jigme Namgyal Polytechnic, Desathang	244	63	307	57	2	59
College of Science and Technology, Rin-chending	189	58	247	62	14	76
Royal Institute of Health Sciences	131	126	257	41	2	43
National Institute of Traditional Medicine	32	3	35	15	-	15
College of Natural Resources, Lobesa	117	23	140	69	2	71
Royal Institute of Management	177	100	277	75	2	77
National Institute for the Disabled	30	20	50	13	-	13
Jigmecholling Sanskrit Pathshala	18	-	18	1	-	1
Vocational Training Institute, Khuruthang	118	50	168	15	-	15
Vocational Training Institute, Samthang	88	9	97	12	-	12
Vocational Training Institute, Chumey	136	91	227	13	-	13
Vocational Training Institute, Rangjung	121	53	174	16	-	16
Vocational Training Institute, Shershong	79	56	135	9	-	9
National Institutes for Zorig Chusum	61	42	103	14	-	14
Trashiyangtse Institute for Zorig Chusum	245	135	380	26	-	26
Sub-Total	**3,702**	**1,840**	**5,542**	**737**	**77**	**814**
Early Childhood Care (Day Care Centres)	143	151	294	26	-	26
Non-Formal Education Programme	4,183	9,647	13,830	736	-	736
Total	**87,555**	**89,223**	**176,778**	**6,597**	**724**	**7,321**

Source: General Statistics 2008, MoE

C M Y K

TABLE 3.4: NUMBER OF EDUCATIONAL FACILITIES BY TYPE AND DZONGKHAG, 2008

Dzongkhag	CPS	PS	LSS	MSS	HSS	Pvt.	Total
Bumthang	13	0	2	2	1	1	19
Chhukha	17	4	7	5	2	2	37
Dagana	15	2	3	2	0	0	22
Gasa	2	1	0	1	1	0	5
Ha	3	3	3	0	0	0	9
Lhuentse	14	8	2	1	1	0	26
Monggar	31	6	8	2	2	0	49
Paro	3	3	8	2	2	5	23
Pemagatshel	18	4	6	2	1	0	31
Punakha	10	3	4	3	1	1	22
Samdrup Jongkhar	10	5	5	5	0	1	26
Samtse	7	3	1	5	1	0	17
Sarpang	7	0	4	2	2	2	17
Thimphu	5	6	9	4	2	12	38
Trashigang	35	11	10	2	3	0	61
Trashi Yangtse	21	2	5	1	1	0	30
Trongsa	15	3	3	1	1	0	23
Tsirang	5	2	2	1	1	0	11
Wangdue Phodrang	15	6	3	2	1	0	27
Zhemgang	15	9	4	1	1	0	30
Bhutan	**261**	**81**	**89**	**44**	**24**	**24**	**523**

Source: General Statistics 2008, MoE

C M Y K

TABLE 3.5: NUMBER OF TEACHERS IN EDUCATIONAL INSTITUTIONS BY NATIONALITY, BHUTAN, 2004 TO 2008

Institution	2004			2005			2006			2007			2008		
	Bht	N/ Bht	Total	Bht	N/Bht	Total	Bht	N/Bht	Total	Bht	N/Bht	Total	Bht	N/Bht	Total
Schools	**3710**	**771**	**4481**	**3983**	**640**	**4623**	**4350**	**613**	**4976**	**4775**	**616**	**5391**	**5,124**	**647**	**5,771**
Day Care Centres	0	0	0	19	0	19	..	..	13	18	1	19	26	-	26
Community Primary Schools	704	3	707	782	4	786	850	2	852	893	3	896	998	2	1,000
Primary Schools	734	18	752	757	10	767	780	10	790	745	6	751	792	7	799
Lower Secondary Schools	1281	180	1461	1320	157	1477	1506	137	1643	1501	103	1604	1,537	90	1,627
Middle Secondary Schools	515	214	729	539	182	721	588	160	748	906	187	1093	982	195	1,177
Higher Secondary Schools	280	160	440	355	196	551	388	208	596	459	224	683	510	244	754
Private Schools	196	196	392	211	91	302	238	96	334	253	92	345	279	109	388
Specialised/Professional Institutes	**765**	**75**	**840**	**1,063**	**88**	**1,151**	**959**	**76**	**1,135**	**1,143**	**76**	**1,219**	**1,473**	**77**	**1,550**
Sherubtse College	26	44	70	39	20	59	35	46	81	35	46	81	88	42	130
Paro College of Education	51	1	52	11	0	11	45	2	47	45	2	47	77	3	80
Samtse College of Education	31	6	37	8	1	9	43	4	47	43	4	47	78	9	87
Institute of Language and Cultural Studies	22	2	24	37	4	41	27	1	28	27	1	28	56	1	57
Royal Institute of Health and Sciences	..	..	..	1	0	1	22	2	24	22	2	24	41	2	43
National Institute for the Disabled (NID)	9	1	10	9	1	10	11	1	12	11	1	12	13	-	13
National Institute of Traditional Medicine	..	..	..	1	0	1	6	0	6	6	0	6	15	-	15
Jigme Namgyel Polytechnic	..	..	..	..	..	..	20	2	22	20	2	22	57	2	59
College of Natural Resources, Lobesa	..	..	..	31	43	74	27	0	27	27	0	27	69	2	71
Royal Institute of Management	..	..	..	9	1	10	30	3	33	30	3	33	75	2	77
College of Science and Technology	39	20	59	66	9	75	24	15	39	24	15	39	62	14	76
Dhoban Sanskrit Patshala	1	0	1	26	1	27	..	..	1	1	0	1	-	-	-
Jigmecholing Sanskrit Patshala	1	0	1	24	2	26	..	..	1	1	0	1	1	-	1
Vocational Training Institute (Chumey)	9	0	9	16	0	16	..	..	22	10	0	10	13	-	13
Vocational Training Institute (Khuruthang)	8	1	9	11	0	11	..	..	10	16	0	16	15	-	15
Vocational Training Institute (Rangjung)	8	0	8	77	3	80	..	..	17	13	0	13	16	-	16
Vocational Training Institute (Samthang)	12	0	12	64	0	64	..	..	12	17	0	17	12	-	12
Vocational Training Institute, Shershong	-	-	-	-	-	-	-	-	-	-	-	-	9	-	9
National Institute for Zorig Chusum	22	0	22	39	3	42	..	..	26	22	0	22	14	-	14
Tashiyangtse Institute for Zorig Chusum	7	0	7	11	0	11	..	..	11	11	0	11	26	-	26
Non Formal Education Programme	519	0	519	583	0	583	669	..	669	762	0	762	736	-	736
Bhutan	**4,475**	**846**	**5,321**	**5,046**	**728**	**5,774**	**5,309**	**689**	**6,111**	**5,918**	**692**	**6,610**	**6,597**	**724**	**7,321**

Source: General Statistics 2008, MoE

TABLE 3.6: NUMBER OF EDUCATIONAL FACILITIES AND STUDENTS BY DZONGKHAG, 2008

Dzongkhag	Educational facilities	Student		Total
		Boys	Girls	
Bumthang	19	2099	2120	4219
Chukha	37	8182	7888	16070
Dagana	22	2982	2897	5879
Gasa	5	317	275	592
Ha	9	1405	1496	2901
Lhuentse	26	2046	1877	3923
Mongar	49	4830	4375	9205
Paro	23	4760	4959	9719
Pemagatshel	31	3381	2981	6362
Punakha	22	3424	3751	7175
Samdrup Jongkhar	26	4173	3817	7990
Samtse	17	6293	5741	12034
Sarpang	17	4758	4605	9363
Thimphu	38	11129	11880	23009
Trashigang	61	6573	5986	12559
Trashi Yangtse	30	2666	2536	5202
Trongsa	23	1767	1783	3550
Tsirang	11	2405	2235	4640
Wangdue Phodrang	27	3533	3780	7313
Zhemgang	30	2804	2603	5407
Bhutan	**523**	**79527**	**77585**	**157112**

Source: General Statistics 2008, MoE
Note: In the above table, Institutes and NFE centres and Day Care Centres are excluded

TABLE 3.7: NUMBER OF ENROLMENT IN EDUCATIONAL INSTITUTIONS, 2004 TO 2008

Institutions	2004	2005	2006	2007	2008
Schools	135988	141388	146524	152194	157,112
Community Primary Schools	24533	26965	29132	28953	29,702
Primary Schools	26508	25879	25745	23585	22,813
Lower Secondary Schools	48089	48995	50576	48716	48,706
Middle Secondary Schools	20775	20641	21236	29829	32,292
Higher Secondary Schools	10865	13145	14414	14963	16,155
Private Schools	5218	5763	5421	6148	7,444
Other institutions	**3381**	**4429**	**4433**	**4739**	**5543**
Sherubtse College	939	465	1014	1045	1,092
Paro College of Education	637	69	744	703	839
Samtse College of Education	489	72	483	546	659
Institute of Language and Culutural Studies	261	779	272	320	338
College of Science and Technology	390	487	446	314	247
Jigme Namgyal Polytechnic, Desathang	..	..	..	250	307
Royal Institute of Health Sciences	..	34	197	211	257
National Institute of Traditional Medicines	..	26	28	23	35
College of Natural Resources, Lobesa	..	1157	142	138	140
Royal Institute of Management	..	42	227	270	277
National Institue of Zorig Chusum, Kawa-jangsa	149	187	172	136	103
Trashiyangtse Institue of Zorigchusum	54	28	59	53	380
National Institute for the Disabled (NID)	38	82	41	49	50
Dhoban Sanskrit patsala	26	48	33	33	
Jigmecholing (Surey) Sanskrit patshala	26	272	27	27	18
Vocational Training Institue, Shershong	-	-	-	-	135
Vocational Training Institue, Samthang	68	215	81	121	97
Vocational Training Institute, Chumey	165	137	254	272	227
Vocational Training Institute, Khuruthang	28	60	133	147	168
Vocational Training Instritute, Rangjung	111	269	80	81	174
Non-formal Education Centres	15866	16642	18550	14694	13,830
Day Care Centres	..	86	269	215	294
Total	**155235**	**162545**	**169776**	**171842**	**176,779**

Source: General Statistics 2008, MoE

C M Y K

TABLE 3.8: NUMBER OF STUDENTS IN HIGH SCHOOLS AND BELOW BY DZONGKHAG AND TYPE OF SCHOOL, 2008

Dzongkhag	Private school			Community school			Primary school		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Bumthang	99	92	191	710	752	1,462	0	0	0
Chhukha	355	345	700	1,221	1,156	2,377	506	440	946
Dagana	0	0	0	1,434	1,412	2,846	221	229	450
Gasa	0	0	0	105	48	153	54	57	111
Ha	0	0	0	60	84	144	317	303	620
Lhuentse	0	0	0	506	451	957	696	775	1,471
Monggar	0	0	0	1,404	1,331	2,735	472	451	923
Paro	583	488	1,071	131	132	263	685	601	1,286
Pemagatshel	0	0	0	898	849	1,747	210	204	414
Punakha	422	376	798	448	469	917	508	545	1,053
Samtse	0	0	0	1,266	1,102	2,368	750	621	1,371
Samdrup Jongkhar	30	28	58	729	685	1,414	1,023	1,003	2,026
Sarpang (a)	224	206	430	950	869	1,819	0	0	0
Thimphu	2,039	2,157	4,196	445	431	876	2,398	2,432	4,830
Trashigang	0	0	0	1,703	1,567	3,270	1,125	1,031	2,156
Trashi Yangtse	0	0	0	892	891	1,783	133	124	257
Trongsa	0	0	0	611	586	1,197	391	382	773
Tsirang	0	0	0	367	331	698	310	332	642
Wangdue Phodrang	0	0	0	783	847	1,630	1,044	1,144	2,188
Zhemgang	0	0	0	573	585	1,158	611	573	1,184
Bhutan	**3,752**	**3,692**	**7,444**	**15,236**	**14,578**	**29,814**	**11,454**	**11,247**	**22,701**

C M Y K

TABLE 3.8 (contd..): NUMBER OF STUDENTS IN HIGH SCHOOLS AND BELOW BY DZONGKHAG AND TYPE OF SCHOOL, 2008

Dzongkhag	Lower Secondary			Middle Secondary			Higher Secondary			All Other School		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Bumthang	515	549	1,064	518	492	1,010	257	235	492	2099	2120	4219
Chhukha	2,802	2,682	5,484	2,478	2,420	4,898	820	845	1,665	8,182	7,888	16,070
Dagana	872	808	1,680	455	448	903	0	0	0	2,982	2,897	5,879
Gasa	0	0	0	158	170	328	0	0	0	317	275	592
Ha	694	745	1,439	0	0	0	334	364	698	1,405	1,496	2,901
Lhuentse	284	282	566	273	185	458	287	184	471	2,046	1,877	3,923
Monggar	1,480	1,459	2,939	646	574	1,220	828	560	1,388	4,830	4,375	9,205
Paro	2,135	2,407	4,542	583	661	1,244	643	670	1,313	4,760	4,959	9,719
Pemagatshel	1,265	1,189	2,454	669	492	1,161	339	247	586	3,381	2,981	6,362
Punakha	817	1,027	1,844	865	975	1,840	364	359	723	3,424	3,751	7,175
Samtse	583	619	1,202	3,418	3,120	6,538	276	279	555	6,293	5,741	12,034
Samdrup Jongkhar	1,096	1,009	2,105	1,295	1,092	2,387	0	0	0	4,173	3,817	7,990
Sarpang (a)	1,828	1,921	3,749	1,092	1,056	2,148	664	553	1,217	4,758	4,605	9,363
Thimphu	3,380	3,499	6,879	1,822	1,968	3,790	1,045	1,393	2,438	11,129	11,880	23,009
Trashigang	2,053	1,999	4,052	599	650	1,249	1,093	739	1,832	6,573	5,986	12,559
Trashi Yang-tse	988	1,008	1,996	362	291	653	291	222	513	2,666	2,536	5,202
Trongsa	337	427	764	201	187	388	227	201	428	1,767	1,783	3,550
Tsirang	982	933	1,915	413	408	821	333	231	564	2,405	2,235	4,640
Wangdue	1,043	1,126	2,169	388	421	809	275	242	517	3,533	3,780	7,313
Zhemgang	959	904	1,863	246	201	447	415	340	755	2,804	2,603	5,407
Bhutan	**24,113**	**24,593**	**48,706**	**16,481**	**15,811**	**32,292**	**8,491**	**7,664**	**16,155**	**79,527**	**77,585**	**157,112**

Source: General Statistics 2008, MoE

TABLE 3.9: NUMBER OF STUDENTS BY GRADE AND TYPE OF SCHOOL, BHUTAN, 2008

Grade	Private	Community Pry	Primary	Lower Secondary	Middle Secondary	Higher Secondary	All Schools
	Total Students	Total Students	Total Students	Total Students	Total Students	Total Students	All Students
Pre primary/ PP	965	5,131	3,317	5,065	1,954	NA	16,432
I	486	5,126	3,357	4,992	2,123	NA	16,084
II	395	5,153	3,484	5,327	2,170	NA	16,529
III	288	4,184	3,262	5,159	2,090	NA	14,983
IV	210	4,046	3,421	5,342	2,487	NA	15,506
V	166	3,331	3,148	4,920	2,243	NA	13,808
VI	155	2,843	2,712	5,017	2,031	NA	12,758
VII	52	NA	NA	7,066	4,626	584	12,328
VIII	29	NA	NA	5,818	4,025	1,047	10,919
IX	19	NA	NA	NA	5,068	4,612	9,699
X	29	NA	NA	NA	3,475	4,405	7,909
XI	2,541	NA	NA	NA	NA	2,885	5,426
XII	2,109	NA	NA	NA	NA	2,622	4,731
Bhutan	**7,444**	**29,814**	**22,701**	**48,706**	**32,292**	**16,155**	**157,112**

Source: General Statistics 2008, MoE

TABLE 3.10: NUMBER OF STUDENTS BY GRADE, 2004 TO 2008

Grade	2004	2005	2006	2007	2008
Primary grade	**97,323**	**99,874**	**102,225**	**104,467**	**106,100**
Nursery	n.a	416	n.a	n.a	n.a
Pre-primary	16,636	15,518	16,869	16,392	16,432
I	15,925	16,455	15,546	16,865	16,084
II	15,081	15,633	16,109	15,537	16,529
III	13,643	14,415	14,772	15,386	14,983
IV	13,805	13,750	14,591	14,899	15,506
V	11,756	12,635	12,618	13,450	13,808
VI	10,477	11,052	11,720	11,938	12,758
Lower Secondary grade	**17,619**	**19,647**	**20,482**	**22,104**	**23,247**
VII	10,036	10,686	11,214	11,887	12,328
VIII	7,583	8,961	9,268	10,217	10,919
Middle Secondary grade	**13,829**	**14,183**	**15,715**	**16,807**	**17,608**
IX	7,544	7,732	8,859	9,116	9,699
X	6,285	6,451	6,856	7,691	7,909
Higher Secondary school	**6,691**	**7,684**	**8,102**	**8,816**	**10,157**
XI	3,610	3,997	4,234	4,581	5,426
XII	3,081	3,687	3,868	4,235	4,731
Bhutan	**135,462**	**141,388**	**146,524**	**152,194**	**157,112**

Source: General Statistics 2008, MoE

TABLE 3.11: NUMBER OF STUDENTS ENROLED,PROMOTEES,REPEATERS AND DROPOUTS BY GRADE, BHUTAN, 2008

Details	Enrolment	Promotees	Repeaters	Dropouts
PP	16,432	14,984	1,192	216
I	16,084	15,442	1,113	310
II	16,529	14,076	1,100	361
II	14,983	14,227	920	239
IV	15,506	13,084	1,285	530
V	13,808	12,262	731	457
VI	12,758	11,318	442	178
VII	12,328	10,204	1,010	673
VIII	10,919	9,093	715	409
IX	9,699	7,819	606	691
X*	7,909	5,318	90	0
Bhutan	**146,955**	**127,827**	**9,204**	**4,064**

Source: General Statistics 2008, MoE
Note:* The students who leave school after Class X are school leavers and not drop-outs.
Promotees and dropout figures are imputations

C M Y K

CHAPTER 4 LABOUR AND EMPLOYMENT

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

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

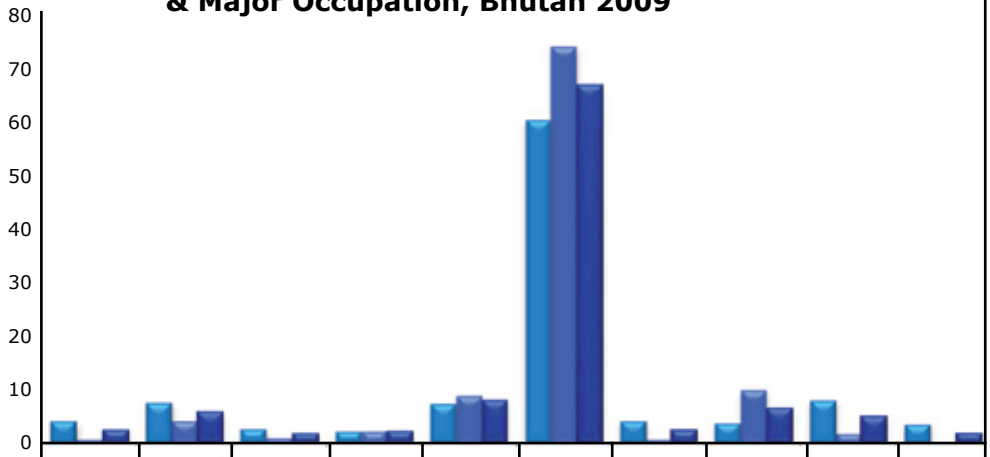
The National Statistics Bureau conducted the two consecutive Labor Force Surveys in 1998 and 2000. The Department of Employment (DoE) under Ministry of Labour and Human Resources (MoLHR) conducted the Labor Force Survey from 2001 onwards, since its creation in 2000. Labour statistics presented in this chapter are from Labour Force surveys (LFS) 2009.

Although share of primary sector in GDP is gradually decreasing, agriculture is still the predominant sector providing employment to around 65.37% of the labour force. 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 worked at least for one hour during the last seven days prior to interview. Out of the total projected population of 679,700, 312,800 were found employed and 12,900 were found to be unemployed from the total Labour Force of 325,700 where rest are not in the Labour Force during the survey reference period. While the unemployment rate at the national level is found to be 4% as per the LFS 2009.

C M Y K

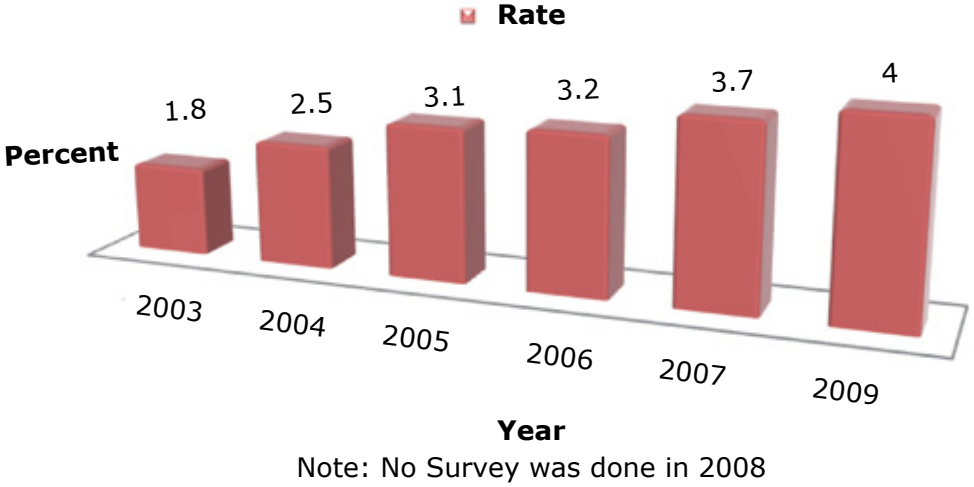
Figure 4.1: Percentage Distribution of Employed Persons by Sex & Major Occupation, Bhutan 2009



	Legislators. Sr.Officials & Managers	Professio-nals	Technicians & Associated Professi-onals	Clerks	Service Workers & Shop & Market Sales Workers	Skilled Agricultu ral & Fishery Workers	Craft & Related Workers	Plant & Machine Operators & Assemblers	Elemen tary Occupati ons	Armed Force Person nel
Male%	3.88	7.39	2.4	2.03	7.02	58.72	3.94	3.45	7.76	3.39
Female %	0.53	3.85	0.86	2.06	8.63	72.11	0.6	9.63	1.66	0.07
Both Sex%	2.27	5.69	1.66	2.05	7.8	65.16	2.33	6.42	4.83	1.79

Sex & Occupation

Figure 4.2: Percentage of Unemployment Rate, Bhutan 2003 to 2009



Note: No Survey was done in 2008

C M Y K

TABLE 4.1: EMPLOYMENT IN CIVIL SERVICE, BHUTAN, 2004 TO December 2008

Ministry/Division	2004	2005	2006	2007	2008
His Majesty 4th King's Secretariat	32	33	35	29	30
His Majesty 5th King's Secretariat	..	..	7	11	14
Judiciary					
Royal Court of Justice	295	289	315	314	309
Legislative					
National Assembly	23	21	25	25	32
Constitutional					
Royal Audit Authority	152	161	170	178	189
Election Commission	..	..	94	93	93
Royal Civil Service Commission	47	49	54	56	57
Anti-Corruption Commission	..	..	18	23	29
Executive					
Ministries					
Ministry of Education	5,225	5,507	5,956	6,272	6,625
Ministry of Agriculture	2,410	3,150	3,243	3,036	3,084
Ministry of Health	2,061	2,216	2,328	2,374	2,492
Ministry of Works & Human Settlement	1,228	1,550	1,667	1,631	1,670
Ministry of Finance	645	1,216	1,293	1,308	1,424
Ministry of Home & Cultural Affairs	2,159	1,092	1,106	1,092	1,104
Ministry of Economic Affairs	509	508	554	570	510
Ministry of Information & Communications	311	323	338	303	320
Ministry of Labour & Human Resources	204	212	247	253	281
Ministry of Foreign Affairs	127	113	121	116	136
Autonomous & Other Agency					
Royal University of Bhutan	329	414	463	470	552
National Land Commission	..	..	..	244	292
Gross National Happiness Commission	..	..	48	91	204
Royal Institute of Management	69	59	58	58	60
National Environment Commission	40	38	42	55	58
National Statistical Bureau	34	41	57	56	56
Tourism Council of Bhutan	..	..	..	..	51
Dratshang Lhentshog	27	25	29	26	26
Cabinet Secretariat	9	10	12	12	24
Center for Bhutan Studies	14	15	19	21	23
Dzongkha Development Commission	..	..	..	22	22
Office of Attorney General	17	21	21	21	22
Bhutan Infocomm & Media Authority	..	..	..	16	17
National Council Secretariat	..	..	..	..	16
Bhutan Olympic Committee	10	9	8	6	7
Bhutan Naroctic Control Agency	..	..	2	4	7
National Commission for Women & Children	..	4	5	6	6
Privy Council Office	..	..	..	..	2
Royal Education Council	"	"	"	"	2
National Steering Committee for Coronation and Centenary Celebration	..	..	1	2	2
All Civil Servants	**15,991**	**17,090**	**18,350**	**18,807**	**19,848**
Includes Seconded to: Corporations,National Agencies, International Org. & NGO's	46	72	..	71	81

Source: Royal Civil Servic Commission

TABLE 4.2: PERCENTAGE DISTRIBUTION OF POPULATION AGED 15 YEARS & ABOVE BY AGE & LEVEL OF EDUCATION, BHUTAN, 2009

Age group	Education Level											All education levels
	Illiterate	Primary	Junior	High	Higher Secondary	PP/ Nurs-ery	Under-graduate	Graduate	Masters and above	Non-formal	Monastic	
15-19	5	33.01	52.5	35.84	22.26	50	10.34	0	0	0	17.93	16.63
20-24	9	14.67	11.39	22.57	40.38	25	68.97	23.21	0	0	15.17	14
25-29	9.82	13.13	12.22	16.15	19.25	25	20.69	39.29	12.5	12.5	13.79	12.34
30-34	9.71	11.39	7.22	11.73	8.3	0	0	12.5	31.25	31.25	7.59	9.92
35-39	9.52	10.81	6.39	5.09	4.53	0	0	7.14	25	25	6.9	8.57
40-44	9.37	6.95	4.17	3.54	1.51	0	0	8.93	18.75	18.75	6.9	7.44
45-49	10.08	3.09	3.06	2.43	1.13	0	0	5.36	6.25	6.25	6.21	7.1
50-54	9.34	2.7	1.39	1.33	0.75	0	0	1.79	0	0	7.59	6.26
55-59	6.63	1.93	1.39	0.66	0.75	0	0	1.79	6.25	6.25	4.83	4.49
60-64	6.45	1.16	0.28	0.44	0.75	0	0	0	0	0	4.14	4.08
65+	15.08	1.16	0	0.22	0.38	0	0	0	0	0	8.97	9.15
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Source: Labour Force Survey 2009, MoLHR

TABLE 4.3: POPULATION DISTRIBUTION BY AGE & ECONOMIC ACTIVITY, 2009, BHUTAN

Age group	Total Employed	Total Unemployed	Total labour force	Not in the labour force	Labour force participation rate	Unemployment rate	Employment rate
15-19	20,700	5,200	25,900	56,000	31.6	20.1	79.9
20-24	39,800	3,800	43,600	23,400	65.1	8.7	91.3
25-29	46,700	1,500	48,200	10,000	82.8	3.1	96.9
30-34	40,400	700	41,100	5,800	87.6	1.7	98.3
35-39	35,400	600	36,000	4,400	89.1	1.7	98.3
40-44	29,300	500	29,800	4,900	85.9	1.7	98.3
45-49	29,900	300	30,200	3,600	89.3	1	99
50-54	24,600	100	24,700	4,800	83.7	0.4	99.6
55-59	16,600	200	16,800	4,100	80.4	1.2	98.8
60-64	12,300	0*	12,300	6,800	64.4	0	100
65+	17,100	0*	17,100	25,900	39.8	0	100
Total	**312,800**	**12,900**	**325,700**	**149,700**	**68.5**	**4**	**96**

Source: Labour Force Survey 2009, MoLHR
Note Totals may not add up due to rounding. * indicates a sample estimate less than 100 persons.

TABLE 4.4: TOTAL EMPLOYED PERSONS BY AGE & COMPLETED LEVEL OF EDUCATION, 2009, BHUTAN

Age group	Level of Education											Total
	Illiterate	Primary	Junior	High	Higher Secondary	PP/ Nursery	Under-graduate	Graduate	Masters and above	Non-formal	Monastic	
15-19	10,900	4,300	1,600	800	300	100	0*	0*	0*	2,800	200	21,000
20-24	19,500	6,100	2,200	4,600	3,400	100	0*	700	0*	2,700	300	39,600
25-29	21,900	5,900	3,800	5,900	4,300	100	0*	1,800	200	1,800	1,100	46,800
30-34	22,900	5,300	2,300	4,800	2,100	0*	0*	700	500	1,700	500	40,800
35-39	22,300	5,000	2,100	2,000	1,100	0*	0*	400	400	1,200	600	35,100
40-44	21,600	2,900	1,100	1,500	300	0*	0*	400	300	600	600	29,300
45-49	24,200	1,500	1,000	1,000	300	0*	0*	300	100	600	800	29,800
50-54	21,100	1,300	400	500	200	0*	0*	100	0*	200	500	24,300
55-59	14,200	600	400	200	100	0*	0*	100	100	200	600	16,500
60-64	11,500	300	0*	100	100	0*	0*	0*	0*	0*	200	12,200
65+	15,700	400	0*	0*	100	0*	0*	0*	0*	0*	600	16,800
Total	**205,800**	**33,600**	**14,900**	**21,400**	**12,300**	**300**	**0***	**4,500**	**1,600**	**11,800**	**6,000**	**312,200**

Source: Labour Force Survey 2009, MoLHR

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

TABLE 4.5: UNEMPLOYED PERSONS BY AGE, SEX & AREA OF RESIDENCE, 2009, BHUTAN

Age group	Rural			Urban			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
15-19	1,500	2,100	3,600	500	1,100	1,600	2,000	3,200	5,200
20-24	500	1,300	1,800	700	1,300	2,000	1,200	2,600	3,800
25-29	300	400	700	200	600	800	500	1,000	1,500
30-34	100	200	300	100	300	400	200	500	700
35-39	100	200	300	100	200	300	200	400	600
40-44	100	200	300	100	100	200	200	300	500
45-49	100	100	200	0*	100	100	100	200	300
50-54	0*	100	100	0*	0*	0*	0*	100	100
55-59	0*	200	200	0*	0*	0*	0*	200	200
60-64	0*	0*	0*	0*	0*	0*	0*	0*	0*
65+	0*	0*	0*	0*	0*	0*	0*	0*	0*
Total	**2,700**	**4,800**	**7,500**	**1,700**	**3,700**	**5,400**	**4,400**	**8,500**	**12,900**

Source: Labour Force Survey 2009
Note: Totals may not add up due to rounding, * indicates a sample estimate less than 100 persons.

TABLE 4.6: ECONOMICALLY INACTIVE POPULATION BY AGE & REASONS, 2009, BHUTAN

Age group	Economically Inactive population								Total
	Tem-porary illness	Off sea-son	House/ family duties	Study	Old or retired	Too young	Physically challenged	Other reasons	
15-19	200	0*	2,200	52,000	0*	200	300	1,100	56,000
20-24	300	200	6,400	14,100	0*	0*	600	1,800	23,400
25-29	400	200	6,000	1,900	0*	0*	300	1,100	9,900
30-34	300	100	4,500	400	0*	0*	100	400	5,800
35-39	300	0*	3,500	300	0*	0*	0*	300	4,400
40-44	300	100	3,600	400	0*	0*	100	300	4,800
45-49	200	0*	2,800	0*	0*	0*	300	200	3,500
50-54	300	100	2,900	0*	0*	0*	500	1,100	4,900
55-59	500	0*	2,900	0*	10	0*	300	200	3,910
60-64	200	0*	1,000	0*	4,800	0*	500	200	6,700
65+	0*	0*	1,200	0*	23,500	0*	1,000	100	25,800
Total	**3,000**	**700**	**37,000**	**69,100**	**28,310**	**200**	**4,000**	**6,800**	**149,110**

Source: Labour Force Survey 2009, MoLHR
Note: Totals may not add up due to rounding, * indicates a sample estimate less than 100 persons.

C M Y K

TABLE 4.7: TOTAL EMPLOYED PERSONS BY ECONOMIC ACTIVITY AND NATURE OF EMPLOYMENT, 2009, BHUTAN

Economic Activity	Nature of employment					Total
	Regular paid employee	Casual paid employee	Unpaid family worker	Own-account worker/self-employed	Employer	
Agricultural and forestry	2,400	7,400	152,700	41,600	300	204,400
Mining and quarrying	200	0*	100	100	100	500
Manufacturing	2,100	1,600	4,500	6,500	0*	14,700
Electricity, gas & water supply	3,500	0*	0*	0*	0*	3,500
Construction	400	300	300	400	0*	1,400
Wholesale & retail trade, repair of motor vehicle & household goods	100	0*	0*	0*	100	200
Hotels & restaurants	1,200	200	100	1,300	0	2,800
Transport, storage & communication goods	600	200	100	0*	0*	900
Financial intermediation	1,000	0*	0*	0*	0*	1,000
Real estate, renting & business activities	700	0*	0*	100	0*	800
Public administration & defense	27,200	500	0*	300	100	28,100
Education	9,300	0*	0*	0*	0*	9,300
Health & social work	2,500	0	100	0*	0*	2,600
Other community, social & personal service activities	7,700	3,600	2,900	12,500	100	26,800
Private households with employed persons	5,000	2,200	1,100	7,300	100	15,700
Extra territorial organizations & bodies	0*	0*	0*	0*	0*	0*
Total	**63,900**	**16,000**	**161,900**	**70,100**	**800**	**312,700**

Source: Labour Force Survey 2009, MoLHR
Note: Totals may not add up due to rounding, * indicates a sample estimate less than 100 persons.

TABLE 4.8: ALL EMPLOYED PERSONS WORKED DURING SURVEY PERIOD BY ECONOMIC ACTIVITY & HOURS OF WORK, 2009, BHUTAN

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	14,500	11,100	29,600	54,200	42,900	36,300	15,700	204,300
Mining and quarrying	200	0*	0*	0*	0	100	0*	300
Manufacturing	7,100	2,100	1,900	2,000	600	600	400	14,700
Electricity, gas & water supply	0*	0*	400	2,700	200	200	200	3,700
Construction	0*	100	200	200	400	400	100	1,400
Wholesale & retail trade, repair of Motor vehicle & household goods	0*	0*	0*	0*	100	0*	100	200
Hotels & restaurants								
Transport, storage & communication goods	100	0	100	300	400	600	1,200	2,700
Financial intermediation	0*	0*	100	500	100	0*	100	800
Real estate, renting & business activities	0*	0*	100	700	100	100	0*	1,000
Public administration & defense	0*	0*	0*	500	0*	200	100	800
Education	300	400	6,000	14,400	2,200	2,300	2,500	28,100
Health & social work	100	300	3,400	4,100	800	300	500	9,500
Other community, social & personal service activities	0	100	1,200	1,000	100	0	200	2,600
Private households with employed persons	1,300	600	2,000	5,500	4,200	5,600	7,700	26,900
Extra territorial organizations & bodies	900	500	1,300	3,600	2,200	3,100	4,100	15,700
Total	0*	0*	0*	0*	0*	0*	0*	0*
	24,500	**15,200**	**46,300**	**89,700**	**54,300**	**49,800**	**32,900**	**312,700**

Source: Labour Force Survey 2009
Note: Totals may not add up due to rounding, * indicates a sample estimate less than 100 persons.

TABLE 4.9: ALL EMPLOYED PERSONS WORKED DURING SURVEY PERIOD BY NATURE OF EMPLOYMENT & HOURS OF WORK, 2009, BHUTAN

Employment nature	Hours Worked							Total
	<30 hrs	30-39 hrs	40-49 hrs	50-59 hrs	60-69 hrs	70-79 hrs	80+ hrs	
Regular paid employee	700	800	12,900	31,000	6,500	5,700	6,100	63,700
Casual paid employee	1,800	800	2,000	3,700	2,300	3,000	2,600	16,200
Unpaid family worker	14,200	9,200	22,300	41,700	35,600	26,200	12,800	162,000
Own-account worker/self-employed	7,700	4,300	9,100	13,200	9,600	15,000	11,400	70,300
Employer	200	0*	0*	200	100	100	100	700
Total	**24,600**	**15,100**	**46,300**	**89,800**	**54,100**	**50,000**	**33,000**	**312,900**

Source: Labour Force Survey 2009
Note: Totals may not add up due to rounding, * indicates a sample estimate less than 100 persons.

TABLE 4.10: ALL EMPLOYED PERSONS BY NATURE OF EMPLOYMENT & OCCUPTATION, 2009, BHUTAN

Occupation	Nature of employment					Total
	Regular paid employee	Casual paid employee	Unpaid family worker	Own-account worker/self-employed	Employer	
Legislators, sr. officials & managers	4,900	800	100	1,300	100	7,200
Professionals	15,600	900	200	800	0*	17,500
Technicians & associated professionals	5,200	0*	0*	100	0*	5,300
Clerks	6,200	0*	0*	100	0*	6,300
Service workers & shop & market sales workers	6,800	900	2,200	14,400	100	24,400
Skilled agricultural & fishery workers	1,700	7,500	152,800	41,800	400	204,200
Craft & related workers	3,100	2,200	600	1,400	0*	7,300
Plant & machine operators & assemblers	3,700	2,000	5,600	8,800	0*	20,100
Elementary occupations	11,100	2,000	500	1,500	0*	15,100
Armed force personnel	5,600	100	0*	0*	0*	5,700
Total	**63,900**	**16,400**	**162,000**	**70,200**	**600**	**313,100**

Source: Labour Force Survey 2009, MoLHR
Note: Totals may not add up due to rounding, * indicates a sample estimate less than 100 persons.

TABLE 4.11: NUMBER OF CHILDREN AGED 13-17 YEARS OLD WHO PERFORMED DOMESTIC CHORES DURING PAST ONE WEEK BY DZONGKHAGS, 2009

Dzongkhag	Domestic chores
Bumthang	830
Chukha	1,875
Dagana	1,045
Gasa	200
Haa	46
Lhuntse	470
Mongar	1,764
Paro	2,701
Pemagatshel	1,533
Punakha	2,239
Samdrup Jongkhar	1,815
Samtse	3,413
Sarpang	1,792
Thimphu	3,171
Trashigang	2,218
Yangtse	691
Trongsa	903
Tsirang	1,647
Wangdue	1,990
Zhemgang	684
Total	**31,027**

Source: Labour Force Survey 2009, MoLHR

TABLE 4.22: PERCENTAGE OF UNEMPLOYMENT RATE, BHUTAN 2003 to 2009

Year	Rate
2003	1.8
2004	2.5
2005	3.1
2006	3.2
2007	3.7
2009	4

Source: NSB & Labour Force Survey 2009

C M Y K

CHAPTER 5 LAND USE AND AGRICULTURE

The Ministry of Agriculture, 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 established 4 main Renewable Natural Resources (RNR) research centers.

The Ministry of Agriculture with the accumulated experiences having accomplished one five year plan to the other, maintains the three basic objectives that are to i) conserve the environment, ii) enhance the rural income and iii) attain self reliance in cereals and essential oil crops. In 2008, Agriculture contributed 18.5 % to the total economy i.e. as measured by the Gross Domestic Product. It was also the single largest sector that provides livelihood to 66.6% of the population as per Bhutan Living Standard Survey (BLSS) 2007.

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

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

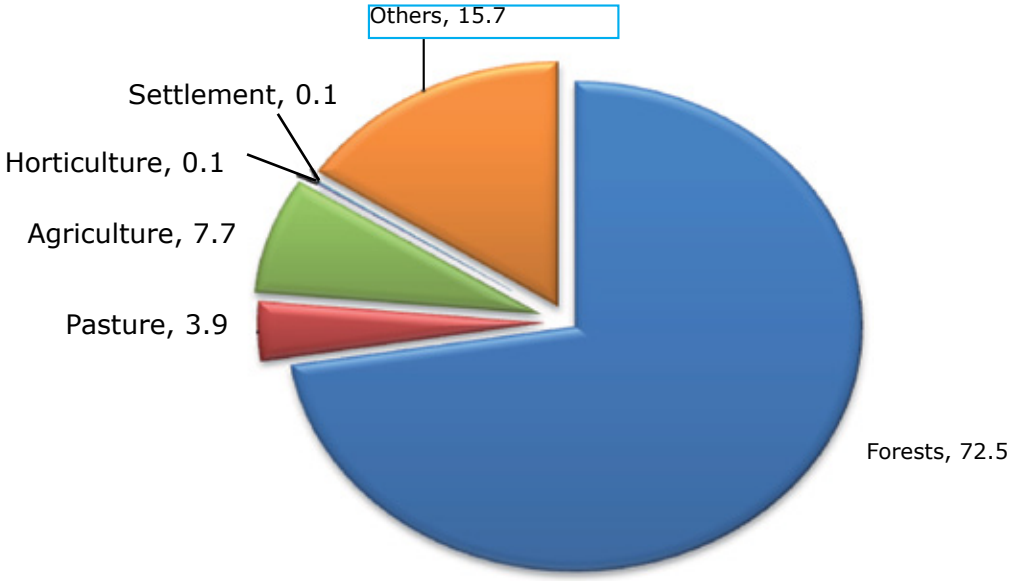
Strategies to increase livestock and cereal production include the propagation and practice of double cropping of the paddy production and distribution of high yield varieties. In the livestock sector the artificial insemination covers not only for the Jersey breeds that are high yielding but also for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

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

Back in 1988/89, the National Agronomic Survey was carried out in collaboration with the then Department of Agriculture. Though the Ministry of Agriculture conducts nation wide sample surveys but the major source of data available till date is from the National Agricultural Census that was conducted in 2000.

C M Y K

Figure 5.1: Land Use by Type, Bhutan, 1995



C M Y K

TABLE 5.1: LAND-USE AND VEGETATION TYPES AS PERCENTAGE OF TOTAL AREA, BHUTAN, 1995

Land-use and vegetation types	Percent
Forests	72.5
Conifer forest	26.5
Fir	8.6
Mixed conifer	12.1
Blue pine	3.2
Chir pine	2.5
Broadleaf forest	37.7
Broadleaf + conifer	3.4
Broadleaf forest	34.3
Forest plantation	0.2
Conifer plantation	0.1
Broadleaf plantation	0.1
Scrub forest	8.1
Pasture	3.9
Natural pastures	3.9
Improved pastures	0.0
Agriculture	7.7
Wetland cultivation	1.0
Irrigated wetland	1.0
Rainfed wetland	0.0
Dryland cultivation	2.4
Terraced dryland	0.3
Unterraced dryland	2.2
Tseri (Shifting cultivation)	2.2
Mixed cultivated land	2.1
Horticulture	0.1
Orchards	0.1
Apple orchards	0.0
Citrus orchard	0.0
Horticulture plantations	0.1
Cardamom plantation	0.1
Arecanut plantation	0.0
Ginger plantation	0.0
Settlement	0.1
Others	15.7
Snow/glaciers	7.5
Rock outcrops	5.0
Water spreads	0.8
Marshy areas	0.1
Landslips/erosion	2.4
Total	**100**

Source: PPD, Ministry of Agriculture, Thimphu.
Note: Horticulture areas might be underestimated as they were too small to be mapped at a scale 1:50,000 and because they were under forest cover.

TABLE 5.2: PERCENTAGE OF AREA BY DZONGKHAG, BY TYPE OF LAND COVER, BHUTAN, 1995

(percent)

Dzongkhag	Forest	Pasture	Agriculture	Horticul-ture	Settle-ment	Others	Total area
Bumthang	4.5	0.6	0.1	0.0	0.0	1.6	6.8
Chhukha	3.9	0.1	0.4	0.0	0.0	0.1	4.5
Dagana	2.8	0.0	0.4	0.0	0.0	0.1	3.5
Gasa	3.6	0.6	0.0	0.0	0.0	6.8	11.0
Ha	3.4	0.3	0.1	0.0	0.0	0.5	4.3
Lhuentse	5.4	0.2	0.3	0.0	0.0	1.2	7.2
Monggar	4.3	0.0	0.5	0.0	0.0	0.0	4.9
Punakha	2.2	0.0	0.1	0.0	0.0	0.1	2.4
Paro	2.1	0.2	0.2	0.0	0.0	0.7	3.2
Pemagatshel	0.7	0.0	0.6	0.0	0.0	0.0	1.3
Samdrup Jongkhar	4.5	0.0	1.1	0.0	0.0	0.2	5.8
Samtse	3.2	0.0	0.6	0.0	0.0	0.1	3.9
Sarpang	4.8	0.0	0.7	0.0	0.0	0.2	5.7
Thimphu	2.7	0.8	0.1	0.0	0.0	1.2	4.8
Trashigang	4.5	0.3	0.8	0.0	0.0	0.1	5.7
Trashi Yangtse	2.7	0.1	0.3	0.0	0.0	0.4	3.6
Trongsa	3.9	0.2	0.3	0.0	0.0	0.1	4.5
Tsirang	1.2	0.0	0.3	0.0	0.0	0.0	1.6
Wangdue Phodrang	7.4	0.4	0.2	0.0	0.0	2.1	10.0
Zhemgang	4.6	0.0	0.6	0.0	0.0	0.1	5.3
Bhutan	**72.5**	**3.9**	**7.7**	**0.0**	**0.0**	**15.7**	**100**

Source:PPD,Ministry of Agriculture, Thimphu.

TABLE 5.3: ALTITUDE ZONES OF DZONGKHAGS AS PERCENTAGE OF THEIR TOTAL AREA, BHUTAN, 1995

(percent)

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

(Contd...)

C M Y K

TABLE 5.3 (contd.): ALTITUDE ZONES OF DZONGKHAGS AS PERCENTAGE OF THEIR TOTAL AREA, BHUTAN, 1995

(percent)

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

Source:PPD, Ministry of Agriculture, Thimphu.

C M Y K

TABLE 5.4: PERCENTAGE OF TOTAL AREA OF BHUTAN BY DZONGKHAG BY ALTITUDE ZONES, 1995

(percent)

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

(Contd...)

C M Y K

TABLE 5.4 (contd.): PERCENTAGE OF TOTAL AREA OF BHUTAN BY DZONGKHAG BY ALTITUDE ZONES, 1995

(percent)

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

Source: PPD, Ministry of Agriculture, Thimphu.

C M Y K

TABLE 5.5: AVERAGE TEMPERATURE (DEGREE CENTIGRADE) RECORDS FROM 1996 TO 2008

(Degree Celsius)

Dzongkhag	Tempera-ture	Month											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	sept	Oct	Nov	Dec
Bumthang	Max	11.0	12.2	14.9	17.2	19.5	21.7	22.4	22.4	21.1	18.2	15.2	12.7
	Min	-3.8	-1.3	1.9	5.7	9.5	12.7	14.3	14.3	12.2	6.8	1.4	-3.2
	Ave	3.6	5.5	8.4	11.5	14.5	17.2	18.4	18.4	16.7	12.5	8.3	4.7
Chhukha	Max	12.4	13.5	16.8	18.9	21.1	22.9	23.1	22.6	21.7	20.0	17.6	14.3
	Min	4.9	6.4	8.8	10.5	12.5	14.1	14.0	13.3	12.5	11.2	8.7	6.1
	Ave	8.6	10.0	12.8	14.7	16.8	18.5	18.5	18.0	17.1	15.6	13.2	10.2
Dagana	Max	10.3	12.3	16.4	19.8	22.1	23.1	23.1	21.3	22.3	20.1	15.0	13.5
	Min	5.6	6.8	10.5	13.6	15.6	17.4	18.1	16.5	17.0	14.9	10.1	8.1
	Ave	8.0	9.5	13.5	16.7	18.9	20.3	20.6	18.9	19.6	17.5	12.6	10.8
Gasa*	Max	9.2	9.8	10.8	13.0	15.2	16.9	22.3	21.9	20.4	15.3	11.7	10.0
	Min	0.3	0.6	3.3	6.8	8.6	10.3	11.1	10.1	12.3	8.8	3.8	0.2
	Ave	4.7	5.2	7.1	9.9	11.9	13.6	16.7	16.0	16.4	12.0	7.7	5.1
Ha Namjay-ling	Max	10.3	10.7	13.2	15.6	18.1	19.7	20.4	20.6	19.0	16.8	14.3	12.0
	Min	-4.5	-2.5	1.2	5.1	9.1	12.7	14.3	14.0	12.0	6.0	0.3	-3.4
	Ave	2.9	4.1	7.2	10.3	13.6	16.2	17.4	17.3	15.5	11.4	7.3	4.3
Lhuentse	Max	17.3	19.7	23.6	25.9	27.2	28.3	28.7	29.0	27.9	25.4	22.4	18.3
	Min	7.0	8.7	12.1	14.8	17.0	19.7	19.9	19.9	19.0	15.3	11.5	8.4
	Ave	12.1	14.2	17.8	20.4	22.1	24.0	24.3	24.5	23.5	20.3	17.0	13.3
Monggar	Max	16.2	18.5	21.6	23.9	25.8	26.6	26.9	27.8	26.8	24.6	20.9	17.8
	Min	5.8	7.4	10.8	13.4	15.6	17.7	18.3	18.1	16.9	13.5	9.8	7.0
	Ave	11.0	12.9	16.2	18.6	20.7	22.2	22.6	22.9	21.8	19.1	15.3	12.4
Punakha	Max	17.6	19.3	22.4	25.2	27.6	29.3	29.1	29.0	27.9	25.7	22.2	19.1
	Min	5.8	8.1	11.2	13.9	17.2	19.3	20.1	19.1	18.1	15.6	12.1	7.3
	Ave	11.7	13.7	16.8	19.5	22.4	24.3	24.6	24.0	23.0	20.7	17.1	13.2
Paro	Max	13.1	14.6	17.8	20.4	22.8	24.7	25.5	25.2	23.5	20.7	16.5	14.4
	Min	0.7	2.6	5.3	8.7	12.2	15.3	17.3	16.9	15.0	10.4	5.5	2.2
	Ave	6.9	8.6	11.5	14.5	17.5	20.0	21.4	21.0	19.3	15.6	11.0	8.3
Pemagatshel	Max	16.2	17.4	20.3	22.7	24.7	25.4	26.2	26.0	25.5	24.1	21.1	18.4
	Min	5.3	6.8	9.9	12.7	15.1	16.9	17.6	17.2	16.2	12.8	9.4	6.7
	Ave	10.7	12.1	15.1	17.7	19.9	21.2	21.9	21.6	20.9	18.4	15.2	12.6
Samdrup Jongkhar	Max	19.0	22.1	24.9	25.8	27.4	28.2	28.6	29.2	28.5	27.9	23.6	21.1
	Min	8.9	11.4	14.4	16.5	18.8	20.6	21.1	21.2	20.2	16.2	13.0	10.4
	Ave	14.0	16.8	19.7	21.2	23.1	24.4	24.8	25.2	24.	22.0	18.3	15.7

(Contd...)

C M Y K

TABLE 5.5(contd.): AVERAGE TEMPERATURE (DEGREE CENTIGRADE) RECORDS FROM 1996 TO 2008

(Degree Celsius)

Dzongkhag	Temper-ature	Month											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	sept	Oct	Nov	Dec
Samtse	Max	20.3	22.9	26.6	28.1	28.7	28.4	27.7	28.3	28.1	27.2	25.0	22.3
	Min	13.6	15.7	18.0	20.6	22.5	24.1	24.1	24.0	23.3	21.4	17.9	15.3
	Ave	17.0	19.3	22.3	24.3	25.6	26.2	25.9	26.2	25.7	24.3	21.5	18.8
Sarpang	Max	22.5	24.0	26.3	27.9	29.3	29.4	29.8	30.5	30.1	28.7	26.5	23.8
	Min	13.1	15.7	18.2	20.7	22.6	23.8	24.1	24.5	23.9	21.2	17.8	14.6
	Ave	17.8	19.8	22.2	24.3	26.0	26.6	26.9	27.5	27.0	24.9	22.1	19.2
Thimphu	Max	14.4	15.5	18.3	20.7	22.9	24.5	24.9	25.1	23.8	21.3	18.4	16.1
	Min	-3.1	-0.7	3.3	6.9	11.0	14.5	15.8	15.4	13.7	8.1	2.1	-1.9
	Ave	5.7	7.4	10.8	13.8	16.9	19.5	20.3	20.2	18.7	14.7	10.3	7.1
Trashigang	Max	13.6	15.4	18.8	21.1	22.9	23.7	24.2	24.7	23.9	21.8	18.4	15.5
	Min	2.6	4.4	7.3	10.4	13.4	16.0	16.8	16.6	15.4	11.3	7.3	4.1
	Ave	8.1	9.9	13.1	15.8	18.1	19.9	20.5	20.6	19.6	16.6	12.9	9.8
Tashi Yangtse	Max	12.3	14.7	17.0	19.8	22.2	23.2	23.7	23.6	22.5	20.1	16.7	13.4
	Min	3.5	5.8	8.1	10.9	14.1	17.0	18.3	17.8	16.5	12.2	7.6	4.2
	Ave	7.9	10.3	12.6	15.4	18.2	20.1	21.0	20.7	19.5	16.2	12.2	8.8
Trongsa	Max	15.1	16.6	19.7	21.2	22.1	22.4	23.4	23.9	22.7	20.3	17.7	16.2
	Min	4.6	5.2	8.9	11.8	12.8	15.4	16.4	16.3	14.3	11.0	7.9	5.9
	Ave	9.9	10.9	14.3	16.5	17.5	18.9	19.9	20.1	18.5	15.7	12.8	11.0
Tsirang	Max	14.3	15.7	18.8	20.9	22.4	23.2	23.6	24.1	23.6	22.0	19.4	16.5
	Min	4.6	5.2	8.9	11.8	12.8	15.4	16.4	16.3	15.4	11.9	8.3	6.0
	Ave	9.5	10.5	13.9	16.4	17.6	19.3	20.0	20.2	19.5	17.0	13.9	11.3
Wangduepho-drang	Max	17.9	19.3	22.8	25.6	27.5	28.4	27.8	28.1	27.4	25.9	22.7	19.8
	Min	5.6	7.9	10.7	14.5	17.9	20.3	21.0	20.6	19.5	15.1	10.3	6.1
	Ave	11.7	13.6	16.8	20.1	22.7	24.3	24.4	24.3	23.5	20.5	16.5	12.9
Zhemgang	Max	12.5	13.7	16.8	19.1	21.0	22.4	22.9	23.0	22.1	20.0	17.1	14.0
	Min	4.8	6.4	9.9	13.0	15.5	17.6	18.1	18.1	16.8	13.4	9.6	6.2
	Ave	8.6	10.0	13.3	16.1	18.2	20.0	20.5	20.5	19.5	16.7	13.4	10.1

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

Note: *Gasa- Data collected from 2003 to 2008

C M Y K

TABLE 5.6: TOTAL MONTHLY RAINFALL AT EXISTING STATIONS IN EACH DZONGKHAG, BHUTAN, 2008

(Millimeter)

Dzongkhag and station	Month												Total rain fall
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	sept	Oct	Nov	Dec	
Bumthang													
Chamkhar (A)	30.2	4.0	23.3	54.7	60.7	114.6	149.3	212.2	70.6	90.9	2.2	0.0	812.7
Gyetsa (C)	10.0	22.8	33.0	77.1	36.2	205.0	205.6	271.4	61.2	94.8	3.2	0.0	1020.3
Chhukha													
Chhukha	32.4	14	110.4	127.8	116.9	283.1	259	792	82	62	0	9.2	1888.8
Gedu	33.0	..	243.6	304.5	313.2	523.6	576.0	776.0	192.2	80.2	7.0	11.0	3060.3
Phuentsholing	13.9	17.6	49.4	45.4	176.7	233.7	409.6	364.1	352.0	17.6	0.0	1.4	1681.4
Tala	32.4	13	210.9	305.6	282.6	474	766.6	792	289	113	7	21.5	3307.6
Dagana													
Dagana Dzong	29.8	7.0	29.8	59.6	60.8	312.9	272.1	324.0	46.2	20.8	0.0	0.0	1163.0
Drujaygang	19.2	4.0	46.2	79.8	56.8	392.0	456.3	420.8	38.0	113.0	0.0	0.0	1626.1
Sunkosh	13.7	7.7	19.3	101.2	96.0	307.2	329.6	319.7	21.7	89.7	0.0	0.0	1305.8
Tashithang	4.0	0.0	22.0	32.0	130.0	..	..	..	..	..	..	..	188.0
Gasa													
Gasa Katey	0	22	12	20	41	68	62	106.5	38.5	0	10.7	0	380.7
Haa													
Haa Namjeyling	11.8	0.0	44.4	45.0	27.4	183.5	199.1	233.2	62.2	39.1	0.0	0.0	845.7
Lhuentse													
Khomachu	17.8	2.0	78.8	74.0	101.1	114.7	96.7	120.8	50.8	92.4	0.0	0.4	749.5
Autsho	26.0	7.2	56.8	57.8	55.0	142.8	78.6	218.0	58.6	108.8	0.0	0.6	810.2
Dungkhar	38.2	29.8	58.5	151.0	141.9	270.8	296.6	247.8	179.9	67.6	0.0	0.0	1482.1
Tangmachu	48.7	12.1	61.0	36.2	133.7	131.5	109.9	262.2	73.4	123.8	5.1	0.0	997.6
Monggar													
Monggar (A)	28.2	14.4	53.4	71.0	47.6	132.5	125.0	251.8	47.8	172.0	0.0	0.0	943.7
Lingmithang	4.0	10.4	25.2	70.4	62.8	112.0	95.2	235.4	32.8	83.2	0.0		731.4
Yadi	30.3	0.0	0.0	56.0	77.8	120.0	358.6	178.1	102.1	89.4	13.5	0.0	1025.8
Paro													
Paro (A)	31.2	0.0	30.2	29.4	69.0	121.3	160.8	147.2	55.2	38.5	0.0	0.0	682.8
Betikha	22.8	0	100	647	168	492	565	995	225	168	0	0	3382.8
Drugyal Dzong	0.0	0.0	19.0	20.0	28.0	217.5	222.5	243.0	56.0	40.0	4.0	0.0	850.0
Pemagatshel													
Pemagatshel	39.1	9.9	75.7	123.1	58.0	237.6	333.7	554.2	123.4	197.6	0.0	1.0	1753.3
Dungmain	0.0	1.3	203.6	184.0	57.0	284.3	642.0	720.0	234.0	129.0	0.0	0.0	2455.2
Yurung	34.2	15.4	78.7	99.7	117.0	274.2	462.7	890.1	122.2	141.2	0.0	3.1	2238.5
Punakha													
Punakha Dzong	0.0	0.0	23.8	11.8	71.9	169.0	87.6	161.2	23.6	2.8	0.0	0.0	551.7
Shelgana	0.0	0.0	21.5	32.5	46.0	281.5	143.4	251.9	32.0	30.0	0.0	0.0	838.8
Samdrup Jongkhar													
Airong	7.6	63.0	130.0	495.8	304.6	447.0	898.6	1577.0	636.4	41.6	0.0	0.0	4601.6
Dechenling	262.8	10.4	54.7	464.9	489.3	1305.4	802.9	745	351	21	0	0	4507.4
Deothang	45.3	8.9	171.9	466.2	230.3	586.3	805.5	1041.1	389.1	188.3	7.4	0.0	3940.3
Samtse													
Tendu	4.9	12.4	44.9	81.8	177.5	898.9	989.2	957.4	213.1	88.4	9.9	6.7	3485.1
NIE	9.2	12.5	66.5	205.2	320.3	820.0	970.8	1304.0	469.6	143.6	2.0	20.2	4343.9
Dorokha	27.3	6.1	150.0	217.2	279.4	510.2	410.0	132.3	133.4	9.3	4.0	0.0	1879.2
Sipsu	21.0	4.8	159.0	337.0	563.7	1109.0	1559.2	1417.8	942.5	214.8	0.0	18.0	6346.8

contd...

C M Y K

TABLE 5.6 (contd.): TOTAL MONTHLY RAINFALL AT EXISTING STATIONS IN EACH DZONG-KHAG, BHUTAN, 2008

(Millimeter)

Dzongkhag and station	Month												Total rain fall
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	sept	Oct	Nov	Dec	
Thimphu													
Gidakom	8.5	0.0	27.4	31.6	3.8	131.9	96.8	132.7	29.5	34.2	0.0	0.0	496.4
Simtokha	15.8	0.0	17.7	15.1	27.5	132.9	152.3	115.1	68.6	46.7	0.0	1.6	593.3
MTI Complex	11.4	0.0	15.9	16.6	44.3	133.3	177.5	145.5	88.4	39.2	0.0	3.3	675.4
Dochula													0.0
Sarpang													
Surey	67.0	37.0	146.0	138.0	478.2	720.2	1089.2	1267.4	256.9	67.8	0.0	0.0	4267.7
Bhur	54.0	24.4	110.7	210.8	541.2	942.4	1270.4	1558.8	391.0	166.0	2.0	0.0	5271.7
Sarpang	33.0	7.0	230.0	186.0	399.0	855.0	1423.0	1220.0	209.0	179.0	14.0	0.0	4755.0
Trashigang													
Chazam	24.4	9.2	63.6	86.2	27.0	91.2	126.6	179.8	58.6	101.2	0.0	0.0	767.8
Kanglung	25.4	13.8	100.2	99.8	70.2	153.8	158.6	252.4	116.0	168.1	0.0	1.0	1159.3
Khaling	5.0	20.0	39.0	141.0	103.0	195.0	127.0	316.0	74.0	36.0	0.0	10.0	1066.0
Radhi	5.4	7.2	41.2	110.5	120.6	252.1	256.0	421.5	141.1	137.6	0.0	0.0	1493.2
Thrimshing	38.6	9.2	82.4	119.8	102.4	161.4	255.6	505.7	99.8	99.3	1	0	1475.2
Wamrong	18	6	71.4	189.5	290.5	568	341	476.8	344.2	82	34.6	20	2442.0
Tashi Yangtse													
Tashi Yangtse	12.3	5.0	84.1	125.4	117.8	206.5	146.8	235.9	152.8	130.8	0.3	2.2	1219.9
Yallang	34	0.2	203.6	186.8	88	15.2	190.6	115	16.4	23.2	1.2	16.6	890.8
Trongsa													
Bjizam	27.3	3.2	47.6	84.8	70.5	151.0	158.3	245.0	156.1	82.2	4.5	13.6	1044.1
Kuengarabten	5.5	6.5	95.0	98.5	131.1	148.9	188.6	87.7	89.4	44.0	43.8	37.9	976.9
Langthel	18.2	16.0	0.0	0.0	41.0	21.0	107.0	27.0	27.0	6.5	0.0	7.0	270.7
Chendepji	0	0	42.6	41.6	112.8	341	279.5	345	146.2	34.2	0.4	1.6	1344.9
Trongsa	4.4	0.0	49.7	144.8	82.0	207.1	237.7	312.3	159.2	76.1	2.4	12.5	1288.2
Tsirang													
Tsirang	17.2	20.4	64.3	68.7	111.2	359.8	366.4	429.4	40.3	88.1	0.0	0.0	1565.8
Sunkosh Dobani	13.7	7.7	19.3	101.2	96	307.2	329.6	319.7	21.7	89.7	0	0	1305.8
Wangdue													
Wangdue (RNRRC)	14.4	0.4	18.6	30.3	31.9	130.9	146.8	171.8	38.2	68.8	0.0	0.0	652.1
Nobding													
Phobjikha	2.8	4	21.2	57.9	176.5	356.2	278.6	234.4	147	29	0.5	1	1309.1
Samtengang	28.6	0	12	70.8	52.2	144.8	215	221.8	102.3	88.6	0	0	936.1
Zhemgang	0	0.3	7.8	47.6	52.5	237.5	100.1	216.2	103.6	12.2	0	0	777.8
Buli													
Yebilaptsa	38.7	14.8	56.1	105.0	114.0	377.8	422.9	548.6	135.6	99.5	0.0	0.0	1913.0
Zhemgang	37	26.4	51	78.6	53	323	485.4	494.6	53	103.8	0	0	1705.8
	26.7	13.7	34.2	46.7	172.2	210.2	349.4	316.4	90.2	188.2	0.0	1.0	1448.9

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

C M Y K

TABLE 5.7: NUMBER OF AGRICULTURE RESEARCH AND EXTENSION FACILITIES, BHUTAN, JUNE 2009

Infrastructure	Numbers
RNR (Common services)	
RNR Extension Centres*	136
RNR Research Centres	4
RNR Research sub-stations	6
Soil and Plant Analytical Laboratory	1
Agriculture	
Agriculture Extension Centres	40
Agriculture Seed Production Farms	11
Farm Mechanization Centres	3
Farm Mechanization Training Centres	1
National Mashroom Centres	1
National Post Harvest Center	1
National Plant Protection Centres	1
National Soil Service Centre	1
Livestock	
Livestock Extension Centres	42
Regional Veterinary Laboratories	4
Satellite Veterinary Laboratories	3
Veterinary Hospital	20
Livestock Farms	11
National Feed & Fodder Development Program	1
Vaccine Production Centres	1
National Artificial Insemination Centers	1
Cold Water Fishery Center	1
National Warm Water Fish Culture Center	1
National Center for Animal Health	1
National Livestock Breeding Program	1
Forestry	
Beat Offices **	65
Nature Conservation Study Centre	1
Range Offices***	47
Territorial Division HQs(DFO)	12
Percent of Forest cover (including 8% shrub)	72.5
Percent of Protected Area	39.5

Source: PPD, Ministry of Agriculture, Thimphu.
Note:
* includes 9 RNR centres under construction.
** includes 1 under construction.
***includes 5 FMUs considered as Range Offices.

TABLE 5.8: IRRIGATION CHANNEL CONSTRUCTED IN DZONGKHAGS FROM 2003/04 TO 2006/07

Dzongkhag	New Construction Year (Km)				Total (Km)	Renovation Year (Km)				Total (Km)
	2003/04	2004/05	2005/06	2006/07		2003/04	2004/05	2005/06	2006/07	
Bumthang	3.00	0.00	2.20	0.00	5.20	0.00	4.00	5.93	0.00	9.93
Chhukha	1.84	0.00	4.50	0.00	6.34	4.10	3.94	0.00	0.00	8.04
Dagana	4.00	4.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00	0.00
Gasa	0.00	0.00	0.36	0.00	0.36	0.00	16.00	0.40	0.00	16.40
Ha	1.00	0.00	0.00	0.00	1.00	3.00	2.60	1.06	0.00	6.66
Lhuentse	9.80	4.30	1.00	0.00	15.10	16.87	24.00	0.00	0.00	40.87
Monggar	0.00	5.10	5.50	0.00	10.60	4.45	12.32	0.00	0.00	16.77
Paro	3.00	4.50	37.79	0.00	45.29	15.50	19.88	16.30	3.00	54.68
Pemagatshel	0.00	1.50	0.00	0.00	1.50	0.00	7.00	0.00	0.00	7.00
Punakha	0.00	0.00	3.00	3.00	6.00	35.75	34.59	11.00	0.00	81.34
Samdrupjongkhar	0.00	0.00	0.00	7.00	7.00	18.01	4.71	0.00	10.22	32.94
Samtse	4.70	10.00	5.72		20.42	11.00	10.00	0.00	0.00	21.00
Sarpang	13.70	9.00	3.00	0.00	25.70	18.50	19.50	8.00	0.00	46.00
Thimphu	0.00	3.00	0.00	0.00	3.00	4.00	7.00	0.00	0.00	11.00
Trashigang	0.00	14.50	0.00	0.00	14.50	1.50	2.60	0.00	0.00	4.10
Trashiyangtse	5.04	1.00	0.60	0.00	6.64	5.30	13.50	3.40	13.90	36.10
Trongsa	0.00	12.50	29.50	0.00	42.00	12.00	12.00	4.00	12.10	40.10
Tsirang	0.00	0.00	7.40	17.00	24.40	3.75	12.88	14.20	35.00	65.83
Wangdue	0.00	0.00	0.00	0.00	0.00	33.00	15.05	0.00	2.50	50.55
Zhemgang	0.00	3.00	0.00	0.70	3.70	7.00	12.80	0.00	0.00	19.80
Bhutan	**46.08**	**72.40**	**100.57**	**27.70**	**246.75**	**193.73**	**234.37**	**64.25**	**76.70**	**569.05**

Source: Department of Agriculture, MoA, Thimphu.
Note: The previous year's data is retained for 2008 since the RNR Census 2009 report is not yet published

TABLE 5.9: POWER TILLER TRACKS DEVELOPMENT AND ACHIEVEMENTS, 2007

Dzongkhag	Length (Km)	Completed (Km)					Total (Km)
		2002-03	2003-04	2004-05	2005-06	2006-07	
Trongsa	34.00	0.00	0.00	7.50	21.75	0.00	**63.25**
Haa	8.00	0.00	0.00	0.00	1.50	3.00	**12.50**
Paro	9.80	0.00	0.00	0.50	3.30	0.00	**13.60**
Mongar	34.64	0.00	0.00	0.00	4.87	14.10	**53.61**
Trashigang	37.30	0.00	0.00	0.00	4.00	0.00	**41.30**
Dagana	19.00	0.00	0.00	0.00	0.00	6.30	**25.30**
Lhuentse	35.00	0.00	0.00	2.00	8.00	2.00	**47.00**
Chukha	17.00	0.00	0.00	0.00	0.00	3.00	**20.00**
Wangdue	19.00	0.00	0.00	0.00	0.00	1.13	**20.13**
Trashiyangtse	21.00	0.00	0.00	0.00	0.00	2.50	**23.50**
Zhemgang	2.50	0.00	0.00	0.00	0.00	6.00	**8.50**
Tsirang	28.00	0.00	0.00	0.00	0.00	19.20	**47.20**
Punakha	17.59	0.00	0.00	0.00	5.00	14.40	**36.99**
Pemagatshel	15.00	0.00	0.00	0.00	0.00	0.00	**15.00**
Samdrupjongkhar	11.80	0.00	0.00	0.00	0.00	0.00	**11.80**
Total	**309.63**	**0.00**	**0.00**	**10.00**	**48.42**	**71.63**	**439.68**

Source: LMS,Department of Agriculture, MoA, Thimphu.
Note: The previous year's data is retained for 2008 since the RNR Census 2009 report is not yet published

TABLE 5.10: WET LAND CONVERTED TO DRY LAND FOR THE YEAR, 2005

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

Source: LMS,Department of Agriculture, MoA, Thimphu.

TABLE 5.11: QUALITY OF PESTICIDES SUPPLIED TO FARMERS, BHUTAN 2003/04 TO 2007/08

(Kilogram or Litre)

Period	Insecticides	Fungicides	Herbicides	Acaricides	Rodenticides	Others (Non-toxic)	Total
2003/04	13,074.3	2,888.3	874.0	9.0	64.7	10,052.4	26,962.7
2004/05	2,600.0	2,460.0	850.0	50.0	10.0	10,505.0	16,475.0
2005/06	3,036.0	2,410.0	1,020.0	20.0	38.0	10,732.0	17,256.0
2006/07	4,126.0	4,101.0	1,853.0	10.0	48.0	10,053.0	20,191.0
2007/08	4,212.0	2,247.0	1,085.0	8.0	35.0	24,120.0	31,707.0

Source: Department of Agriculture, MoA, Thimphu.
Note: Others inlude Tree spray oil, Linseed oil,protein Hydruolysate,Sandovit
*The previous year's data is retained for 2008 since the RNR Census 2009 report is not yet published

C M Y K

TABLE 5.12: ARABLE AGRICULTURE LAND,BY LAND TYPE AND DZONGKHAG, BHUTAN 2007

(hectares)

Dzongkhag	Wet land	Dry land	Orchard	Total area
Bumthang	0.00	5,756.76	54.12	5,810.88
Chhukha	1,033.85	8,729.30	1,030.85	10,793.99
Dagana	2,117.39	6,387.13	795.04	9,299.56
Gasa	114.72	262.61	0.00	377.32
Haa	44.99	1082.97	75.85	1,203.80
Lhuentse	1,354.11	3,594.74	0.88	4,949.73
Monggar	825.27	10,106.78	8.10	10,940.15
Paro	1,599.56	3,617.94	296.45	5,513.95
Pemagatshel	241.49	12,881.72	781.00	13,904.21
Punakha	3,605.44	1236.04	151.84	4,993.32
Samdrupjongkhar	734.29	11,531.12	265.74	12,531.14
Samtse	3,474.01	12,066.32	2,376.64	17,916.97
Sarpang	2,252.87	5,353.85	1,918.35	9,525.07
Thimphu	321.72	1040.45	221.85	1,584.03
Trashigang	1,929.07	14,577.33	27.52	16,533.92
Trashiyangtse	1,454.19	5,702.33	1.65	7,158.16
Trongsa	1,042.23	1,886.37	62.30	2,990.90
Tsirang	1,672.19	3,598.35	678.05	5,948.59
Wangdue	2,799.77	2,128.24	21.43	4,949.45
Zhemgang	1,067.70	7,994.84	370.18	9,432.72
Bhutan	**27,684.84**	**119,535.17**	**9,137.83**	**156,357.84**

Source: PPD,Ministry of Agriculture, Thimphu
Note: Tseri and Chilzhing data(as per DSLR's record) have been clubbed with dryland. Pakzhing has been clubbed with orchard.
*Pangzhing and kitchen garden have been clubbed with dry land
*Sokshing and Tsamdrog are not applicable
*The previous year's data is retained for 2008 since the RNR Census 2009 report is not yet published

C M Y K

TABLE 5.13: CULTIVATED AREA, PRODUCTION AND YIELD OF MAJOR CROPS BY DZONGKHAG, BHUTAN, 2007

Dzongkhag	Wheat			Barley		
	Area	Production	Yield	Area	Production	Yield
	(acre)	(MT)	(Kg/acre)	(acre)	(MT)	(Kg/acre)
Bumthang	125	41	328	696	377	542
Chhukha	1,209	713	589	186	125	676
Dagana	31	14	450	103	35	339
Gasa	48	9	179	38	18	464
Ha	1604	922	575	167	64	385
Lhuentse	130	71	550	n.a	n.a	n.a
Monggar	683	442	648	1,691	829	490
Paro	2,541	1,602	630	1002	597	595
Pemagatshel	145	96	662	1223	385	315
Punakha	1,385	546	394	n.a	n.a	n.a
Samdrupjongkhar	594	436	734	412	240	583
Samtse	2,844	1,374	483	77	24	310
Sarpang	na	na	na	na	na	na
Thimphu	944	612	648	266	164	616
Trashigang	450	245	545	699	555	794
Trashiyangtse	151	91	600	25	22	873
Trongsa	865	334	386	424	287	675
Tsirang	452	179	396	n.a	n.a	n.a
Wangdue	2004	1,218	608	362	195	538
Zhemgang	1310	637	486	124	87	702
Bhutan	**17,515**	**9,582**	**547**	**7,495**	**4,004**	**534**

contd...

C M Y K

TABLE 5.13 (contd.): CULTIVATED AREA, PRODUCTION AND YIELD OF MAJOR CROPS BY DZONGKHAG, BHUTAN, 2007

Dzongkhag	Paddy			Maize		
	Area (acre)	Production (MT)	Yield (Kg/acre)	Area (acre)	Production (MT)	Yield (Kg/acre)
Bumthang	52	97	1,863	n.a	n.a	n.a
Chhukha	3,638	3,580	984	6,521	6,929	1,063
Dagana	5,466	3,959	24	8026	6005	748
Gasa	209	251	1200	n.a	n.a	n.a
Ha	507	535	1,055	274	162	591
Lhuentse	3,073	4,268	1,389	3,187	4,917	1,543
Mongar	1,566	2,000	1,278	7,360	10,200	1,386
Paro	3,753	6,904	1,840	89	57	640
Pemagatshel	551	413	749	5,180	5,777	1,115
Punakha	5,575	9,229	1,655	438	287	656
Samdrupjongkhar	4,649	5,902	1269	5,801	7,415	1,278
Samtse	11,008	8,542	776	11,981	9,452	789
Sarpang	10,134	7,510	741	8,444	3,624	429
Thimphu	2,355	4,034	1,713	330	245	745
Trashigang	1,934	2,529	1,340	5,648	7,200	1,275
Trashiyangtse	1,377	1,814	1,318	2365	2,695	1,140
Trongsa	1,622	1,802	1,111	762	607	796
Tsirang	4,460	3,470	778	5,772	3,827	663
Wangdue	4,062	6,186	1,523	441	420	953
Zhemgang	1,577	1,292	820	2,782	2,411	867
Bhutan	**67,568**	**74,317**	**1,101**	**75,401**	**72,230**	**958**

Source: PPD, Ministry of Agriculture
Note: The previous year's data is retained for 2008 since the RNR Census 2009 report is not yet published

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

(Metric tons)

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

Source: PPD, Ministry of Agriculture, Thimphu

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

(Numbers)

Dzongkhag	Nublang+ Mithun Cattle	Jersey Cattle	Brown Swiss Cattle	Other Cattle (Baffaloes+ Zo+Zom)	Yaks	Horses (includes Mules+ Donkeys)	Sheep	Goats	Pigs	Poultry
Thimphu	1,198	1,707	28	0	11,073	1200	18	30	313	2,105
Paro	10,426	5,236	78	0	4,314	1,365	5	170	1,291	7,364
Haa	6,341	1,941	5	0	3,583	1,227	0	158	727	3,193
Chhukha	34,074	3,852	0	29	0	584	987	9800	5,967	18,046
Samtse	32,672	2,916	0	479	0	299	3900	13798	2,141	31,764
Punakha	9,366	1,967	28	0	0	738	1	36	1,077	3,854
Gasa	719	108	120	0	9,511	1116	56	0	10	354
Wangdue	16,672	2,566	784	0	2,787	980	2,583	379	1,845	4,728
Tsirang	7,644	4,831	7	261	0	238	693	5644	1,721	21,443
Dagana	13,454	2,973	3	50	0	464	496	4340	2,086	18,582
Bumthang	6,433	1,805	2,477	0	3,984	1,474	620	2	17	779
Trongsa	8,505	1,989	702	0	979	495	756	0	424	3,253
Zhamgang	10,489	1,628	30	0	0	1,791	0	82	1,042	6,365
Sarpang	17,449	3,067	48	204	0	286	714	3269	1,177	22,969
Lhuentse	10,942	1,499	419	0	454	1,764	84	29	363	5,563
Monggar	22,472	4,579	290	0	0	2,699	29	202	1,804	14,756
Trashigang	23,012	7,565	85	0	11,093	6,067	2,049	0	1,242	16,384
Trashiyangtse	9,154	1,902	52	0	622	1,584	34	89	886	2,236
Pemagatshel	5,467	3,134	2	0	0	1225	0	40	514	4,279
S/Jongkhar	14,934	3,148	0	0	0	1,609	84	1,031	829	10,280
Bhutan	**261,423**	**58,413**	**5,158**	**1,023**	**48,400**	**27205**	**13109**	**39099**	**25476**	**198,297**

Source: PPD,Ministry of Agriculture, Thimphu

TABLE 5.16: IMPORTS AND DISTRIBUTION OF FOOD ITEMS BY FOOD CORPORATION OF BHUTAN, 2004 TO 2008

(Metric tonns)

Commodity	2004	2005	2006	2007	2008
Imports					
Rice	7,187.92	6,226.74	8,293.74	7,414.25	9,416.62
Wheat	2,500.00	35.59	0.00	0.00	48.96
Sugar	1,966.02	3,924.27	3,706.36	1,231.78	1,820.43
Salt	140.03	194.96	215.44	199.99	309.97
Oil	198.07	568.53	643.94	671.60	818.89
Pulses	231.49	202.65	289.56	309.67	331.72
Atta	..	169.7	327.8	160.20	183.78
Maida	20.0	283.4	327.8	249.88	294.53
Sales					
Rice	15,985.14	7,279.18	7,948.99	8,078.77	8,250.78
Wheat	987.52	202.91	0.00	0.00	20.50
Sugar	2,106.18	3,726.05	3,028.88	1,829.61	1,914.29
Salt	401.85	212.47	207.82	204.17	274.43
Oil	473.77	486.26	648.89	667.20	785.85
Pulses	710.81	229.08	261.73	304.56	359.43
Atta	633.65	430.61	299.04	199.32	177.78
Maida	265.03	337.41	332.72	263.07	266.06

Source: Food Corporation of Bhutan,Phuentsholing.

TABLE 5.17: QUANTITY OF AGRICULTURAL PRODUCE HANDLED BY FOOD CORPORATION OF BHUTAN, 2004 TO 2008

(Metric tonns)

Commodity	2004	2005	2006	2007	2008
Potatoes	22,834.90	23,766.14	20,645.22	21,611.87	21,109.11
Vegetables	1,994.30	1,706.50	1,488.00	1,432.61	1,592.65
Apples	147.30	226.70	452.53	202.28	121.56
Oranges	2,218.10	1,916.50	1,863.61	2,876.83	2,339.96
Cardamom	0.00	0.17	0.01	0.00	0.50
Ginger	156.40	208.70	459.90	0.00	462.99
Garlic	0.10	0.08	0.00	0.00	0.00
Arecanut	114.60	146.62	153.86	233.33	545.12
Supari(dried doma)	0.00	0.00	0.00	0.00	0.00
Dry chilli	4.20	3.90	6.40	0.00	0.91
Kidney bean(rajma)	48.70	49.63	69.53	0.00	51.26
Soya bean	60.90	37.15	47.92	0.00	17.09
Pulses	0.00	0.00	0.00	100.36	68.35
Mustard	0.00	0.00	0.00	0.00	0.00
Pipla (wild)	0.00	0.00	0.00	0.00	0.00
Leshi	0.10	0.00	0.00	0.00	0.00
Lemon	0.00	0.00	0.00	0.00	0.00
Apricot	0.00	0.00	0.00	0.00	0.00
Peach	0.80	1.13	0.18	0.00	1.06
Plum	0.30	0.13	0.02	0.00	0.27
Pear	0.80	0.02	0.11	0.00	0.40
Dry bean	0.00	0.00	0.00	0.00	0.00

Source: Food Corporation of Bhutan,Phuentsholing.

C M Y K

TABLE 5. 18: QUANTITY AND VALUE OF FOREST PRODUCTS SUPPLIED BY TYPE AND USERS BHUTAN, 2005/06 TO 2007/08

User and product type	2005/06		2006/07		2007/08	
	Quantity	Value (Nu)	Quantity	Value (Nu)	Quantity	Value (Nu)
Rural Supply						
Trees (numbers)	25037.0	1001480.00	11504.0	471458.00	24510.0	997,936.00
Shinglap (numbers)	2260.0	90400.00	13.0	520.00	3240.0	120,692.25
Cham (numbers)	63538.0	1906140.00	19451.0	594064.00	56772.0	1,840,121.75
Tsim (numbers)	48526.0	582312.00	10897.0	43588.00	32572.0	489,147.00
Dangchung (numbers)	23391.0	93564.00	4393.0	30195.00	11802.0	58,699.50
Poles (numbers)	38192.0	152768.00	22984.0	103372.00	49721.0	215,081.25
Post (numbers)	31020.0	124080.00	16015.0	225105.00	45753.0	262,411.25
Fire wood (cubic metre)	29900.2	299002.00	1331927.7	616728.95	50766.1	733,978.65
Log form (Cft)	346194.0	276955.20	308461.0	246097.20	0.0	-
Sawn timber (cft)	39309.1	39309.08	0.0	0.00	0.0	-
Other woods (numbers)	"	"	"	"	265.0	1,170.00
Sub total		**4566010.3**		**2331128.2**		**4,719,237.65**
Non wood Forest Produce (Rural Supply)						
Bamboo (numbers)	163987.0	86913.1	369390.5	30905.8	287235.0	47,826.44
Stones (Truck Load)	12.0	480.0	1100.0	24040.0	1011.0	40,440.00
Sand (Truck Load)	10.0	400.0	647.0	1972.0	1423.0	56,920.00
Mashrrom billet (numbers)	..	..	9.0	360.0	4260.0	4,260.00
Cane (Headload)	242.0	2420.0	484.0	1972.0	375.0	1,330.00
Chirrata (kg)	..	..	0.0	..	"	"
Sub total		**90213.1**		**59249.8**		**150,776.44**
Urban Supply (Auction)						
Trees (number)	43.0	103200.0	961.0	291587.0	595.0	202,561.25
Shinglap (numbers)	..	..	..	..	36.0	2,080.00
Cham (numbers)	..	..	413.0	23946.0	723.0	41,812.00
Tsims (numbers)	..	..	987.0	11650.0	686.0	10,488.00
Dangchung (numbers)	8434.0	3710960.0	259.0	3158.0	688.0	4,342.00
Poles (numbers)	254.0	5080.0	8407.0	38735.0	7731.0	90,276.25
post (numbers)	..	..	5585.0	53112.0	10084.0	78,356.75
Firewood (cubic metre)	43736.0	437360.0	130686.3	1297404.0	77804.3	1,646,624.72
Log form (cft)	731650.0	13169700.0	1803567.8	25158174.3	"	
Sawn form (cft)	474.1	8532.9	6962.0	123178.0	1968.1	30,660.39
Sub total		**17,434,832.90**		**27,000,944.30**		**2,107,201.36**
Non wood Forest Produce on Commercial rate						
Bamboo (numbers)	464883.0	246388.0	110159.0	87430.8	156921.0	112,461.00
Stones (Truck Load)	41955.0	1678200.0	27476.8	1110254.0	74475.5	961,860.00
Sand (TL)	45730.0	1829200.0	43439.0	9329236.5	32691.0	1,307,640.00
Stones Chips (Truck Load)	0.00	0.00	13799.0	347500.0	681.5	26,270.00
Top Soil (TL)	380.0	15200.0	..	..	1128.5	38,610.00
Wood Chips (Truck Load)	289.0	144500.0	0.0	0.0	536.0	231,595.00
Lemon grass (kg)	3596.0	14384.0	..	..	1652.2	8,261.00
Mashrrom Billet (numbers)	12774.0	12774.0	6870.0	4600.0	14850.0	14,795.00
Resin (Kg)	41135.0	164540.0	24954.5	85503.0	54408.0	136,620.00
Dalphne (Kg)	9400.0	5640.0	8830.0	7808.0	14250.0	3,020.00
Cordycep (Kg)	81.0	1821600.0	..	..	52.3	121,495.00
Leaf mould (Truck Load)	575.5	34530.0	206.0	11324.0	305.0	10,363.00
Sand (Truck Load)	..	..	79.0	13551875.0	32691.0	1,307,640.00
Sub total		**5966956.0**		**24535531.3**		**4,280,630.00**

contd...

C M Y K

TABLE 5. 18(contd.): QUANTITY AND VALUE OF FOREST PRODUCTS SUPPLIED BY TYPE AND USERS BHUTAN, 2005/06 TO 2007/08

User and product type	2005/06		2006/07		2007/08	
	Quantity	Value (Nu)	Quantity	Value (Nu)	Quantity	Value (Nu)
Subsidy (Dzong and Lhakhang)						
Tree (numbers)	104.0	4160.0	0.0	0.0	528.0	30120.00
Chams (numbers)	12.0	360.0	0.0	0.0	227.0	6810.00
Tsim (numbers)	..	..	0.0	0.0	310.0	3720.00
Ploes (numbers)	..	..	0.0	0.0	25.0	100.00
Log (cft)	..	..	0.0	0.0	0.0	0.00
Sub total		**4520.0**		0.0		**40750.00**
Commercial (Dzong and Lhakhang)						
Tree (numbers)	87.0	100224.0	0.0	0.0	57.0	56000.00
Shinglap (numbers)	..	..	0.0	0.0	0.0	0.00
Chams (numbers)	..	..	0.0	0.0	1.0	30.00
Dangchung (numbers)Tsims	..	..	0.0	0.0	0.0	0.00
(numbers)	105.0	3990.0	0.0	0.0	0.0	0.00
Ploes (numbers)	..	..	0.0	0.0	200.0	4000.00
Firewood (cubic metre)	416.0	4160.0	0.0	0.0	1063.9	24020.00
Log (cft)	..	..	0.0	0.0	199.8	181.62
Swan timber (cft)	..	..	0.0	0.0	0.0	0.00
Sub total		**109014.0**		**0.0**		**84231.62**
Government Institution						
Tree (numbers)	1468.0	1691136.0	0.0	0.0	1115.0	212753.00
Chams (numbers)	293.0	70320.0	0.0	0.0	103.0	3090.00
Tsims (numbers)	1637.0	62206.0	0.0	0.0	167.0	2039.00
Dangchung (numbers)Poles	8360.0	200640.0	0.0	0.0	237.0	3968.00
(numbers)	1622.0	25952.0	0.0	0.0	2501.0	26326.00
Post (numbers)	8076.0	96912.0	0.0	0.0	5318.0	36842.00
Firewood (cubic metre)	31176.0	311760.0	0.0	0.0	24602.6	587539.05
Log forms (cft)	284016.0	3692207.2	0.0	0.0	4475.7	44526.37
Sawn timber (cft)	..	..	0.0	0.0	3569.2	16395.70
Sub total		**6151133.2**		**0.0**		**933479.12**
Free of Royalty						
Tree (numbers)	216.0	0.0	270.0	0.0	352.0	0.00
Shinglap (numbers)	..	0.0	40.0	0.0	41.0	0.00
Chams (numbers)	1260.0	0.0	167.0	0.0	885.0	0.00
Tsims (numbers)	1105.0	0.0	175.0	0.0	968.0	0.00
Dangchung (numbers)	899.0	0.0	280.0	0.0	1298.0	0.00
Poles (numbers)	..	0.0	1253.0	0.0	2094.1	0.00
Fencing post (numbers)	640.0	0.0	80.0	0.0	0.00	0.00
Poles (numbers)	401.0	0.0	0.0	0.0	0.00	0.00
Log (cft)	256.0	0.0	0.0	0.00	0.00	0.00
Firewood (cubic metre)	885.0	0.0	767.7	0.0	0.00	0.00
Sub total	**5662.0**	**0.0**	**3032.7**	**0.0**	**5638.1**	**0.00**

contd...

TABLE 5. 18(contd.): QUANTITY AND VALUE OF FOREST PRODUCTS SUPPLIED BY TYPE AND USERS BHUTAN, 2005/06 TO 2007/08

User and product type	2005/06		2006/07		2007/08	
	Quantity	Value (Nu)	Quantity	Value (Nu)	Quantity	Value (Nu)
Bhutan						
Tree (numbers)	26,955.0	2,900,200.00	12,465.0	763,045.00	27,157.0	1,499,370.25
Shinglap (numbers)	2,260.0	90,400.00	13.0	520.00	4,438.0	124,712.25
Cham (numbers)	65,103.0	1,976,820.00	19,864.0	618,010.00	58,711.0	1,891,863.75
Tsims (numbers))	51,373.0	648,508.00	11,884.0	55,238.00	34,703.0	505,394.00
Dangchung (numbers)	41,084.0	4,005,164.00	4,393.0	30,195.00	14,075.0	67,209.50
Poles (numbers)	40,255.0	179,360.00	28,569.0	156,484.00	60,178.0	335,783.50
Post (numbers)	39,990.0	226,072.00	24,422.0	263,840.00	61,355.0	378,410.00
Firewood (cubic metre)	29,900.2	299,002.00	1,462,614.0	1,914,133.00	156,531.0	2,996,362.42
Log forms (cft)	1,361,860.0	17,138,862.42	2,112,028.8	25,282,528.70	4,675.5	44,707.99
Sawn timber (cft)	39,309.1	39,309.08	6,962.0	123,178.00	5,537.3	47,056.09
Bamboo (numbers)	628,870.0	333,301.10	479,549.5	118,336.60	447,356.0	160,287.44
Stones (Truck Load)	41,967.0	1,678,680.00	28,576.8	1,134,294.00	75,695.5	1,002,300.00
Sand (Truck Load)	45,740.0	1,829,600.00	44,086.0	9,331,208.50	34,268.0	1,364,560.00
Stone chips (Truck Load)	-	-	13,808.0	347,860.00	715.5	27,630.00
Top Soil (Truck Load)	380.0	15,200.00	..	..	1,158.5	40,110.00
Wood chips (Truck Load)	289.0	144,500.00	..	..	536.0	231,595.00
Mashrrom Billet (numbers)	12,774.0	12,774.00	6,870.0	4,600.00	14,850.0	14,975.00
Resin (Kg)	41,135.0	41,135.00	24,954.5	85,503.00	54,408.0	136,620.00
Cordycep (Kg)	81.0	1,821,600.00	140.4	3,158,258.00	52.3	121,495.00
Daphne (Kg)	9,400.0	9,400.00	8,830.0	7,808.00	14,750.0	3,320.00
Lemon grass (Kg)	3,596.0	3,596.00	..	..	1,652.2	8,261.00
Leaf mould (Truck Load)	575.5	575.50	211.0	11,624.00	336.0	12,069.00
Cane (Head Load)	242.0	2,662.00	484.0	1,972.00	893.0	2,516.00
Chirrata (Kg)	..	..	0.0	0.00	0.0	0.00
Total		**33,396,721.10**		**43,408,635.80**		**11,016,608.19**

Source: Department of Forest, MoA, Thimphu.

C M Y K

TABLE 5.19: DETAILS OF PROTECTED AREAS IN BHUTAN, BY YEAR OF ESTABLISHMENT AND AREA, 2006

Name of Area	Establishment year	Area (sq.Km)
Existing Protected Areas		
Torsa Strict Nature Reserve	1993	644
Jigme Dorji National Park	1993	4,349
Jigme Singye Wangchuck National Park*	1993	1,723
Thrumshingla National Park	1993	905
Royal Manas National Park	1993	1,023
Sakteng Wildlife Sanctuary	1993	650
Bomdeling Wildlife Sanctuary	1993	1,487
Phibsoo Wildlife Sanctuary	1993	278
Khaling Wildlife Sanctuary	1993	273
Royal Botanical Park (RBP)	1994	47
Total		11,379
Biological Corridors	2000	3,710

Source: NCD, DoF, Ministry of Agriculture, Thimphu.
Note: * Previously known as Black Mountain National Park

TABLE 5.20: DISPOSAL OF LOGWOOD BY FORESTRY DEVELOPMENT CORPORATION LIMITED, BHUTAN 2004 TO 2008

Item	Units	2004	2005	2006	2007	2007
Logwood						
Logwood (Urban/Commercial/Auction)	cft	1940958.60	1925870.76	1791035.39	1853056.00	1559656.99
Rural logwood						
Logwood (Rural)	cft	317945.56	285034.73	304699.40	227260.68	152526.10
Firewood	M3	30856.16	..	26826.00	36826.32	33831.39
Woodchips	M3	..	..	..	..	10510.08
Sand	Truck Load	..	..	..	2470.00	27374.39
Stone/ Stonechips/ Gravels	Truck Load	..	..	..	..	6457.00
Poles	Numbers	..	..	12780.00	18080.00	36710.00
Total		**2289760.32**	**2210905.49**	**2135340.79**	**2137693.00**	**1827065.95**

Source:Department of Forest, MoA, Thimphu.

CHAPTER 6 INDUSTRIES

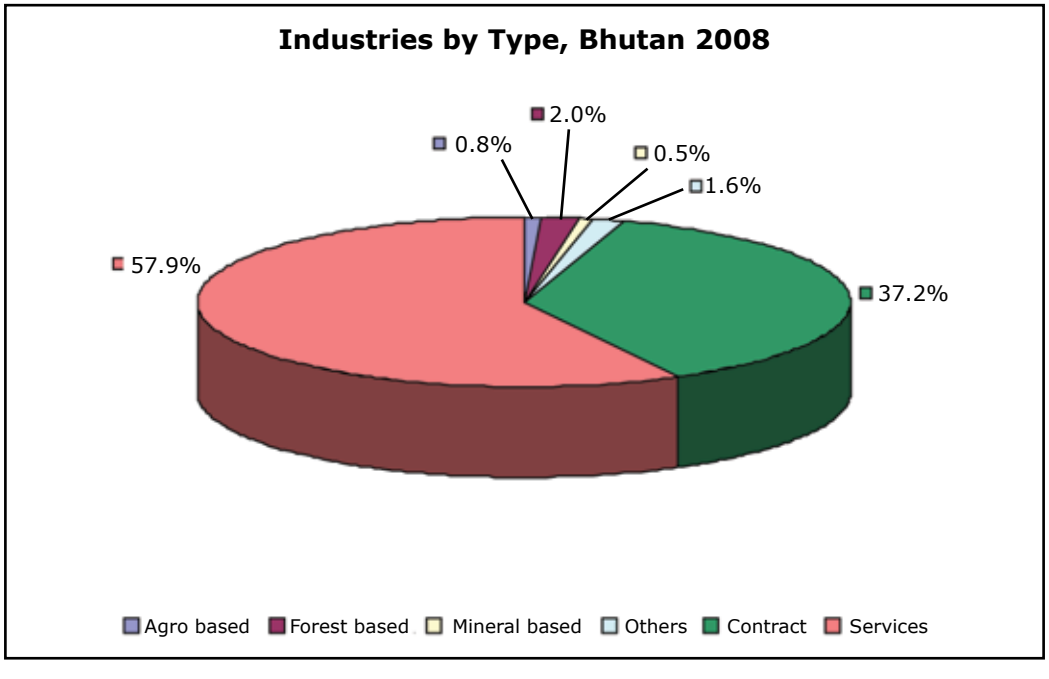
The subject 'Industries' covers the whole range of industrial activities carried out by businesses in all fields including mining, manufacturing, wholesale and retail trade, and other service industries. In Bhutan, the industrial sector has until recently played a relatively small role in the economy 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 in 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, the number of industrial license holders increased from 1254 in 2007 to 1389 in 2008, with more than 90% of the establishments operated by the private sectors. Most of the existing industrial establishments are either small scale or cottage industries.



C M Y K

TABLE 6.1 NUMBER OF INDUSTRIAL ESTABLISHMENTS BY SECTOR, 2004 TO 2008

Sector	2004	2005	2006	2007	2008
Production & manufacturing	874	985	1133	1,254	1,389
New registration	73	99	135	116	133
Existing establishments	801	886	998	1,138	1,256
Services	5468	6753	13597	14,923	16,253
New registration	662	1366	1479	1,263	1,331
Existing establishments	4806	5387	12118	13,660	14,922
Contract	9212	9,519	9,775	10,084	10,431
New registration	131	207.0	269	307	347
Existing establishments	9,081.0	9,312.0	9506.0	9,777	10,084
All sectors	**15554**	**17257**	**24505**	**26,261**	**28,073**

Source: Department of Industry, MoEA, Thimphu.

TABLE 6.2 NUMBER OF LICENCESED FIRMS IN MANUFACTURING AND MINING INDUSTRIES BY SECTOR, BHUTAN 2006 TO 2008

Industry	2006				2007				2008			
	Public	Joint	Private	Total	Public	Joint	Private	Total	Public	Joint	Private	Total
Mining	0	0		25	0	0	27	27	0	0	47	47
Manufacturing	15	5	1088	1108	14	5	1208	1227	15	6	1321	1342
Food processing/milling	5	1	193	199	5	1	201	207	5	1	211	217
Textiles and Clothing	0	0	1	1	0	0	2	2	0	0	1	1
Wood and Paper Products	2	2	466	470	2	2	513	517	2	2	570	574
Chemical Products	..	..	..	..	..	..	..	..	..	..	..	..
Mineral Products	0	2	64	66	0	2	81	83	0	3	94	97
Others	8	0	364	372	7	0	411	418	8	0	445	453
Total	**15**	**5**	**1113**	**1133**	**14**	**5**	**1235**	**1254**	**15**	**6**	**1368**	**1389**

Source: Department of Industry, MoEA, Thimphu.

C M Y K

TABLE 6.3 NUMBER OF INDUSTRIES BY SECTOR, SIZE AND TYPE, BHUTAN, 2004 TO 2008

Industrial establishments	2004	2005	2006	2007	2008
Sector					
Private	15489	17181	24417	26163	27972
Joint	15	15	11	11	14
Public	50	61	77	87	87
Size					
Large scale	47	57	72	85	91
Medium scale	43	62	78	112	128
Small scale	628	678	1660	1815	2064
Cottage scale	5624	6941	12920	14165	15359
Other (Contract)	9212	9519	9775	10084	10431
Type					
Production & Manufacturing	874	985	1133	1254	1389
Agro based	162	181	199	207	217
Forest based	368	414	470	517	574
Mineral based	66	80	91	110	144
Others	278	310	373	420	454
Contract	9212	9519	9775	10084	10431
Services	5468	6753	13597	14923	16253
All industries	**15554**	**17257**	**24505**	**26261**	**28073**

Source: Department of Industry, MoEA, Thimphu.

TABLE 6.4 NUMBER OF CONTRACT FIRMS BY TYPE, BY DZONGKHAG, BHUTAN, 2008

Dzongkhag	Class of contract firm				Total
	A	B	C	D	
Bumthang	2	2	9	234	247
Chhukha	41	20	132	648	841
Dagana	1	0	9	276	286
Gasa	0	0	0	35	35
Haa	0	5	44	208	257
Lhuntse	0	0	22	120	142
Mongar	1	2	62	343	408
Paro	0	10	68	415	493
Pemagatshel	1	3	20	178	202
Punakha	1	2	7	275	285
Samdrup Jongkhar	17	6	88	266	377
Samtse	1	1	47	279	328
Sarpang	7	2	38	422	469
Thimphu	132	88	518	3281	4019
Trashigang	5	22	63	447	537
Trashi Yangtse	0	0	35	167	202
Trongsa	0	0	35	176	211
Tsirang	0	0	5	134	139
Wangdue Phodrang	0	0	22	652	674
Zhemgang	0	0	9	270	279
Bhutan	**209**	**163**	**1233**	**8826**	**10431**

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

C M Y K

TABLE 6.5 NUMBER OF INDUSTRIAL FIRMS, BY TYPE, BY DZONGKHAG, BHUTAN, 2008

Dzongkhag	Scale of industry				Total
	Small	Medium	Large	Cottage	
Bumthang	32	10	2	530	574
Chhukha	983	46	47	1442	2518
Dagana	6	0	1	298	305
Gasa	0	0	0	52	52
Haa	40	0	0	208	248
Lhuntse	1	0	0	161	162
Mongar	8	1	1	654	664
Paro	74	15	2	1179	1270
Pemagatshel	8	0	2	261	271
Punakha	11	1	1	340	353
Samdrup Jongkhar	25	3	5	884	917
Samtse	189	8	8	443	648
Sarpang	44	1	2	1108	1155
Thimphu	588	36	18	5393	6035
Trashigang	8	0	0	691	699
Trashi Yangtse	3	0	0	177	180
Trongsa	4	4	0	316	324
Tsirang	4	0	0	284	288
Wangdue Phodrang	35	2	2	640	679
Zhemgang	1	1	0	298	300
Bhutan	**2064**	**128**	**91**	**15359**	**17642**

Source: Department of Industry, MoEA, Thimphu.

TABLE 6.6 NUMBER OF INDUSTRIES BY TYPE, BY DZONGKHAG, BHUTAN, 2008

Dzongkhag	Agro based	Forest based	Mineral based	Services	Contract	Others	All types
Bumthang	9	38	2	518	247	7	821
Chhukha	47	49	27	2303	841	92	3359
Dagana	0	1	1	303	286		591
Gasa	1	1	0	50	35	0	87
Haa	2	34	1	211	257	0	505
Lhuntse	1	3	1	157	142	0	304
Mongar	9	29	4	619	408	3	1072
Paro	10	94	11	1133	493	22	1763
Pemagatshel	5	10	12	243	202	1	473
Punakha	1	4	1	346	285	1	638
Samdrup Jongkhar	19	24	5	858	377	11	1294
Samtse	14	10	28	583	328	13	976
Sarpang	46	28	6	1063	469	12	1624
Thimphu	31	146	28	5550	4019	280	10054
Trashigang	3	30	2	657	537	7	1236
Trashi Yangtse	1	25	0	153	202	1	382
Trongsa	3	9	0	312	211	0	535
Tsirang	10	5	2	271	139	0	427
Wangdue Phodrang	2	15	13	646	674	3	1353
Zhemgang	3	19	0	277	279	1	579
Bhutan	**217**	**574**	**144**	**16253**	**10431**	**454**	**28073**

Source: Department of Industry, MoEA, Thimphu.

C M Y K

TABLE 6.7 MINERAL PRODUCTION FROM MINES IN BHUTAN, 2004 TO 2008

Minerals	2004	2005	2006	2007	2008
Dolomite (metric tonnes)	452336	388711	388711	578551.57	1247568.11
Lime stone (metric tonnes)	560807	536030	536030	543963.58	583706.63
Gypsum (metric tonnes)	131236	150585	150585	189198.288	248444.7
Slate (square feet)	126789	2908	2908	105260.81	123704.23
Coal mines (metric tonnes)	29631	85279	85279	12070.8	12301.06
Marble (square feet)	3385	4005	4005	78107.17	8226.89
Quartzite (metric tonnes)	42599	52694	52694	64048.59	94687.65
Talc (metric tonnes)	39797	42791	42791	62014.77	56077.39
Iron Ore (metric tonnes)	n.a	5679	5679	n.a	n.a
Pink Shale (metric tonnes)	n.a	364	364	n.a	n.a
Stone (metric tonnes)	252207	146767	146767	388720.64	408943.11
Granite (square feet)	2151.73	9436	9436	14430.33	8226.89

Source: Department of Gelogy and Mines, MoEA, Thimphu

C M Y K

TABLE 6.8 MINERAL PRODUCTION, BHUTAN, 2005 TO 2008

Minerals	2005			2006			2007			2008		
	Export	Domestic use	Total	Export	Domestic use	Total	Export	Domestic use	Total	Export	Domestic use	Total
Dolomite (metric tonnes)	388,637	74	388,711	472982.21	3,533.87	476,516.08	573554.38	4997.19	578551.57	1242638.00	4930.11	1,247,568.11
Lime stone (metric tonnes)	86,996	449,034	536,030	90028.94	491304.04	581332.98	96836.28	447127.30	543963.58	89059.23	494647.40	583,706.63
Gypsum (metric tonnes)	115,646	34,940	150,585	168116.37	36081.79	204198.16	150799.22	38399.07	189198.29	210080.80	38363.90	248,444.70
Coal mines (metric tonnes)	48,377	36,902	85,279	65545.15	32420.31	97965.46	75365.78	29895.03	105260.81	80975.99	42728.24	123,704.23
Marble (square feet)	n.a	4,005	4,005	n.a	3813.40	3,813.40	n.a	12070.80	12070.80	n.a	12301.06	12,301.06
Slate (square feet)	n.a	2,909	2,909	n.a	5873.06	5,873.06	n.a	78107.17	78107.17	n.a	8226.89	8,226.89
Quartzite (metric tonnes)	9,193	43,501	52,694	8402.81	31794.84	40,197.65	1805.29	62243.30	64048.59	4122.63	90565.02	94,687.65
Talc (metric tonnes)	42,738	53	42,791	54208.24	n.a	54,208.24	62014.77	n.a	62014.77	56077.39	n.a	56,077.39
Iron Ore (metric tonnes)	n.a	5,679	5,679	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Pink & green Shale (mt)	364	n.a	364	360.30	n.a	360.30	n.a	n.a	n.a	n.a	n.a	n.a
Stone (metric tonnes	25,626	121,142	146,767	70783.22	161403.88	232,187.10	101576.89	287143.75	388720.64	121967.86	286975.25	408,943.11
Granite (square feet)	n.a	9,436	9,436	n.a	8,310.90	8,310.90	n.a	14430.33	14430.33	n.a	8,226.89	8,226.89

Source: Department of Gelogy and Mines, MoEA, Thimphu

C M Y K

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

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

Source: Census of Manufacturing Industries, 2001

TABLE 6.10: DISTRIBUTION OF ESTABLISHMENT BY DZONGKHAGS, BHUTAN, 2000

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

Source: Census of Manufacturing Industries, 2001

C M Y K

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

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

Contd...

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

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

Source: Census of Manufacturing Industries, 2001

C M Y K

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

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

Source: Census of Manufacturing Industries, 2001

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

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

Source: Census of Manufacturing Industries, 2001

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

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

Source: Census of Manufacturing Industries, 2001

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

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

Source: Census of Manufacturing Industries, 2001

C M Y K

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 2008, there were 40659 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 26 years, tremendous achievements were made in establishing 5362.6 kilometers of motorable roads and several motorable bridges. In the difficult areas where the construction of motorable road has not yet begun, suspension bridges provide the vital transport links. Today the Department of Roads is responsible for the design and planning of roads and in setting standards for quality.

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

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

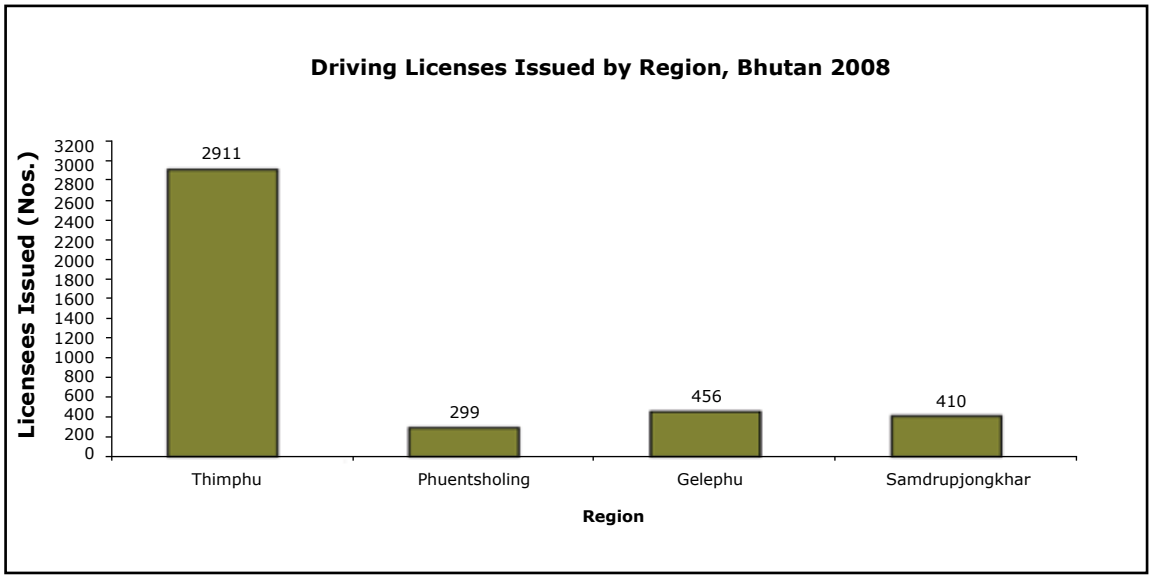
Following the formulation and implementation of Bhutan Postal Act of 1996, Division of Post was incorporated under the Companies Act of Bhutan. In 1993, Bhutan Post introduced International Express Mail Service and after a year Domestic Express Services and Fax Mail Services were introduced. Fax Money Order Service started in 1996 followed by Post Overnight Courier and Bhutan Post Express Passengers Services in 1997. Within a short period, Bhutan Post increased the types of services from 4 to 13. There are now 127 postal infrastructures, where on an average one Post Office caters to around 5,284 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

C M Y K

Services. Since then, the information and communication technology such as Internet provides access to global information and plays an important role in the every day affairs.

Yet another breakthrough was the launch of cellular mobile (B Mobile) services in the Kingdom, coinciding with the His Majesty's Birthday, 11 November 2003. The Bhutan Telecom Corporation Ltd. has now connected all twenty Dzongkhags by the cellular services. As of December 2008, there were 27937 telephone sets in use and 178346 B-Mobile subscribers.



C M Y K

TABLE 7.1 LENGTH OF ROADS BY TYPE, BHUTAN, 2004 TO JUNE 2009

(Length in Km)

Type of road	Express-way	National highway	District road	Feeder road	Urban road	Farm road	Forest road	Access Road	Power tiller track	All road
2004	0.0	1577.20	459.00	1226.50	109.20	251.50	529.50	n.a	n.a	4152.90
Black topped	0.0	1559.10	360.00	417.10	102.10	4.80	7.40	n.a	n.a	2450.50
Non-black topped	0.0	18.20	99.00	809.40	7.10	246.40	522.10	n.a	n.a	1702.20
2005	0.0	1571.04	459.00	1278.26	125.11	388.54	570.60	n.a	n.a	4392.50
Black topped	0.0	1552.89	360.00	420.16	117.15	4.84	7.38	n.a	n.a	2462.42
Non-black topped	0.0	18.15	99.00	858.10	7.96	383.70	563.22	n.a	n.a	1930.13
2006	0.0	1556.00	510.95	1246.91	130.22	525.85	574.80	n.a	n.a	4544.73
Black topped	0.0	1537.85	380.70	436.20	118.75	4.84	7.38	n.a	n.a	2485.72
Non-black topped	0.0	18.15	130.25	810.71	11.47	521.01	567.42	n.a	n.a	2059.01
2007	6.20	1628.10	481.20	812.70	150.60	716.90	559.60	531.20	60.20	4946.70
Black topped	6.20	1544.10	449.50	158.50	137.70	n.a	7.00	291.50	n.a	2594.50
Non-black topped	0.00	84.00	31.70	654.20	12.90	716.90	552.60	239.70	60.20	2352.20
2008	6.20	1621.10	482.00	820.80	163.10	1045.60	528.90	554.10	140.80	5362.60
Black topped	6.20	1537.10	449.50	160.90	150.00	0.00	7.00	297.60	0.00	2608.30
Non-black topped	0.00	84.00	32.50	659.90	13.10	1045.60	521.90	256.50	140.80	2754.30
2009	6.20	1709.80	490.70	910.80	206.70	1361.60	533.00	567.90	195.60	5982.30
Black topped	6.20	1572.30	454.20	174.10	190.00	2.70	7.00	294.00	0.00	2700.50
Non-black topped	0.00	137.50	36.50	736.70	16.70	1358.90	526.00	273.90	195.60	3281.80

Source: Department of Roads, MoWHS, Thimphu.

C M Y K

TABLE 7.2 LENGTH OF ROADS BY TYPE AND DZONGKHAG, BHUTAN, AS ON 30 JUNE 2008

(Length in Km)

Dzongkhag	Express-way	National Highway	District Road	Feeder Road	Urban Road	Farm Road	Forest Road	Access Road	Powertiller track	Total	Percentage
Bumthang	0.0	136.0	0.0	33.0	1.7	74.2	47.8	24.3	0.0	317.0	5.9
Chhukha	0.0	229.9	0.0	42.0	15.1	24.9	30.9	170.7	21.0	534.5	10.0
Dagana*	0.0	0.0	87.0	29.5	1.5	43.1	0.0	2.7	13.0	176.8	3.3
Gasa	0.0	0.0	27.5	0.0	0.0	9.2	0.0	0.0	0.0	36.7	0.7
Ha	0.0	16.0	25.6	16.0	3.8	26.2	47.0	18.9	6.1	159.6	3.0
Lhuentse	0.0	0.0	45.0	54.8	1.5	72.7	7.1	3.2	9.0	193.3	3.6
Monggar	0.0	198.0	20.0	51.2	2.2	79.0	44.8	19.3	17.2	431.7	8.0
Paro	0.0	103.0	36.4	26.1	5.2	137.3	5.2	49.9	2.0	365.1	6.8
Pemagatshel	0.0	0.0	23.0	32.5	0.0	26.6	17.6	8.5	0.0	108.2	2.0
Punakha	0.0	9.0	33.0	40.5	4.4	90.9	59.0	14.0	10.4	261.2	4.9
Samdrup Jongkhar	0.0	73.8	50.0	17.0	7.6	55.8	11.5	18.4	0.0	234.1	4.4
Samtse	0.0	28.0	49.0	51.6	7.4	19.2	7.0	3.3	0.0	165.5	3.1
Sarpang	0.0	123.4	0.0	38.5	0.0	78.4	93.3	3.4	0.0	337.0	6.3
Thimphu	6.2	111.0	0.0	46.3	85.9	24.8	103.9	74.7	0.0	452.8	8.4
Trashigang	0.0	121.0	5.0	115.5	5.9	79.7	8.5	32.3	29.0	396.9	7.4
Trashi Yangtse	0.0	0.0	40.0	29.7	8.7	38.4	10.1	7.8	15.1	149.8	2.8
Trongsa	0.0	164.0	0.0	24.2	0.6	55.0	0.0	10.2	0.0	254.0	4.7
Tsirang	0.0	66.0	0.0	24.0	1.5	22.7	6.5	4.2	0.0	124.9	2.3
Wangdue Phodrang	0.0	133.0	2.5	82.9	3.0	44.2	26.6	67.7	14.0	373.9	7.0
Zhemgang	0.0	109.0	38.0	65.6	7.0	43.4	2.3	20.8	4.0	290.1	5.4
Bhutan	**6.2**	**1621.1**	**482.0**	**820.9**	**163.0**	**1045.7**	**529.1**	**554.3**	**140.8**	**5363.1**	**100.0**

Source: Department of Roads,MoWHS, Thimphu.

TABLE 7.3 NUMBER AND LENGTH OF MOTORABLE BRIDGES BY TYPE, BHUTAN, 2008

(Length in Km)

Type of bridges	Number	% by Number	Length (Km)	% by Length
RCT Beam	51	19.25	962.60	12.16
RC Slab	26	9.81	384.05	4.85
Pre-Stressed Concrete	6	2.26	351.00	4.43
Bailey bridge	116	43.77	3359.80	42.44
Bailey Suspension Bridge	1	0.38	310.97	3.93
Composite bridge	19	7.17	295.06	3.73
Composite arch bridge	1	0.38	48.00	0.61
Steel Hemilton	10	3.77	313.60	3.96
Submersible	7	2.64	193.50	2.44
RC Arch	3	1.13	265.00	3.35
Steel Pony Truss	4	1.51	190.00	2.40
Steel Truss/Grider	9	3.40	560.00	7.07
Steel Langer Arch	4	1.51	346.45	4.38
Multi Cell Box Culvert	2	0.75	48.00	0.61
Steel Arch Bridge	1	0.38	78.00	0.99
RC T-Girder	3	1.13	69.70	0.88
Fly Over	1	0.38	115.00	1.45
PT Slab	1	0.38	25.00	0.32
All bridges	**265**	**100**	**7915.73**	**100**
Total Permanent bridges	148	55.85	4244.96	53.63
Total Temporary(semi-permanent) bridges	117	44.15	3670.77	46.37
Total No of bridges	**265**	**100**	**7915.73**	**100**

Source: Bridge Division, DoR , MoWHS, Thimphu.

C M Y K

TABLE 7.4 NUMBER OF SUPENSION BRIDGES COMPLETED DURING I TO IX FIVE YEAR PLAN PERIODS BY DZONGKHAG

Dzongkhag	Plan periods						All Plans (I-IX)	% (I - IX)
	I - IV	V	VI	VII	VIII	IX		
Bumthang	1	7	3	4	2	3	20	4.57
Chhukha	3	5	1	3	2	3	17	3.88
Dagana	2	2	2	3	4	3	16	3.65
Gasa	0	0	2	2	2	1	7	1.60
Ha	3	6	1	3	2	1	16	3.65
Lhuentse	3	4	2	3	5	3	20	4.57
Monggar	9	5	2	5	6	6	33	7.53
Paro	3	8	3	2	1	3	20	4.57
Pemagatshel	2	7	2	3	4	3	21	4.79
Punakha	3	4	1	0	2	3	13	2.97
Samdrup Jongkhar	10	13	6	2	6	2	39	8.90
Samtse	10	14	2	1	2	3	32	7.31
Sarpang	9	8	5	0	5	2	29	6.62
Thimphu	0	1	3	3	1	3	11	2.51
Trashigang	7	12	2	3	8	7	39	8.90
Trashi Yangtse	3	6	4	3	3	3	22	5.02
Trongsa	4	6	3	3	2	3	21	4.79
Tsirang	6	4	1	2	2	1	16	3.65
Wangdue Phodrang	2	10	5	3	3	2	25	5.71
Zhemgang	1	5	4	4	4	3	21	4.79
Bhutan	**81**	**127**	**54**	**52**	**66**	**58**	**438**	**100.00**

Note: 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.

C M Y K

TABLE 7.5 NUMBER OF REGISTERED VEHICLES BY TYPE AND REGION, 2002 TO 2007

Region	Heavy	Medium	Light	Two Wheeler	Taxi	Earth mover	Others	All Types
2004	**2,964**	**919**	**13,359**	**6,583**	**1,785**	**472**	**658**	**26,740**
Thimphu	709	597	9,006	3,276	1,235	158	358	15,339
Gelephu	137	5	327	704	26	9	140	1,348
Phuntsholing	1,938	277	3,619	1,739	504	265	41	8,437
Samdrup Jongkhar	180	40	407	810	20	40	119	1,616
2005**	**4,352**	**..**	**15,374**	**7,138**	**2,050**	**509**	**491**	**29,914**
Thimphu	1,668	..	10,235	3,417	1,410	232	140	17,102
Gelephu	152	..	483	845	34	15	136	1,665
Phuntsholing	2,301	..	4,179	1,982	583	240	52	9,337
Samdrup Jongkhar	231	..	477	894	23	22	163	1,810
2006	**4184**	**363**	**17712**	**7931**	**2056**	**549**	**446**	**33241**
Thimphu	1729	7	11773	3499	1452	273	234	18967
Gelephu	159	5	537	859	39	8	35	1642
Phuntsholing	2061	351	4875	2056	538	262	69	10212
Samdrup Jongkhar	235	0	527	1517	27	6	108	2420
2007	**4494**	**520**	**19792**	**7464**	**2218**	**633**	**582**	**35703**
Thimphu	1837	53	13063	3601	1575	301	275	20705
Gelephu	162	7	572	795	44	9	19	1608
Phuntsholing	2174	409	5531	2120	569	281	86	11170
Samdrup Jongkhar	321	51	626	948	30	42	202	2220
2008	**4627**	**649**	**23687**	**7731**	**2481**	**725**	**759**	**40659**
Thimphu	1867	89	15242	3714	1748	316	393	23369
Gelephu	163	11	671	812	46	12	53	1768
Phuntsholing	2273	498	6985	2242	656	354	111	13119
Samdrup Jongkhar	324	51	789	963	31	43	202	2403

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

TABLE 7.6 NUMBER OF DRIVING LICENSES ISSUED BY REGION, 2008

Region	No. of Licenses
Thimphu*	2911
Phuentsholing	299
Gelephu	456
Samdrupjongkhar	410
Total	**4076**

Note: *includes 583 Professional Driving Licenses (PDL) issued during the year 2008
Source: Road Safety and Transport Authority, MOIC, Thimphu.

C M Y K

TABLE 7.7 NUMBERS OF PASSENGERS CARRIED & REVENUE EARNED BY DRUK AIR FLIGHTS BY AREA OF OPERATION, 2004 TO 2008

Area of operation	2004	2005	2006	2007	2008
Paro to Kolkata	4,990	6,933	7,359	7305	8,557
Kolkata to Paro	4,397	6,242	6,190	6470	6,932
Paro to Bangkok	10,879	13,642	15,642	17996	20,700
Bangkok to Paro	10,610	13,265	15,608	17656	20,508
Paro to Dhaka	n.a	n.a	136	642	910
Dhaka to Paro	n.a	n.a	108	899	966
Paro to Delhi	4,718	7,168	7,866	8325	10,619
Delhi to Paro	4,608	7,222	7,782	8180	9,620
Paro to Kathmandu	4,388	5,633	4,945	6251	8,015
Kathmandu to Paro	4,163	5,805	4,801	6378	8,192
Kathmandu to Delhi	2,687	4,333	7,432	9281	2,277
Delhi to Kathmandu	985	2,531	3,059	6727	1,530
Kolkata to Bangkok	2,693	9,602	10,934	6849	4,735
Bangkok to Kolkata	2,312	8,798	10,750	7414	5,033
Dhaka to Bangkok	n.a	n.a	123	2666	2352
Bangkok to Dhaka	n.a	n.a	91	1759	2020
Paro to Yangon	166	n.a	n.a	n.a	n.a
Yangon to Paro	127	n.a	n.a	n.a	n.a
Dhaka to Yangon	n.a	n.a	n.a	n.a	n.a
yangon to Dhaka	n.a	n.a	n.a	n.a	n.a
Gaya to Bangkok	n.a	n.a	3203	2748	2256
Bangkok to gaya	n.a	n.a	2954	2776	2546
Yangon to Bangkok	1196	n.a	n.a	n.a	n.a
Bangkok to Yangon	401	n.a	n.a	n.a	n.a
Paro to Gaya	418	515	711	852	650
Gaya to Paro	274	510	443	537	687
kolkata to Yangon	14	n.a	n.a	n.a	n.a
Yangon to kolkata	19	n.a	n.a	n.a	n.a
Total passengers	**6,005**	**92,199**	**110,137**	**121,711**	**119,105**
Revenue (Nu.in millions)	609.8	838.87	1184.24	1255.45	1168.6*

Source: Druk Air Corporation Ltd., Paro.
Note:* From 1 January to 31st December 2008 (Unaudited)

C M Y K

TABLE 7.8 NUMBER OF FLIGHTS MADE BY DRUK AIR BY AREA OF OPERATION, 2004 TO 2008

Area of operation	2004	2005	2006	2007	2008
Paro to Calcutta	275	266	267	239	199
Calcutta to Paro	260	268	265	240	199
Paro to Bangkok	267	264	394	376	376
Bangkok to Paro	271	266	390	375	384
Paro to Dhaka	0	n.a	18	87	89
Dhaka to Paro	0	n.a	18	83	79
Paro to Delhi	140	162	166	180	184
Delhi to Paro	139	162	161	185	185
Paro to Kathmandu	146	164	163	191	198
Kathmandu to Paro	152	165	164	188	186
Paro to Yangon	92	n.a	n.a	n.a	n.a
Yangon to Paro	101	n.a	n.a	n.a	n.a
Paro to Gaya	9	11	90	70	70
Gaya to Paro	9	11	94	72	75
Delhi to katmandu	137	160	155	178	160
katmandu to Delhi	122	148	154	171	158
Bangkok to kolkata	197	261	259	233	181
Kolkata to Bangkok	195	245	263	234	187
Gaya to Bangkok	n.a	n.a	93	69	70
Bangkok to Gaya	n.a	n.a	95	73	76
Dhaka to Yangon	n.a	n.a	n.a	n.a	n.a
Yangon to Dhaka	n.a	n.a	n.a	n.a	n.a
kolkata to Yangon	13	n.a	n.a	n.a	n.a
yangon to Kolkata	13	n.a	n.a	n.a	n.a
Dhaka to Bangkok	n.a	n.a	18	88	90
Bangkok to Dhaka	n.a	n.a	18	83	78
yangon to bangkok	96	n.a	n.a	n.a	n.a
Bangkok to Yangon	100	n.a	n.a	n.a	n.a
Gaya to Dhaka	n.a	n.a	n.a	14	n.a
Dhaka to Gaya	n.a	n.a	n.a	14	n.a
All sectors	**2734**	**2553**	**3245**	**3443**	**3,224**

Source: Druk Air Corporation Ltd., Paro.

C M Y K

TABLE 7.9 TELEPHONE CONNECTION CAPACITY BY EXCHANGE, 2004 TO 2008

Exchange (Switch type)	2004	2005	2006	2007	2008
Bubja(DRMASS)	n.a	n.a	128	128	128
Bartsham(DRMASS)	n.a	n.a	64	64	64
Basochu(DRMASS)	n.a	n.a	55	55	55
Bngtar(DAMA)	n.a	n.a	4	n.a	n.a
Chumey(SAU)	n.a	n.a	256	256	256
Chargarey(DRMASS)	n.a	n.a	42	64	64
Changmari(DRMASS)	n.a	n.a	128	128	128
Chapcha(DRMASS)	n.a	n.a	64	64	64
Dechencholing(ELU)	720	720	720	720	720
Damji(DRMASS)	n.a	n.a	30	30	30
Dramtse(DRMASS)	n.a	n.a	64	64	64
Deothang(SAU)	n.a	n.a	512	512	348
Dagana(DRMASS)	n.a	n.a	128	128	128
Dagana(VoIP)	n.a	n.a	400	400	n.a*
Drujegang(DRMASS)	128	128	64	64	64
Dagapela(DRMASS)	n.a	n.a	64	64	64
Damphu(RLU)	636	992	n.a	n.a	n.a
Damphu(E10)	n.a	n.a	992	992	992
Damphu(corVAN)	n.a	n.a	n.a	900	900
Damthang(SAU)	n.a	n.a	256	256	256
Gepshing(DRMASS)	n.a	n.a	128	n.a	n.a
Gepshing(RLU)	n.a	n.a	n.a	508	380
Gelephu(LS)	1572	1652	2164	2164	2148
Gelephu(corDECT)	n.a	n.a	1000	324	325
Gedu(CDOT)	n.a	n.a	672	n.a	n.a
Gedu(SAU)	n.a	n.a	n.a	640	640
Gomtu(SAU)	n.a	n.a	384	384	384
Gasa(DRMASS)	n.a	n.a	128	128	128
HAA(DRMASS)	532	532	n.a	n.a	n.a
HAA(RLU)	n.a	n.a	732	732	732
Jakar(RLU)	892	892	892	892	892
Jomotsangkha(EPOST)	n.a	n.a	108	n.a	n.a
Jomotsangkha(VoIP)	n.a	n.a	n.a	108	104
Jengkha(DRMASS)	n.a	n.a	64	64	64
Khasadrapchu(SAU)	n.a	n.a	384	384	384
Khaling(DRMASS)	n.a	n.a	128	128	128
Kanglung(DRMASS)	n.a	n.a	n.a	n.a	n.a
Kanglung(RLU)	540	508	n.a	n.a	n.a
Kanglung(E10)	n.a	n.a	1008	1008	1008
Kanglung(corVAN)	n.a	n.a	n.a	1550	1550
Lhuntse(DRMASS)	123	123	127	n.a	n.a
Lhuntse(SAU)	n.a	n.a	n.a	256	256
Lobesa(DRMASS)	n.a	n.a	128	128	128
Laya(EPOST)	n.a	n.a	8	1	1
Lingshi(DAMA)	n.a	n.a	4	n.a	n.a
Lingshi(VoIP)	n.a	n.a	n.a	4	4
Lhamoi Zhingkha(DAMA)	n.a	n.a	4	n.a	n.a
Mongar(RLU)	832	892	892	892	892
Mongar (corVAN)	n.a	n.a	n.a	900	900

Contd.

C M Y K

TABLE 7.9 (contd.) TELEPHONE CONNECTION CAPACITY BY EXCHANGE, 2004 TO 2008

Exchange (Switch type)	2004	2005	2006	2007	2008
Merak(EPOST)	n.a	n.a	8	1	1
Menjowong(EPOST)	n.a	n.a	8	1	1
Nganglam(DAMA)	n.a	n.a	4	n.a	n.a
Nganglam(SAU)	n.a	n.a	n.a	128	128
Pemagatshel(RLU)	376	504	504	504	504
Phontsholing(LS)	3832	6008	6008	6008	5624
Phuntsholing(corDECT)	n.a	n.a	560	400	400
Padechu(DRMASS)	n.a	n.a	20	n.a	n.a
Pasakha(SAU)	n.a	n.a	640	384	384
Paro(LS)	1784	2680	3192	3192	3192
Paro(corDECT)	n.a	n.a	1000	650	650
Punakha(RLU)	632	632	632	632	632
Panbang(DAMA)	n.a	n.a	104	n.a	n.a
Panbang(VoIP)	n.a	n.a	n.a	8	8
Rangjung(DRMASS)	n.a	n.a	128	128	128
Ramitey(DRMASS)	n.a	n.a	64	64	128
Simtokha(ELU)	720	720	720	720	720
Samdrupjongkhar(LS)	968	1140	1396	1396	1396
Samdrupjongkhar(corVAN)	n.a	n.a	n.a	850	850
Sinkhar Lauri(EPOST)	n.a	n.a	8	1	1
Sarpang(DRMASS)	256	256	n.a	n.a	n.a
Sarang(RLU)	n.a	n.a	892	892	892
Surey(DRMASS)	n.a	n.a	64	64	64
Sinchekha(SAU)	n.a	n.a	384	384	384
Samtse(LS)	892	1788	1788	1788	1772
Samtse(corVAN)	n.a	n.a	n.a	550	550
Sibsu(SAU)	n.a	n.a	384	384	384
Satsam(SAU)	n.a	n.a	512	512	512
Sombekha(EPOST)	n.a	n.a	8	1	1
Sakten(DAMA)	n.a	n.a	4	n.a	n.a
Thimphu(LS/INTS)	15464	18032	17376	18416	18416
Thimphu(corDECT)	1000	1000	4000	n.a	n.a
Thimphu(corVAN)	n.a	n.a	n.a	800	649
Trongsa(LS)	636	892	892	892	892
Tshangkha(DRMASS)	n.a	n.a	64	80	80
Trongsa(corVAN)	n.a	n.a	4000	650	650
Trashigang(LS)	1180	1404	1756	1756	1756
Tshenkherla(DRMASS)	n.a	n.a	128	128	128
Trashiyangtse(DRMASS)	128	128	128	128	256
Tangmachu(DRMASS)	n.a	n.a	64	64	64
Tala(DRMASS)	n.a	n.a	64	64	64
Tashijong(DRCS)	n.a	n.a	5	5	n.a
Tshimasham(RLU)	620	676	764	764	764
Tshimasham(CorDECT)	n.a	n.a	1000	250	250
VoIP	n.a	n.a	48	4	3
Wangdue(RLU)	764	976	n.a	n.a	n.a
Wangdue(E10)	n.a	n.a	1376	1376	1376
Wangdue(corVAN)	n.a	n.a		950	950

Contd..

C M Y K

TABLE 7.9 (contd.) TELEPHONE CONNECTION CAPACITY BY EXCHANGE, 2004 TO 2008

Exchange (Switch type)	2004	2005	2006	2007	2008
Wamrong(DRMASS)	n.a	n.a	128	128	128
Yusipang(DRMASS)	n.a	n.a	125	125	n.a
Yadi(DRMASS)	n.a	n.a	64	64	64
Yosel Tshe(DRMASS)	n.a	n.a	12	n.a	n.a
Zhemgang(RLU)	376	376	376	376	376
Zhemgang(corDECT)	1000	1000	1000	284	225
Zhemgang(corVAN)	n.a	n.a	n.a	500	119
Total capacity	36603	48295	59024	56702	61889

Source: Bhutan Telecom Corporation Ltd., Thimphu.
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,

TABLE 7.10 NUMBER OF TELEPHONE TRUNK CIRCUITS, BHUTAN, JAN TILL DEC 2008

Sector	Type of connection	Existing circuits
Thimphu INTS - London (BT)	Bothway	19
Thimphu INTS- Singapore (ST)	Bothway	8
Thimphu INTS - Japan (KDD)	Bothway	59
Thimphu INTS - Telco214(USA)	Bothway	30
Thimphu TLS - Intel.Gateway Switch	Bothway	91
Thimphu INTS - Nepal	Bothway	7
Thimphu INTS - Thailand	Bothway	29
Thimphu INTS - India	Bothway	90
Thimphu TLS - Phuntsholing	Bothway	243
Thimphu TLS - Trongsa	OG	45
Thimphu TLS - Trongsa	IC	45
Thimphu TLS - Gelephu	OG	30
Thimphu TLS - Gelephu	IC	30
Thimphu TLS- Trashigang	OG	n.a
Thimphu TLS- Trashigang	IC	n.a
Thimphu TLS - Samdrup Jongkhar	OG	15
Thimphu TLS - Samdrup Jongkhar	IC	w15
Thimphu TLS - Paro	Bothway	120
Thimphu TLS - Wangdue Phodrang	Bothway	91
Thimphu INTS - Wangdue Phodrang	Bothway	60
Thimphu TLS- Punakha	N/A	n.a
Thimphu TLS - Decholing	N/A	n.a
Thimphu TLS- Basochu	N/A	n.a
Thimphu TLS - Kasa Dapchu	N/A	n.a
Thimphu TLS- Yoesepang	N/A	n.a
Thimphu TLS - Lobesa	N/A	n.a
Thimphu TLS - VOIP National	Bothway	30
Thimphu TLS - VOIP International	Bothway	120
ThimphuTLS - Gasa	N/A	n.a
Thimphu TLS - Damjee (Gasa)	N/A	n.a
Thimphu TLS- Simtokha	N/A	n.a
Thimphu TLS- DAMA	N/A	n.a

Contd..

C M Y K

TABLE 7.10(contd..) NUMBER OF TELEPHONE TRUNK CIRCUITS, BHUTAN, JAN TILL DEC 2008

Sector	Type of connection	Existing circuits
Thimphu TLS- DAMA	N/A	n.a
Thimphu TLS- Thimphu corVAN	Bothway	60
Thimphu TLS-kanglung	Bothway	91
Thimphu TLS- Samtse	Bothway	60
Thimphu TLS- Damphu	Bothway	60
Thimphu TLS- Druknet	OG	300
Trongsa - Jakar	N/A	n.a
Trongsa - Zhemgang	N/A	n.a
Trongsa - Tshangkha	N/A	n.a
Trongsa - Bubja	N/A	n.a
Trongsa - Chumey	N/A	n.a
Trongsa - Gelephu	OG	30
Trongsa - Gelephu	IC	30
Trongsa - S/Jongkhar	N/A	n.a
Trongsa - S/Jongkhar	N/A	n.a
Trongsa - DAMA	N/A	n.a
Trongsa - DAMA	N/A	n.a
Trongsa -Zhemgang cor DECT	Bothway	30
Trongsa - Zhemgang cor VAN	Bothway	30
Trongsa - Trongsa cor VAN	Bothway	60
Trongsa - Kanglung	Bothway	60
Trashigang - Mongar	N/A	n.a
Trashigang - Tashi Yangtse	N/A	n.a
Trashigang - Yonphula	N/A	n.a
Trashigang - Khaling	N/A	n.a
Trashigang - Wamrong	N/A	n.a
Trashigang - Tshenkherla	N/A	n.a
Trashigang - Rangjung	N/A	n.a
Trashigang - Dremetse	N/A	n.a
Trashigang - Bartsham	N/A	n.a
Trashigang - Kanglung	Bothway	90
Trashigang - Yadi	N/A	n.a
Trashigang DAMA	N/A	n.a
Trashigang DAMA	N/A	n.a
Mongar - Luntse	N/A	n.a
Mongar - Tangmachu	N/A	n.a
Mongar - Gelpoishing	N/A	n.a
Kanglung- kanglung cor VAN	Bothway	60
Kanglung- Mongar cor VAN	Bothway	60
S/Jongkhar - Pemagatshel	N/A	n.a
S/Jongkhar - Deothang	N/A	n.a
S/Jongkhar - Kanglung	Bothway	60
S/Jongkhar - Tashigang	N/A	n.a
S/Jongkhar DAMA	N/A	n.a
S/Jongkhar DAMA	N/A	n.a
Jomoitshangkha DAMA	N/A	n.a
Nanglam DAMA	N/A	n.a
Bangtar DAMA	N/A	n.a
Gelephu - DAMA	N/A	n.a

Contd..

C M Y K

TABLE 7.10(contd..) NUMBER OF TELEPHONE TRUNK CIRCUITS, BHUTAN, JAN TILL DEC 2008

Sector	Type of connection	Existing circuits
Gelephu - Sarpang	N/A	n.a
Gelephu - Tsirang	Bothway	60
Gelephu - Surey	N/A	n.a
Gelephu - Gelephu corDECT	Bothway	30
Panbang DAMA	N/A	n.a
Tsirang - Dagana	N/A	n.a
Tsirang - Dagapela	N/A	n.a
Tsirang - Drukjegang	N/A	n.a
Tsirang - Tsirang corVAN	Bothway	60
Phuntsholing - Samtse	Bothway	60
Phuntsholing - Gedu	N/A	n.a
Phuntsholing - Pasakha	N/A	n.a
Phuntsholing - Remetey	N/A	n.a
Phuntsholing - Paro	Bothway	60
Phuntsholing - Samtse	Bothway	60
Phuntsholing - Phuntsholing corDECT	Bothway	60
Phuntsholing - Kolkata	OG	70
Phuntsholing - Kolkata	IC	20
Phuntsholing - Delhi	Bothway	60
Paro - Tsimatsham	N/A	n.a
Pare - Haa	N/A	n.a
Paro - Chapcha	N/A	n.a
Paro - Haa Damthang	N/A	n.a
Paro - Haa Jengkhana	N/A	n.a
Paro - Paro corDECT	Bothway	60
Paro - Tsimasham corDECT	Bothway	30
Thimphu B-Mobile MSC -PSTN Thimphu	Bothway	338
Thimphu B-Mobile MSC -PSTN Intl gateway switch	Bothway	120
Thimphu B-MobileMSC-PSTN Wangdue	Bothway	122
Samtse - DAMA	OG	n.a
Samtse - DAMA	IC	n.a
Samtse - Samtse corVAN	Bothway	61
Wangdue -Tsirang	Bothway	60
Wangdue -Kanglung	Bothway	60
Wangdue -wangdue corVAN	Bothway	60
Total trunk lines (National, International and DAMA)		**4417**

Source: Bhutan Telecom Corporation Ltd., Thimphu.

C M Y K

TABLE 7.11 NUMBER OF TRUNK LINES, CONNECTION CAPACITIES & SETS IN USE, 2004 TO 2008

Details	2004	2005	2006	2007	2008
Trunk lines	2,699	3,102	3,140	3,358	4,018
Satellite Communications	164	162	232	205	402
International Lines	86	96	168	205	402
Domestic (DAMA)	78	66	64	n.a	n.a
Digital Microwave	480	480	480	480	480
Digital Radio Concentrator System	15	15	15	15	15
DRMASS	120	120	120	120	120
VOIP	30	56	56	30	3
SDH	1,890	7,560	11,340	11,340	11,340
Connection capacity	39,036	48,295	59,024	56,702	55,750
Telephone sets in use	30,285	32,709	31,526	30,279	27,937
Cellular Mobile Subscribers	18,995	37,842	82,078	148,179	178,346

Source: Bhutan Telecom Corporation Ltd., Thimphu.

TABLE 7.12 NUMBER OF TELEPHONE TRUNK CALLS BY TYPE, 2004 TO 2008

Type of Call	2004	2005	2006	2007	2008
Domestic calls	17,626,815	22,692,205	25,784,563	24,421,096	19,324,867
International calls	1,860,705	1,877,931	1,949,680	1,899,478	1,266,838
India	1,578,465	1,613,460	1,686,267	1,660,127	1,247,812
Other	282,240	264,471	263,413	239,351	19,026
All calls	**21,348,225**	**26,448,067**	**29,683,923**	**28,220,052**	**21,858,543**

Source: Bhutan Telecom Corporation Ltd., Thimphu.

TABLE 7.13TELECOMMUNICATION TRAFFIC IN MINUTES AND REVENUE EARNINGS, BHUTAN, 2004 TO 2008

Type of Call	2004	2005	2006	2007	2008
Domestic calls (minutes)	38,394,147	64,676,091	70,995,238	50,325,711	37,002,667
International calls (minutes)	5,509,120	6,139,579	5,842,238	5,545,720	3,758,837.48
India	4,605,610	5,163,205	4,913,824	4,742,024	3,699,661.86
Other countries	903,510	976,374	928,414	803,696	59,175.62
Total calls (Domestic + International)	**43,903,267**	**70,815,670**	**76,837,476**	**55,871,431**	**40,761,504.48**
Revenue earnings (Nu. in Million)	**594.00**	**709.00**	**877.00**	**1,158.00**	**1,217.37**

Source: Bhutan Telecom Corporation Ltd., Thimphu.

C M Y K

TABLE 7.14 NUMBER OF COMMUNICATION FACILITIES, 2004 TO 2008

Postal infrastructure	2004	2005	2006	2007	2008
General Post Offices	2	2	2	2	2
Post Offices	10	34	41	41	41
Branch Post Offices	n.a	n.a	n.a	n.a	n.a
Agency Post Offices	33	7	0	0	0
Community Mail Offices	65	54	47	47	47
Telegraph or Fax Offices	n.a	n.a	35	37	37
Wireless Stations(a)	n.a	n.a	n.a	n.a	n.a
Total	**110**	**97**	**125**	**127**	**127**

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

TABLE 7.15 VOLUME OF POSTAL MAIL TRAFFIC BY DESTINATION, 2004 TO 2008

Type of service	2004	2005	2006	2007	2008
Domestic	955,292	852,314	720,830	823,970	925,425
International	559,769	722753	768,641	781,143	742,495
Dispatch	186,716	139,660	170,161	138,414	115,643
Receipt	373,053	583,093	598,480	642,729	626,852
Total mail items	**1,515,061**	**1,575,067**	**1,489,471**	**1,605,113**	**1,667,920**

Source:Bhutan Postal Corp. Ltd, Thimphu.

TABLE 7.16 VOLUME OF MAIL, BY TYPE OF ARTICLE AND DESTINATION, 2008

Type of mail	Actual Volume Total Domestic	International		
		Total	Inward	Outward
Letter-post items				
Ordinary letter	662,204	699,978	604,469	95,509
Registered items	86,925	23,523	11,694	11,829
Parcels	1,428	1,581	1,287	294
Express mail service (EMS)	26,556	9,344	5,426	3,918
Post Overnight Courier (POC)		6,986	3,537	3,449
Electronic mail				
Local Urgent Mail (LUM)	123,093			
Facsimile message	25,219	1,083	439	644
All mail items	**925,425**	**742,495**	**626,852**	**115,643**

Source:Bhutan Postal Corp. Ltd, Thimphu.

TABLE 7.17: NUMBER AND VALUE OF MONEY ORDER BY TYPE, BHUTAN, 2004 TO 2008

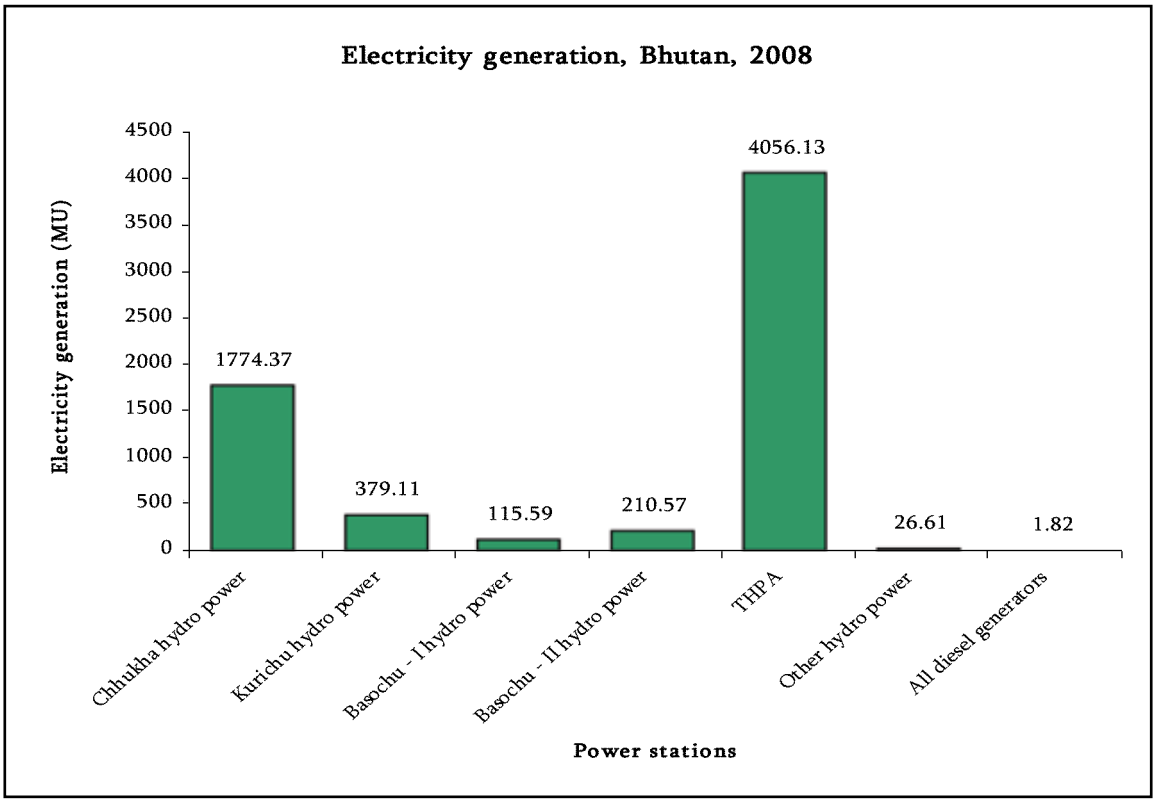
Type of service	2004	2005	2006	2007	2008
Total money orders					
Number of orders ('000)	33,381	41,971	43,927	69,403	76,139
Amount of orders ('000 Nu.)	82,296,406	89,481,948	115,114,821	160,583,947	174,737,274
Domestic money order					
Number of orders ('000)	23,140	28986	34,387	62,033	71,201
Amount of orders ('000 Nu.)	49,602,026	62,912,814	91,250,905.9	139,602,943	160,547,857
International money order					
Number of orders ('000)					
Amount of orders ('000 Nu.)	9,916	11,933	9,129	7,331	4,773
	32,435,814	26,219,504.4	23,739,977	20,518,826	13,717,519
Receipts					
Number of orders ('000)					
Amount of orders ('000 Nu.)	325	1,052	411	39	165
	258,566	349,629.6	123,938.1	462,178	471,898

Source:Bhutan Postal Corp. Ltd, 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. Earlier, electricity generation was based on small diesel generating and micro hydro stations, providing limited supply of electricity, which was supplemented by imports from India. With the commissioning of the first two units of Chhukha Hydro Projects in 1986, and the other two units in 1998 Bhutan substantially increased its electricity generation and became a significant exporter of electricity to India.

The Chhukha Hydro power with the installed capacity of 336 MW, the Kurichu Hydro power with 60 MW and Basachu Hydro Power with 64 MW generated 1774.374 MU, 379.108 MU and 326.155 MU respectively in 2007/08. With the commissioning of mega "Tala Hydro Power Project" with the installed capacity of 1020 MW, there is a substantial increase in the energy generation of the country. During the year 2007/08 it has generated 4056.129 Million Unit of electricity. In 2007/08, the total electricity generation was 6,564.20 Million Unit (MU). Domestic consumption of electricity has been marginal but may increase with the ongoing emphasis on Rural Electrification Programs. Other forms of energy such as the solar, wind and biomass energy are also being explored. Number of villages electrified increased from 1761 in 2006/07 to 1934 villages in 2007/08. This trend is a positive indication of the prospective reduction of dependence on fuel wood as a source of energy, in the near future.



C M Y K

TABLE 8.1 ELECTRICITY GENERATING STATIONS AND THEIR CAPACITIES, BHUTAN, FY 2005/06 & 2007/08

Generating stations (Dzongkhag)	2006/07				2007/08			
	Installed capacity (No. x MW)	Generating capacity (MW)	Peak generation (MW)	Energy generation (MU)	Installed capacity (No. x MW)	Generating capacity (MW)	Peak generation (MW)	Energy generation (MU)
Hydro stations (a)								
Chhukha	4 x 84.000	336.000	360.000	1830.419	4 x 84.000	360.000	360.000	1774.374
Chumey (Bumthang)	3 x 0.500	1.080	1.350	3.723	3 x 0.500	1.080	1.320	3.945
Gidakom (Thimphu)	5 x 0.250	0.816	1.225	5.862	5 x 0.250	0.816	0.890	5.645
Jushina (Thimphu)	4 x 0.090	0.270	0.270	1.336	4 x 0.090	0.270	0.240	1.238
Kurichu (Mongar)	4 x 15.000	60.000	60.000	374.449	4 x 15.000	60.000	60.000	379.108
Basochu..I (W/phodrang)	2 x 12.000	24.000	24.000	110.733	2 x 12.000	24.000	24.000	115.589
Basochu..II (W/phodrang)	2 x 20.000	40.000	40.000	203.524	2 x 20.000	40.000	40.000	210.566
THPA (Chhukha)	6 x 170.000	1122.000	1020.000	1979.617	6 x 170.000	1020.000	1122.000	4056.129
Rangjung (Trashigang)	2 x 1.100	2.200	1.110	2.709	2 x 1.100	2.200	2.140	8.213
Chenari (Trashigang)	3 x 0.250	0.500	0.220	0.644	3 x 0.250	0.500	0.000	0.000
Khaling (Trashigang)	3 x 0.000	Decommissioned due to flood			3 x 0.000	Decommissioned due to flood		
Khalanzi (Mongar)	3 x 0.130				3 x 0.130			
Wangduephodrang	3 x 0.100	0.260	0.240	0.515	3 x 0.100	0.260	0.210	0.434
		0.200	-	0.523		0.200	0.09	0.517
Micro hydels								
Lhuntse (Lhuntse)	2 x 0.060	0.080	-	0.160	2 x 0.060	0.080	0.05	0.084
Rukubji (W/phodrang)	1 x 0.040	0.040	-	0.068	1 x 0.040	0.040	0.03	0.068
Tangsibi (Trongsa)	1 x 0.030	0.030	-	0.039	1 x 0.030	0.030	0.02	0.039
Trongsa (Trongsa)	1 x 0.050	0.050	-	0.281	1 x 0.050	0.050	0.04	0.128
Bubja (Trongsa)	1 x 0.030	0.030	-	0.112	1 x 0.030	0.030	0.03	0.139
Tamshing (Bjakar)	1 x 0.030	0.030	-	0.067	1 x 0.030	0.030	-	0.075
Ura (Bjakar)	1 x 0.050	0.050	-	0.168	1 x 0.050	0.050	-	0.181
Yadi (Mongar)	1 x 0.000	Decommissioned due to grid supply			1 x 0.000	Decommissioned due to grid supply		
Kekhar (Zhemgang)	1 x 0.020	0.020	-	0.025	1 x 0.020	0.020	-	0.025
Surey (Sarpang)	1 x 0.070	0.070	0.150	0.010	1 x 0.070	0.070	-	0.010
Damphu (Tsirang)	2 x 0.100	0.200		0.918	2 x 0.100	0.200	0.150	0.918
Tingtibi (Zhemgang)	2 x 0.100	0.200	0.160	0.100	2 x 0.100	0.200	0.120	0.118
Dagana (Dagana)	2 x 0.100	0.200	-	0.846	2 x 0.100	0.200	0.160	0.828
Lingzhi (Thimphu)	1 x 0.008	0.008	0.210	-	1 x 0.008	0.008	-	-
Rongchu (Lhuentse)	2 x 0.100	0.200	-	1.031	2 x 0.100	0.200	0.180	1.197
Chendebji	1 x 0.070	0.070	-	0.583	1 x 0.070	0.070	-	0.495
Sengor (Mongar)	1 x 0.100	0.100		0.110	1 x 0.100	0.100	-	0.318

contd...

TABLE 8.1(contd.) ELECTRICITY GENERATING STATIONS AND THEIR CAPACITIES, BHUTAN, FY 2006/07 & 2007/08

Generating stations (Dzongkhag)	2006/07				2007/08			
	No of Machines	Generating capacity (MW)	Peak generation (MW)	Energy generation (MU)	No of Machine	Generating capacity (MW)	Peak gen-eration (MW)	Energy generation (MU)
Diesel generation stations								
Thimphu	7	-	-	0.004	7	-	-	0.003
Paro	1	-	-	-	1	-	-	0.000
Phuentsholing	3	0.000	-	0.371	3	0.000	-	0.286
Damphu	3	-	-	0.082	3	-	-	0.099
Trongsa	2	-	-	0.193	2	-	-	0.237
Gelephu	2	0.692	-	-	2	0.692	-	
Sarpang	2	0.505	-	0.002	2	0.505	-	0.001
Kalikhola	2	0.000	-	-	2	0.000	-	-
Zhemgang	3	-	-	0.001	3	-	-	0.003
Dagana	2	-	-	0.004	2	-	-	0.006
Trashigang	4	-	-	0.000	4	-	-	0.000
Bjakar	4	0.806	-	1.005	4	0.806	-	1.172
Mongar	1	-	-	0.001	1	-	-	0.001
Samdrup Jongkhar	2	-	-	0.005	2	-	-	0.000
Trashi Yangtse	1	-	-	0.007	1	-	-	0.006
Pema Gatshel	1	-	-	0.001	1	-	-	0.002
Samtse	1	-	-	0.000	1	-	-	0.000
Other diesel stations								
Penden Cement Authority Ltd.	2	1.800	-	0.006	2	1.800	-	0.002
Bhutan Board Products Ltd.	2	0.458	-	-	2	0.458	-	-
Chhukha Hydro Power Corp.	4	1.250	-	-	4	1.250	-	-
Bhutan Carbide & Chemical Ltd.	3	0.338	-	0.005	3	0.338	-	0.005
Bhutan Ferro Alloys Ltd.	2	0.684	-	0.141	2	0.684	-	0.148
Kurichu Project Authority	3	1.276	-	0.014	3	1.276	-	-
Basochu Project Authority	1	0.117	-	0.000	1	0.117	-	0.000
Tala Hydroelectric Project Authority	1	2.250	-	-	1	2.250	-	-
S.D.Eastern Bhutan Ferro Silicon Pvt.Ltd.					2	0.225	-	0.002

TABLE 8.2 TOTAL ELECTRICITY GENERATION AND SUPPLY, BHUTAN, 2003/04 TO 2007/08

Details	2003/04	2004/05	2005/06	2006/07	2007/08
Installed capacity (MW)	**437.82**	**477.82**	**477.26**	**1,497.36**	**1,497.36**
Chhukha 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
THPA	-	-	-	1020.00	1,020.00
Other hydro power	8.63	8.63	8.07	8.17	8.17
All diesel generators	9.19	9.19	9.19	9.19	9.19
Electricity generation (MU)	**2,528.45**	**2,354.70**	**2,647.72**	**4,520.25**	**6,564.20**
Chhukha hydro power	2038.39	1764.34	1931.91	1830.42	1,774.37
Kurichu hydro power	332.89	340.43	365.62	374.45	379.11
Basochu - I hydro power	131.84	116.31	117.83	110.73	115.59
Basochu - II hydro power	-	114.68	213.84	203.52	210.57
THPA				1979.62	4,056.13
Other hydro power	23.46	17.39	16.65	19.83	26.61
All diesel generators	1.87	1.55	1.87	1.68	1.82
Exports (MU)	1844.5	1623.66	1943.43	3643.71	5,429.12
Imports (MU)	18.72	21.04	34.35	11.06	7.25
Total energy requirement (MU)	702.9	752.34	738.30	887.76	1,140.49
Total energy sales (MU)	580.19	622.16	620.89	766.72	989.80
Energy losses (MU)	122.72	130.18	117.41	121.05	150.69
Percentage losses (%)	17.00	17.00	16.00	14.00	13.00
Peak system demand (MW)	112	120.00	128.00	157.00	194.00
Length of HT lines (33/11 KV)					
Overhead lines (km)	1995.57	1895.54	2084.34	2404.32	2,399.98
Underground lines (km)	28.11	40.4	43.03	49.76	57.53
Length of LT lines					
Overhead lines (km)	1918.57	2134.24	2272.49	3080.50	3,273.97
Underground lines (km)	65.79	70.37	229.44	194.62	165.77

Source:Department of Energy, MoEA, Thimphu

C M Y K

TABLE 8.3 MAJOR TRANSMISSION LINES FOR EVACUATING HYDRO POWER FROM CHHUKHA POWER PLANT, 2007 & 2008

Stations	2007				2008			
	400kv Line (Km)	220 KV line(Km)	132 KV line(Km)	66 KV line (Km)	400kv Line	220 KV line(Km)	132 KV line(Km)	66 KV line (Km)
Tala- Khogla	24.615 (D/C)	220 KV	-	-	24.615 (D/C)			
Tala- Malbasse - Pugli	49.528 (D/C)	line(Km)	-	-	49.528 (D/C)			
Chhukha - Birpara	-	71.280	-	-	-	71.280	-	-
Chhukha - Singhigoan	-	33.320	-	-	-	33.320	-	-
Chhukha - Simtokha	-	54.367	-	-	-	54.367	-	-
Indian Border - Singhigaon	-	2.500	-	-	-	2.500	-	-
Rurichu - Simtokha	-	36.430	-	-	-	36.430	-	-
Gelephug - Indian border	-	-	0.300	-	-	-	0.300	-
Gyleposhing - kilikhar	-	-	10.214	-	-	-	10.214	-
Kilikhar - Kanglung	-		29.807		-	-	29.807	-
Kilikhar - Lhuentse	-	-	43.100	-	-	-	43.100	-
Nangkor - Deothang	-	-	23.668	-	-	-	23.668	-
Gyleposhing - Nangkor	-	-	33.700	-	-	-	33.700	-
Nangkor - Nganglam	-	-	34.300	-	-	-	34.300	-
Nganglam - Tingtibi	-	-	83.200	-	-	-	83.200	-
Tingtibi - Gelephug	-	-	46.000	-	-	-	46.000	-
Chhukha - Gedu	-	-	-	20.100	-	-	-	20.100
Gedu - Phuntsholing	-	-	-	17.700	-	-	-	17.700
Chhukha - Confluence	-			36.700	-	-	-	36.700
Confluence - Simtokha	-	-	-	18.300	-	-	-	18.300
Confluence - Haa	-	-	-	33.522	-	-	-	33.522
Simtokha - Dechenchholing		-	-	11.900				11.900
		-						
Confluence - Paro	-	-	-	24.022	-	-	-	24.022
Simtokha - W/phodrang	-	-	-	26.023	-	-	-	26.023
Lobeysa - Basochhu	-	-	-	23.023	-	-	-	23.023
Phuntsholing - Gomtu	-	-	-	27.002	-	-	-	27.002
Phuntsholing - Singhigoan	-		-	8.380	-	-	-	8.380
Phuntsholing - Birpara	-			Redundant	-	-	-	Redundant
			-	-			-	
Khasadrapchu - Jemina	-	-	-	5.960	-	-	-	5.960
Hebisa - Rurichu	-	-	-	3.080	-	-	-	3.080
Tie- Line-Watsa	-			0.500				0.500
Total	**74.143 (D/C)**	**71.28(D/):126.617(S/C)**	**304.289**	**256.212**	**74.143 (D/C)**	**71.28(D/C):126.617(S/C)**	**304.289**	**256.212**

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

TABLE 8.4 DETAILS OF DOMESTIC ELECTRICAL ENERGY CONSUMPTION, 2003/04 TO 2007/08

Details	2003/04	2004/05	2005/06	2006/07	2007/08
Towns electrified (numbers)	40	46	68	71	71
Villages electrified (numbers)	1,064	1,210	1318	1761	1934
Consumers ('000)	52.9	57.5	64.3	71.1	81.18
Sales of energy (million Nu.)	539.0	647.7	620.9	766.7	989.80
Per capita energy consumption (Units)	957.2	1,184.8	1141.4	1362.4	1773.04

Source:Department of Energy, MoEA, Thimphu
Note: The per capita Energy consumption has increased from 2002/03 partly because of change in format which started including generation of CHPC, BHPC and KHPC. Per capita energy consumption for 2007/08 is based on population of 6,60,070

TABLE 8.5 CONSUMPTION OF ELECTRICITY BY TYPE OF CONSUMER, 2003/04 TO 2007/08

Type of consumer	2003/04	2004/05	2005/06	2006/07	2007/08
Total consumption (MU)	**560.78**	**618.55**	**612.59**	**764.07**	**989.80**
Domestic	76.72	90.58	97.51	114.08	127.76
Commercial & Government Offices	48.57	52.51	52.89	65.95	70.09
Industries	372.56	415.08	404.15	497.07	680.42
Bulk supply	62.11	59.32	56.80	84.71	109.49
Public lighting	0.83	1.05	1.25	2.26	2.04
Consumption in percentage	**100**	**100**	**100**	**100**	**100**
Domestic	13.68	14.65	15.92	14.93	12.91
Commercial & Government Offices	8.66	8.49	8.63	8.63	7.08
Industries	66.44	67.11	65.97	65.06	68.74
Bulk supply	11.08	9.59	9.27	11.09	11.06
Public lighting	0.15	0.17	0.20	0.30	0.21

Source:Department of Energy, MoEA, Thimphu

TABLE 8.6 MONTHLY REVENUE FROM SALE OF ENERGY FROM CHHUKHA HYDROPOWER, 2005 TO 2008

Month	2005			2006			2007			2008		
	Export	Internal	Total	Export	Internal	Total	Export	Internal	Total	Export	Internal	Total
January	43.58	14.65	58.23	53.82	17.33	71.15	113.29	6.49	119.78	97.18	7.38	104.55
February	29.8	13.73	43.52	31.87	15.17	47.03	99.15	5.74	104.89	71.50	6.71	78.21
March	55.36	14.03	69.39	26.09	16.57	42.66	142.07	6.29	148.36	87.55	6.14	93.68
April	93.35	12.76	106.12	97.63	14.56	112.19	206.94	4.31	211.25	156.10	5.05	161.15
May	196.25	13.18	209.43	249.11	15.16	264.27	257.95	3.82	261.77	201.72	5.20	206.91
June	195.95	12.99	208.93	430.02	14.63	444.65	368.99	3.74	372.73	515.68	5.28	520.96
July	502.78	16.31	519.09	513.48	15.99	529.47	542.25	3.99	546.24	580.67	5.32	585.99
August	519.91	14.24	534.15	585.61	3.29	588.90	590.46	3.89	594.35	590.57	4.30	594.87
September	486.68	14.76	501.44	578.57	3.75	582.33	576.65	3.85	580.50	554.57	5.66	560.24
October	480.43	15.8	496.23	479.56	4.65	484.20	469.03	4.40	473.43	460.82	6.27	467.09
November	235.63	16.4	252.03	250.94	6.11	257.05	234.06	5.55	239.61	248.22	6.89	255.10
December	110.5	17.42	127.92	165.99	6.22	172.20	148.30	6.65	154.95	159.89	7.18	167.06
Total	**2,950.22**	**176.26**	**3,126.48**	**3462.67**	**133.42**	**3596.09**	**3749.14**	**58.72**	**3807.86**	**3724.47**	**71.38**	**3795.86**

Source:Department of Energy, MoEA, Thimphu

CHAPTER 9 TOURISM

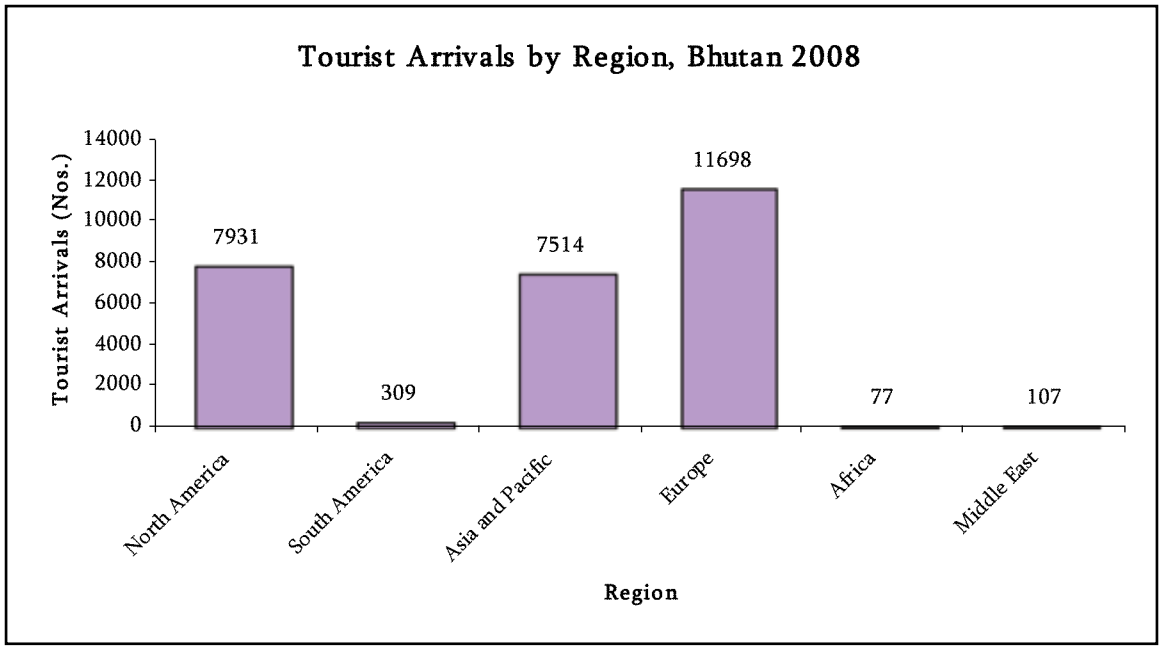
The tourism industry in Bhutan began in 1974. The government agency, erstwhile Bhutan Tourism Corporation, controlled tourism until its privatization in 1991. In 2008 there were 475 licensed tour operators. The potential as far as foreign exchange earnings are concerned is very high. The revenue generation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

The tourism industry in Bhutan enjoyed continued growth 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, there were 27636 tourists arrivals compared to 21094 in 2007. This accounts to a record growth rate of 31.01%.

Following similar trend from the previous years, tourist arrivals from the European region dominated in 2008. Country wise, the highest number of tourist came from the United States of America accounting to 25.1% of the total arrivals in 2008, followed by United Kingdom (10.0%), Japan (10%) and Germany (6.2%). There was also significant increase in visitors from other countries too.

There is unequal distribution of tourist arrival in Bhutan interms of time of their visit. Majority of tourist arrivals are in Spring (February-April) and Autumn (August-October) season.

"Culture and Nature" has always been the Unique Selling Proposition (USP) for the tourism industry of Bhutan. In 2008, major festivals in the country attracted significant number of visitors. There were 26426 tourists who visited Bhutan for culture, holidays and recreation purposes.



C M Y K

TABLE 9.1 ANNUAL TOURIST ARRIVALS BY REGION/CONTINENT, BHUTAN, 2004 TO 2008

Country	2004	2005	2006	2007	2008
Africa	**14**	**44**	**47**	**66**	**77**
Algeria	0	0	0	1	0
Egypt	0	0	0	1	0
Kenya	0	0	0	0	1
Liberia	0	0	0	0	1
Mauritius	0	0	0	1	3
Namibia	0	0	0	0	5
Somalia	0	0	0	0	1
South Africa	14	44	47	62	65
Swazi	0	0	0	0	1
Uganda	0	0	0	1	0
Asia & Pacific	**1685**	**2771**	**4264**	**5429**	**7514**
Australia	315	458	774	1181	1524
Bangladesh	0	0	0	0	1
Burma	0	0	0	0	5
Cambodia	0	0	0	3	1
China	78	234	362	504	1069
Fiji	0	0	0	1	0
Indonesia	0	0	0	46	36
Japan	1087	1556	1815	2008	2743
Korea	10	61	60	172	n.a
Kazakistan	0	0	0	0	1
Malaysia	17	72	49	94	221
Mongolia	0	0	0	1	0
Nepal	15	16	25	31	78
New Zealand	50	76	116	127	180
North Korea	..	..	..	..	43
Pakistan	0	0	0	1	1
Phillipines	21	21	72	42	72
Singapore	16	149	180	350	667
South Korea	..	..	..	..	97
Sri Lanka	0	0	0	4	26
Taiwan	46	10	35	132	114
Thailand	30	96	776	707	627
Uzbekistan	0	0	0	0	1
Vietnam	0	0	0	25	7
Europe	**3819**	**5457**	**7031**	**8777**	**11698**
Austria	223	319	484	443	472
Belarusia	0	0	0	0	2
Belgium	124	134	220	291	432
Bulgaria	0	0	0	2	13
Crotia	0	0	0	0	8
Cypriot	0	0	0	0	6
Czech	17	29	49	71	65
Denmark	85	56	85	170	127
Estonia	0	0	0	37	54
Finland	11	21	35	76	191
France	434	532	708	738	1402

contd...

C M Y K

TABLE 9.1(contd.) ANNUAL TOURIST ARRIVALS BY REGION/CONTINENT, BHUTAN, 2004 TO 2008

Country	2004	2005	2006	2007	2008
Germany	671	1042	1074	1456	1717
Greece	18	39	42	29	45
Hungary	0	0	0	112	54
Iceland	0	0	0	7	13
Ireland	24	31	51	56	98
Italy	462	529	648	614	751
Latvia	0	0	0	24	9
Lithuania	0	0	0	9	32
Luxembourg	5	9	8	24	14
Netherlands	163	329	389	497	915
Norway	10	58	104	116	109
Poland	47	52	133	252	233
Portugal	21	45	64	208	91
Russia	63	87	125	204	245
Romania	0	0	0	3	12
Slovakia	0	0	0	18	55
Slovenia	0	0	0	21	63
Spain	198	185	281	444	803
Sweden	61	84	103	166	177
Switzerland	173	363	427	396	597
Turkey	55	49	51	94	91
Ukraine	0	0	0	5	44
United Kingdom	954	1464	1950	2193	2758
Yugoslavia	0	0	0	1	0
Middle East	**130**	**237**	**440**	**169**	**107**
Israel	37	98	46	152	78
Others	93	139	394	17	29
North America	**3534**	**5060**	**5466**	**6488**	**7931**
Canada	257	296	375	588	852
Mexico	34	83	73	127	138
USA	3243	4681	5018	5773	6941
South America	**67**	**57**	**94**	**165**	**309**
Argentina	7	13	39	43	21
Brazil	60	44	55	79	249
Belize	0	0	0	2	0
Chile	0	0	0	5	15
Colombia	0	0	0	11	5
Costa Rica	0	0	0	1	0
Cuba	0	0	0	1	1
Ecuador	0	0	0	1	0
Hondurus	0	0	0	0	1
Peru	0	0	0	0	7
Venezuela	0	0	0	22	10
Total arrivals	**9,249**	**13,626**	**17,342**	**21,094**	**27,636**
Trekkers	507	613	766	903	1,210
Cultural	8,742	13,013	16576	20,191	26,426

Source: Tourism Council of Bhutan, Thimphu.

C M Y K

TABLE 9.2 TOURIST ARRIVALS BY COUNTRY OF RESIDENCE AND REVENUE RECEIPTS, BHUTAN, 2004 TO 2008

Region	2004	2005	2006	2007	2008
North America	3,534	5,060	5,466	6,488	7931
South America	67	57	94	165	309
Asia and Pacific	1,685	2,771	4,264	5,429	7514
Europe	3,819	5,457	7,031	8,777	11698
Africa	14	44	47	66	77
Middle East	130	237	440	169	107
All regions (persons)	**9,249**	**13,626**	**17,342**	**21,094**	**27,636**
Tourism revenue receipts					
Ngultrums (million)	589	821.00	1,083.60	1,234.30	1689.49
Or					
US Dollars (million)	13	18.54	23.92	29.85	38.83

Source: Tourism Council of Bhutan, Thimphu.

TABLE 9.3 NUMBER OF TOURIST ARRIVALS BY SEASON AND MONTH,BHUTAN, 2004 TO 2008

Season & Month	2004	2005	2006	2007	2008
Winter	**1,742**	**2,400**	**3,350**	**4,265**	**5,848**
November	1,198	1,443	2084	2,733	4,126
December	455	625	854	1,091	1,190
January	89	332	412	441	532
Spring	**2,493**	**4,261**	**5,257**	**6,019**	**7,996**
February	358	632	532	814	1311
March	831	2,164	1,381	2,539	3512
April	1,304	1,465	3,344	2,666	3173
Summer	**1,037**	**1,289**	**1,875**	**2,213**	**3,816**
May	448	700	999	1,045	1862
June	313	315	422	580	869
July	276	274	454	588	1085
Autumn	**3,977**	**5,676**	**6,860**	**8,597**	**9,976**
August	476	576	896	1,133	1386
September	1,248	1,688	2,187	2,952	2428
October	2,253	3,412	3,777	4,512	6162
Total Arrival	**9,249**	**13,626**	**17,342**	**21,094**	**27,636**

Source: Tourism Council of Bhutan, Thimphu.

C M Y K

TABLE 9.4 NUMBER OF TOURIST ARRIVALS BY PURPOSE OF VISIT, BHUTAN, 2004 TO 2008

Purpose	2004	2005	2006	2007	2008
Tour, holidays & recreation	8,742	13,013	16,576	20,191	26,426
Trekking & mountaineering	507	613	766	903	1,210
Total tourists	**9,249**	**13,626**	**17,342**	**21,094**	**27,636**

Source: Tourism Council of Bhutan, Thimphu.

TABLE 9.5 NUMBER OF TOURIST ARRIVALS BY MODE OF TRANSPORT, BHUTAN, 2004 TO 2008

Mode of transport	2004	2005	2006	2007	2008
By Air	6,666	11,715	13,968	16,053	22,563
By Road	2,583	1,911	3,374	5,041	5,073
Total arrivals	**9,249**	**13,626**	**17,342**	**21,094**	**27,636**

Source: Tourism Council of Bhutan, Thimphu.

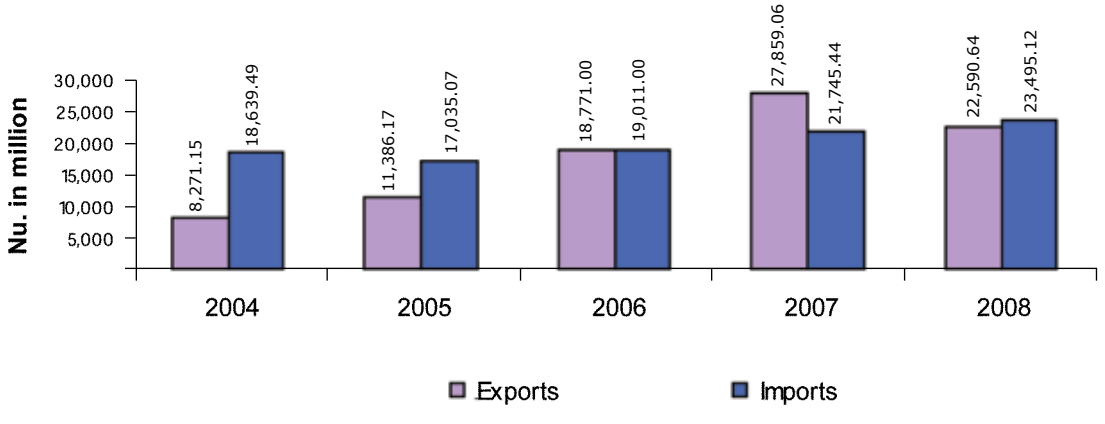
CHAPTER 10 FOREIGN TRADE AND BALANCE OF PAYMENT

Bhutan's economy is closely linked with India, though efforts towards diversification of products and markets are actively pursued. While economy links with other countries are limited, significant amount of aid have been received in recent years and this has enabled substantial increases in imports from third countries. Exports to third countries continue to be very low against higher imports, so reliance has to be placed on inflows of aid for the financing of imports.

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. Payments and receipts include imports and exports of merchandise; services and transfers (such as freight and insurance charges); expenditure by travelers; and capital movements (such as loans and investments). The trade balance measures the balance between imports and exports. Including services and transfers to provide a measure of the current account balance obtain a more comprehensive picture of the balance of payments situations.

The balance of payments statements also show how any negative current account balance is financed. In the case of Bhutan this is achieved through foreign aid. Any surplus of foreign aid over and above current account deficits means an increase in the foreign currency reserves of the country. 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.

Figure 10.1: Value of Exports and Imports (2004-2008)



C M Y K

TABLE 10.1: VALUE OF EXPORTS AND IMPORTS, BHUTAN, 2004 TO 2008

(Nu. In Million)

Trade	2004	2005	2006	2007	2008
Exports	8,271.15	11,386.17	18,771.00	27,859.06	22,590.64
India	7,761.56	9,969.83	14,488.00	22,723.72	21,480.02
Third Countries	509.59	1,416.34	4,283.00	5,135.34	1,110.62
Imports	18,639.49	17,035.07	19,011.00	21,745.44	23,495.12
India	10,193.90	12,795.08	13,053.00	15,099.54	17,339.55
Third Countries	8,445.59	4,239.99	5,958.00	6,645.90	6,155.57
Balance of trade	(10,368.34)	(5,648.90)	(240.00)	6,113.62	(904.48)
India	(2,432.34)	(2,825.25)	1,435.00	7,624.18	4,140.47
Third Countries	(7,936.00)	(2823.65)	(1,675.00)	(1,510.56)	(5,044.95)

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

TABLE 10.2(a): TOP TEN COMMODITIES OF EXPORTS, BHUTAN, 2008

Commodity	Million Nu.	Share %	Rank
Electrical energy	11,032.59	59.99	1
Ferro-silicon: containing weight more than 55 % of silicon	2,811.57	15.29	2
Carbides, whether or not chemically defined: Of calcium	852.57	4.64	3
Other: Of refined copper wire	769.47	4.18	4
Maganese and articles thereof, including waste and scrap	619.79	3.37	5
Portland pozzolana cement	569.02	3.09	6
Vegetable fats and oils and their fractions	527.20	2.87	7
Ordinary pozzolana cement	456.17	2.48	8
other of free cutting steel	400.33	2.18	9
Other (semi finished products of iron or non alloy steel)	350.89	1.91	10
Total	**18,389.60**	**100.00**	

TABLE 10.2(b): TOP TEN COMMODITIES OF IMPORTS, BHUTAN, 2008

Commodity	Million Nu.	Share %	Rank
Other light oils and preparations (HSD)	1807.66	257.01	1
Motor spirit (gasolene) including avaitation spirit (petrol)	703.35	100.00	2
Semi-miled or wholly miled rice, whether or not polished or glazedOf cylinder capacity exceeding 2500cc (Eg. Land Cruiser, Prado, Hylux etc..)	693.10	98.54	3
Ferrous products obtained by direct reduction of iron ore	680.99	96.82	4
Of cylinder capacity exceeding 1000cc but not exceeding 1500cc. (Eg. Santro, 110 Gets etc..)	678.95	96.53	5
Manganese ores and concentrates, including ferruginous maganese ores and concentrates with a maganese content of 20 % or more, calculated on the dry weight.	558.88	79.46	6
Coke and semi-coke of coal, of lignite or of peat, whether or not agglomerated:	555.45	78.97	7
retort carbon	480.05	68.25	8
Crude palmolein	453.77	64.52	9
others (wood charcoal)	430.99	61.28	10
Total	**7043.19**	**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, 2008

Country	Mill. Nu	Share(%)	Rank
India	17339.55	79.09	1
Japan	1098.89	5.01	2
Singapore	964.76	4.40	3
China	844.66	3.85	4
Thailand	410.76	1.87	5
Korea South	286.69	1.31	6
Germany	285.03	1.30	7
Indonesia	244.30	1.11	8
Sweden	240.67	1.10	9
Malaysia	207.14	0.94	10
Total	**21922.45**	**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, 2008

Country	Mill. Nu	Share(%)	Rank
India	21480.02	95.24	1
Bangladesh	632.41	2.80	2
Nepal	195.76	0.87	3
Hong Kong	105.26	0.47	4
Japan	65.97	0.29	5
Poland	18.79	0.08	6
United Arab Emirates	17.03	0.08	7
United Zstates of America	15.11	0.07	8
China	12.45	0.06	9
Maldives	11.44	0.05	10
Total	**22554.24**	**100.00**	

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

C M Y K

TABLE 10.5: OVERALL BALANCE OF PAYMENTS ESTIMATES, BHUTAN, FY 2003/04 TO 2007/08

Item	2003/04	2004/05	2005/06	2006/07	2007/08 (P)
A.Current Account	**(5,519.3)**	**(10,487.4)**	**(1,695.7)**	**6417.2**	**(1,024.6)**
Exports cif	7,157.5	9,457.1	13,959.8	25,333.8	24170.8
Imports, cif	(11,923.5)	(20,556.0)	(19,456.5)	(23271.90)	(27,092.4)
Trade balance	(4,766.0)	(11,099.0)	(5,496.7)	2061.8	(2,921.6)
Services	(2,213.4)	(1,753.1)	(573.0)	137	(1,554.8)
Credit	1,252.3	1,894.9	2,313.8	2661.2	2206.9
Debit	(3,465.7)	(3,647.9)	(2,886.8)	(2524.20)	(3,761.7)
Income	(739.6)	(707.7)	(312.5)	-9.6	(1,265.3)
Credit	436.3	537.2	813.3	1159.5	1416.8
Debit	(1,175.9)	(1,244.9)	(1,125.8)	(1169.10)	(2,682.2)
Current Transfers	2,199.7	3,072.3	4,686.5	4228.0	4717.2
Credit	4,442.3	5,492.8	7,313.7	6536.1	6783.3
Of Which Grants	4,287.0	5,348.6	7,181.5	6000.9	5935.4
Debit	(2,242.5)	(2,420.5)	(2,627.2)	(2308.10)	(2,066.2)
B.Capital and Financial Account	**8,801.6**	**9,473.3**	**5,847.1**	**5095.5**	**4808.1**
Capital Transfers (1)	5,072.0	4,586.4	1,751.5	1111.8	635.5
Foreign Direct Investment	157.0	401.5	273.9	3238.1	1198.1
Portfolio Investment	..	0.0	0.0	0.0	0.0
Foreign Aid (Loans net)	4,666.2	2,939.4	3,474.7	783.3	(517.2)
Other loans	363.3	89.2	347.0	(37.80)	2379.6
Other Investment	(1456.9)	1,456.9	0.0	0.0	1112.1
C.Net Errors and Omissions	**(2,912.2)**	**95.5**	**1,057.7**	**(6458.0)**	**(1891.70)**
D.Overall balance (2)	**370.1**	**(918.6)**	**5209.1**	**5054.7**	**1891.8**

Notes: Figures within bracket indicate deficit (-).
(1) Grants for the Tala project have been reclassified from current to capital transfers as per IMF standards.
(2) Overall Balance is the Change in Reserves.
Source : Royal Monetary Authority of Bhutan, Thimphu

C M Y K

TABLE 10.6: GROSS INTERNATIONAL RESERVES, BHUTAN, 2004/05 TO 2008/09

Item	2004/05	2005/06	2006/07	2007/08	2008/09
1.Rupee reserves	3,578.3	3,127.7	769.60	3,965.3	628.1
Royal Monetary Authority of Bhutan	2,069.7	1,507.4	136.3	2,554.0	118.4
Bank of Bhutan Ltd.	1,079.4	938.9	387.4	1,148.8	373.0
Bhutan National Bank Ltd.	429.1	681.4	245.9	262.4	136.7
2.Convertible currency reserves	284.4	410.9	581.6	593.9	735.4
Royal Monetary Authority of Bhutan (a)	253.5	364.8	502.7	549.8	711.2
Bank of Bhutan Ltd.	21.0	29.6	47.3	31.1	7.5
Bhutan National Bank Ltd.	9.9	16.5	31.5	13.0	16.7
3.Total reserves(1+2)	**366.5**	**478.8**	**600.4**	**694.5**	**748.3**
4.Total reserves	9.3	13.6	13.3	13.3	19.9
Rupee reserves	3.5	2.7	0.6	2.9	0.4
Convertible currecny reserves	17.9	40.**0**	49.9	48.8	83.8

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 reservesm for 2004/2005 onwards have been revised due to change in classification as of may 2005. Trade figures for the last two years have been revised affecting the import cover of reserves.

Source : Royal Monetary Authority of Bhutan, Thimphu.

TABLE 10.7 MONTHLY AVERAGE EXCHANGE RATES, NGULTRUMS PER US $, 2004 TO 2008

Month	2004	2005	2006	2007	2008
January	45.46	43.76	44.40	44.33	39.37
February	45.27	43.68	44.33	44.16	39.73
March	45.02	43.69	44.48	44.03	40.36
April	43.93	43.74	44.95	42.15	40.02
May	45.25	43.49	45.41	40.78	42.13
June	45.51	43.58	46.06	40.77	42.82
July	46.04	43.54	46.46	40.41	42.84
August	46.34	43.63	46.54	40.82	42.94
September	46.10	43.92	46.12	40.34	45.56
October	45.78	44.82	45.47	39.51	48.66
November	45.13	45.73	44.85	39.44	49.00
December	43.98	45.64	44.54	39.44	48.63
Calendar year average	45.32	44.1	45.31	41.35	43.51
	2003/04	**2004/05**	**2005/2006**	**2006/2007**	**2007/2008**
Fiscal year average	45.41	44.61	44.74	44.19	40.37

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

C M Y K

CHAPTER 11 MONEY, BANKING AND FINANCE

Until recent times most economic transactions in Bhutan were carried out on the basis of barter arrangements. The widespread use of money commenced during the 1960s with the expansion of trade with India and the inflow of development assistance. The Indian Rupee was used till 1974 when the Royal Government issued its first currency notes the Ngultrum. Since then, the monetary section has grown rapidly resulting in the dramatic economic development and improvement in transport and communication, planned urbanization in spite of the fact that barter economy still remains in some part of the country. The monetary sector in Bhutan comprises the Royal Monetary Authority (Bhutan's Central Bank); the Bank of Bhutan and the Bhutan National Bank. The non-bank financial institutions are the Royal Insurance Corporation of Bhutan and the Bhutan Development Finance Corporation, which was established during 1988 to provide long-term loans for development purposes.

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

C M Y K

TABLE 11.1: MONETARY SURVEY: ROYAL MONETARY AUTHORITY, BHUTAN NATIONAL BANK AND BANK OF BHUTAN, 2004 TO 2008

(Nu. in Million)

Item	2004	2005	2006	2007	2008
Assets total	23,045.40	26,772.20	29,849.40	38,602.50	46,906.30
Reserves	17,327.30	21,369.00	24,425.40	27,888.30	36,081.88
Foreign Assets	17,327.30	21,369.00	24,425.40	27,522.10	35,684.30
Rupee	5,446.60	4,779.50	3,786.00	4,024.70	3,471.11
Others	11,880.80	19,349.50	20,639.40	23,497.40	32,213.16
Domestic Credit	5,718.00	5,403.10	5,424.00	10,714.20	10,824.40
Claims on Government. (Net)	(936.30)	(2,715.00)	(5,183.90)	(2,955.00)	(7,417.90)
Claims on Government Corps	1,308.80	1,228.00	1,268.80	1,188.80	1,054.01
Claims on Joint Corps.	135.80	109.30	142.80	383.40	365.93
Claims on private sector	4,963.40	6,462.00	8,658.30	11,528.90	16,267.17
Claims on NMFIs(1)	246.30	319.00	537.90	568.00	555.22
Liabilities total	23,045.40	26,772.20	29,849.40	38,602.50	46,906.30
Broad money (M2)	16,599.50	18,569.20	20,983.70	27,670.00	31,384.40
Narrow Money (M1)	8,053.80	8,969.60	10,338.10	17,474.90	16,233.40
Nu. Outside Banks	2,070.70	2,404.40	2,762.50	3,229.10	3,839.10
Demand Deposits	5,983.10	6,565.20	7,575.60	14,245.80	12,394.30
NMFI Deposits	0.0	0.0	0.00	0.00	0.00
Quasi Money (2)	8,545.70	9,599.50	10,645.50	10,195.10	15,151.00
Capital accounts	2,029.40	3,087.60	3,312.50	4,018.80	4,272.40
Other items(net)	6,444.10	8,202.10	8,831.80	9,167.10	14,521.90

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.

C M Y K

TABLE 11.2: FINANCIAL DETAILS OF ROYAL INSURANCE CORPORATION OF BHUTAN, 2004 TO 2008

(Nu. in Million)

Item	2004	2005	2006	2007	2008
Assets total	1428.4	1657.6	1773.0	2,030.7	2,600.7
Reserves	47.6	47.1	71.0	98.6	332.9
Foreign Assets	3.6	9.6	10.7	7.5	31.1
Rupee	0.1	0.1	0.0	0.0	0.0
Others	3.5	9.5	10.6	7.5	31.1
Domestic Credit**	1369.0	1592.8	1633.2	1,916.5	2,227.3
Claims on Government (Net)	..	..	0.0	0.0	0.0
Claims on Government Corps.	..	..	0.0	0.0	0.0
Claims on Joint Corps.	20.8	14.9	18.2	37.3	46.1
Claims on private sector	1345.2	1574.9	1611.9	1,867.3	2,178.1
Claims on NFIs	3.0	3.0	3.0	3.0	3.0
Claims on DMBs	8.1	8.1	58.1	8.1	9.4
Liabilities total	1428.4	1657.6	1773.0	2,030.7	2,600.7
General Insurance reserve funds	0.0	0.0	0.0	0.0	0.0
Life fund	87.2	116.9	153.6	199.0	261.4
Government employee provident funds	73.8	93.8	117.7	141.4	183.4
Group Insurance Fund	210.7	233.2	253.9	303.8	206.1
Credit from DMB	94.5	0.0	172.4	0.0	0.0
Unit Trust of Bhutan fund	0.0	0.0	0.0	0.0	0.0
Capital accounts	306.4	96.0	445.1	531.5	644.1
Other items (net)	255.7	1117.6	330.3	375.1	525.7

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

TABLE 11.3: FINANCIAL DETAILS OF BHUTAN NATIONAL BANK, 2004 TO 2008

(Nu. in Million)

Item	2004	2005	2006	2007	2008
Assets total	6519.1	7474.7	9553.0	10,189.8	15,704.4
Reserves with RMA	1221.9	1857.9	2210.9	1,595.5	5,232.4
Foreign Assets	773.9	1007.6	1707.6	790.8	754.5
Rupee	540.4	370.1	448.9	265.1	290.9
Others	233.5	637.5	1258.7	525.8	463.6
Domestic Credit	4523.3	4609.2	5634.6	7,803.4	9,717.5
Claims on Government	864.4	120.0	0.0	0.0	59.3
Claims on Government Corps	590.7	576.1	635.2	608.5	527.0
Claims on Joint Sector	7.6	7.6	7.6	7.6	7.6
Claims on private sector	2966.8	3819.0	4988.0	7,183.6	9,119.9
Claims on NBFIs	93.8	86.9	3.7	3.7	3.7
Liabilities total	6519.1	7474.7	9553.1	10,189.8	15,704.4
Demand Deposits (Current and saving Deposits)	1008.4	1060.0	3251.3	3,659.7	3,125.8
Time Deposits	3730.9	4162.1	6020.2	4,507.1	9,862.9
Foreign currency Deposits	81.1	154.2	320.5	351.4	259.4
Central Govt. Deposits**	840.7	951.3	0.0	0.0	0.0
Credit from RMA (b)	0.0	0.0	0.0	0.0	0.0
Capital accounts	742.6	836.9	919.1	1,125.1	1,518.1
Other items (net)	115.5	310.1	173.7	1,678.2	938.2

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

C M Y K

TABLE 11.4: MONEY AND BANKING DATAILS OF BHUTAN DEVELOPMENT FINANCE CORPORATION, 2004 TO 2008

(Nu. in Million)

Item	2004	2005	2006	2007	2008
Assets total	1,256.0	1,394.1	1,793.0	2,106.8	2,764.5
Reserves	93.2	66.6	131.3	66.6	139.9
Foreign assets	0.0	0.0	0.0	0.0	22.6
Rupees	0.0	0.0	0.0	0.0	22.6
Others	0.0	0.0	0.0	0.0	0.0
Domestic Credit*	1,152.9	1,327.5	1,581.7	2,039.7	2,502.0
Claims on Government	0.0	0.0	0.0	0.0	0.0
Claims on Government Corporations	0.0	0.0	0.0	0.0	0.0
Claims on joint Corporations	18.0	15.5	9.6	3.0	0.9
Claims on private sector	1,134.8	1,312.0	1,572.1	2,036.7	2,501.1
Claims on DMBs(a)	10.0	0.0	80.0	0.6	100.0
Claims on other NMFIs(b)	0.0	0.0	0.0	0.0	0.0
Liabilities total	1,256.0	1,394.2	1,793.0	2,106.8	2,764.5
Foreign liabilities	320.3	301.4	278.8	252.7	265.0
Credit from RMA	0.0	0.0	0.0	0.0	0.0
Credit from DMB(a)	89.9	83.0	374.6	565.0	594.0
Credit from other NMFIs	90.0	160.0	150.0	180.0	665.0
Grants	50.0	50.0	50.0	50.0	0.0
Capital account	507.9	590.3	693.8	767.8	869.3
Other items net	198.0	209.5	245.7	291.4	341.7

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 11.5: MONEY AND BANKING OF ROYAL MONETARY AUTHORITY OF BHUTAN, 2004 TO 2008

(Nu. in Million)

Item	2004	2005	2006	2007	2008
Assets total	13,933.6	20,664.8	18,510.7	25,986.2	33,768.3
Foreign assets	13,000.5	19,796.1	18,397.7	24,659.8	33,636.9
Indian rupee	2,709.6	2,539.7	200.8	2,554.0	2,291.9
Convertible Foreign Currency (Including Gold)	10,290.9	17,256.4	18,197.0	22,105.7	31,345.0
Claims on deposit money banks	895.4	768.3	103.1	157.4	114.6
Claims on Government	37.0	100.0	0.0	0.0	0.0
Claims of private sector	0.7	0.5	9.9	11.5	16.8
Claims on NMFIs	0.0	0.0	0.0	0.0	0.0
Liabilities total	13,933.6	20,664.8	18,510.7	25,986.2	33,768.3
Reserve money	9,222.6	12,732.9	12,284.8	14,516.8	15,525.3
Currency outside banks	2,070.7	2,404.4	2,762.5	3,229.1	3,839.1
Foreign Liabilities	0.0	0.0	0.0	0.0	0.0
Rupee	0.0	0.0	0.0	0.0	0.0
Others	0.0	0.0	0.0	0.0	0.0
Government deposits	1,087.6	835.2	1,495.7	2,955.0	7,477.2
RMA Bills Outstanding	200.0	100.0	100.0	2,000.0	1,000.0
Capital Account	205.8	1,058.2	1,039.9	1,437.7	946.1
Other items (net)	3,217.6	5,938.6	3,590.3	5,076.7	8,819.8

Source: Royal Monetary Authority of Bhutan, Thimphu.

C M Y K

TABLE 11.6: MONEY AND BANKING, BANK OF BHUTAN, 2004 TO 2008

(Nu. in Million)

Item	2004	2005	2006	2007	2008
Assets total	13,013.2	14,404.5	16,930.9	18,431.2	19,645.0
Reserve with RMA	5,386.2	7,565.9	7,647.5	10,139.2	9,387.2
Foreign assets	3,552.9	3,009.8	4,320.0	2,437.7	1,690.5
Rupee	2,196.6	1,869.8	3,136.3	1,205.6	888.3
Other	1,356.4	1,140.0	1,183.7	1,232.1	802.2
Claims on Government	1,079.4	200.0	0.0	0.0	0.0
Claims on Government's corpns.	718.1	652.2	633.5	580.3	527.0
Claims on joint's Corporations	128.2	101.8	135.3	375.8	358.3
Claims on private sector	1,996.0	2,642.5	3,660.4	4,333.9	4,333.9
Claims on NMFIs	152.5	232.4	534.2	564.3	551.5
Liabilities total	13,013.2	14,404.5	16,930.9	18,431.2	19,645.0
Demand deposit (a)	4,974.7	5,505.0	7,671.3	11,718.0	9,271.4
Time deposit	4,226.2	4,934.6	5,366.3	4,736.7	4,218.5
Foreign currency deposits	507.6	348.6	411.4	600.0	810.1
Foreign liabilities	..	..	0.0	0.0	0.0
Rupee	..	..	0.0	0.0	0.0
Other	..	..	0.0	0.0	0.0
Government deposits*	988.8	1,348.8	0.0	0.0	0.0
Credit from RMA	..	..	0.0	0.0	0.0
Capital accounts	1,081.1	1,192.5	1,353.6	1,456.0	1,808.2
Other items (net)	1,234.9	1,075.0	2,128.3	(79.5)	3,536.7

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 asr 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: INVESTMENTS OF FINANCIAL INSTITUTIONS BY INDUSTRY, AMOUNTS OUTSTANDING, 2004 TO 2008

(In Million Nu.)

Item	2004	2005	2006	2007	2008
Agriculture	**201.8**	**211.6**	**242.5**	**289.1**	**573.5**
Bank of Bhutan	1.5	0.9	0.9	1.2	1.1
RICB	1.8	1.9	1.9	1.7	0.0
BDFC	198.6	208.8	239.8	286.2	572.4
Bhutan National Bank	0.0	0.0	0.0	0.0	0.0
Service and Tourism**	**1,776.0**	**1,084.6**	**1,663.6**	**2,422.9**	**2,958.9**
Bank of Bhutan	1,188.9	429.4	883.3	1,068.7	1,312.1
RICB	144.3	158.1	125.7	74.8	70.4
BDFC	307.2	324.5	380.2	647.1	631.5
Bhutan National Bank	135.6	172.7	274.5	632.3	944.9

Contd..

C M Y K

TABLE 11.7: (contd..) INVESTMENTS OF FINANCIAL INSTITUTIONS BY INDUSTRY, AMOUNTS OUTSTANDING, 2004 TO 2008

(In Million Nu.)

Item	2004	2005	2006	2007	2008
Manufacturing	**2,100.7**	**1,701.4**	**2,278.4**	**3,039.3**	**4,364.4**
Bank of Bhutan	462.6	662.1	1,029.9	1,221.5	1,906.3
RICB	118.7	121.8	157.6	205.2	271.0
BDFC	217.5	235.5	270.5	323.0	425.6
Bhutan National Bank	1,301.8	682.0	820.3	1,289.6	1,761.5
Building and construction	**2,653.9**	**3,521.2**	**4,473.7**	**5,380.4**	**5,768.2**
Bank of Bhutan	542.5	700.0	998.2	1,277.8	1,497.6
RICB	553.5	704.8	676.7	692.9	723.4
BDFC	364.5	455.2	500.3	440.1	370.4
Bhutan National Bank	1,193.4	1,661.2	2,298.5	2,969.6	3,176.8
Trade and commerce	**1,276.2**	**1,559.7**	**1,925.4**	**2,681.7**	**3,772.5**
Bank of Bhutan	480.3	562.6	672.4	830.5	954.8
RICB	364.4	400.4	435.5	598.8	690.4
BDFC	48.6	69.1	114.0	173.2	285.1
Bhutan National Bank	382.8	527.6	703.5	1,079.1	1,842.2
Transport (Heavy)	**392.0**	**373.6**	**346.2**	**440.0**	**580.5**
Bank of Bhutan	251.6	209.7	161.0	136.5	209.2
RICB	39.6	44.5	38.8	66.3	111.5
BDFC	11.7	28.6	47.6	108.3	117.1
Bhutan National Bank	89.2	90.7	98.8	128.9	142.7
Transport (Light)	**404.0**	**457.8**	**506.6**	**584.6**	**744.9**
Bank of Bhutan	189.8	230.5	266.2	273.3	337.6
RICB	41.6	45.2	58.2	65.8	86.9
BDFC	0.0	0.0	0.0	0.0	0.0
Bhutan National Bank	172.6	182.1	182.2	245.5	320.4
Personal loans	**733.8**	**860.1**	**1,077.9**	**1,404.2**	**2,746.7**
Bank of Bhutan	141.5	194.6	292.2	377.6	1,716.5
RICB	62.4	73.9	96.6	148.2	218.7
BDFC	3.0	3.0	19.4	39.0	69.9
Bhutan National Bank	526.9	588.5	669.7	839.5	741.6
Staff loan	**54.7**	**67.1**	**79.6**	**108.7**	**324.9**
Bank of Bhutan	37.9	51.2	64.0	74.4	138.9
RICB	0.6	0.3	0.1	0.1	0.1
BDFC	0.0	0.0	0.0	20.9	28.7
Bhutan National Bank	16.3	15.6	15.4	13.2	157.2
EDP loans	**5.6**	**4.9**	**5.5**	**7.1**	**7.4**
Bank of Bhutan	5.0	3.4	3.5	4.2	3.8
RICB	0.2	0.2	0.4	0.3	0.6
BDFC	0.0	0.0	0.0	0.0	0.0
Bhutan National Bank	0.4	1.3	1.7	2.6	3.0
Small Business and Artisan Schemes	**6.0**	**3.2**	**2.1**	**2.1**	**1.6**
Bank of Bhutan	6.0	3.2	2.1	2.1	1.6
RICB	0.0	0.0	0.0	0.0	0.0
BDFC	0.0	0.0	0.0	0.0	0.0
Bhutan National Bank	0.0	0.0	0.0	0.0	0.0

Contd..

C M Y K

TABLE 11.7: (contd..) INVESTMENTS OF FINANCIAL INSTITUTIONS BY INDUSTRY, AMOUNTS OUTSTANDING, 2004 TO 2008

(In Million Nu.)

Item	2004	2005	2006	2007	2008
Loan Against Shares	**52.8**	**42.3**	**46.3**	**93.5**	**118.0**
Bank of Bhutan	0.7	0.7	7.8	4.9	6.8
RICB	0.6	0.4	0.4	21.1	13.1
BDFC	0.0	0.9	8.3	0.0	0.0
Bhutan National Bank	51.4	40.2	29.8	67.5	98.1
Others	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Bank of Bhutan	0.0	0.0	0.0	0.0	0.0
RICB	0.0	0.0	0.0	0.0	0.0
BDFC	0.0	0.0	0.0	0.0	0.0
Bhutan National Bank	0.0	0.0	0.0	0.0	0.0
Total	**9657.5**	**9887.4**	**12647.8**	**16,453.4**	**21,961.5**

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 11.8: INTEREST RATES OF DEPOSITS IN FINANCIAL INSTITUTIONS, 2004 TO 2008

Type of deposit	2004	2005	2006	2007	2008
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
c) 2 years to less than 3 years	6.0	6.0			
d) More than 3 years	7.0	7.0	7.0	7.0	7.0
For Institutions & Companies					
(46 days < 1 Year)	3.0	3.0	2.0	2.0	2.0

Source: Bank of Bhutan,Main Branch, Phuntsholing

C M Y K

TABLE 11.9: INTEREST RATES AND REPAYMENT PERIOD BY SECTOR AND TYPE OF LOAN, FINANCIAL INSTITUTIONS, BHUTAN, 2006 TO 2008

Sector	2006		2007		2008	
	Interest Rate (% p.a)	Repayment period (Years)	Interest Rate (% p.a)	Repayment period (Years)	Interest Rate (% p.a)	Repayment period (Years)
Export finance						
(convertible currency areas)**	13.00	0.5	13.00	0.5	13.00	0.5
(convertible currency areas)***	14.00	0.5	14.00	0.5	14.00	0.5
General trade	13.75	1	13.75	1	13.75	1
Buses and trucks						
Term Loan	13.00	5	13.00	5	13.00	5
Working Capital	15.00	1	15.00	1	15.00	1
Other passanger vehicles	14.00	5	14.00	5	14.00	5
Agriculture and Livestock	13.00	10	13.00	10	13.00	10
Manufacturing Industry						
Term Loan	12.00	10	12.00	10	12.00	10
Working Capital	13.00	1	13.00	1	13.00	1
Service Industries *						
Term Loan	10.00	10	10.00	10	10.00	10
Working Capital	13.00	1	12.00	1	12.00	1
Personal loans	15	3	15.0	3	15.0	3
Equity finance	13	5	13.0	5	13.0	5
Housing						
New Construction	10.00	10-20 yrs	10.00	10-20 yrs	10.00	10-20 yrs
Repair/Renovation	10.00	10-20 yrs	13.00	10-20 yrs	13.00	10-20 yrs
Consumer Loans	12.00	5	12.00	5	12.00	5

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.

C M Y K

TABLE 11.10: ROYAL SECURITIES EXCHANGE OF BHUTAN LTD NUMBER OF SHAREHOLDERS, BHUTAN, 2004 TO 2008

(In Numbers)

Company	2004	2005	2006	2007	2008
Bhutan Beverages & Company Ltd.	4,407	4,372	4372	..	..
Bhutan Board Products Ltd.	489	489	489	492	491
Bhutan Carbide & Chemical Ltd.	270	269	269	264	259
Bhutan Dairy and Agro Products Ltd.	96	96	96	96	96
Bhutan Ferro Alloys Ltd.	50	46	46	46	44
Bhutan National Bank Ltd.	4,656	4,193	4,193	4,440	4,357
Bhutan Polymers Company Ltd.	102	102	102	129	129
Bhutan Tourism Corpn. Ltd	161	161	161	164	162
Druk Petroleum Corpn. Ltd.	71	71	71	71	71
Druk plaster & Chemicals Ltd.	203	203	203	213	213
Druk Satair Corporation Ltd.	1,264	1,150	1,150	1,277	1,276
Druk Mining Ltd.	69	69	69	67	67
S.D Eastern Bhutan Coal Company Ltd.	..	1,152	1,152	1,089	1,082
Kuensel corporation Ltd.	..	..	..	..	233
Penden Cement Authority Ltd.	1,477	1,477	1,477	1,471	1,472
Royal Insurance Corpn. of Bhutan	1,670	1,641	1,641	1,585	1,556
State Trading Corpn. of Bhutan Ltd.	125	125	125	125	125
Bhutan Times Ltd.	..	..	..	..	288
Jigme Mining Corporation Ltd.	..	..	..	..	426
Druk Wang Alloys Ltd.	..	..	..	..	504
TOTAL	**15,110**	**15,616**	**15,616**	**8,348**	**12,851**

Note: * Delisted in 2007

Source: Royal Securities exchange of Bhutan Ltd, Thimphu.

C M Y K

TABLE 11.11: ROYAL SECURITIES EXCHANGE OF BHUTAN LTD. MARKET INFORMATION AT THE END OF DECEMBER 2008

Company	Price per share (Nu)	Paid-up Shares	Market Capitalization (Nu)
Bhutan Beverages Company Ltd.	-	-	-
Bhutan Board Products Ltd.	140	1,400,014	196,001,960
Bhutan Carbide Chemicals Ltd.	800	1,000,000	800,000,000
Bhutan Dairy Agro Product Ltd.	100	140,929	14,092,900
Bhutan Ferro Alloys Ltd.	550	1,500,000	825,000,000
Bhutan National Bank Ltd.	400	3,555,175	1,422,070,000
Bhutan Polymers Company Ltd.	100	249,334	24,933,400
Bhutan Tourism Corpn. Ltd.	301	209,400	63,029,400
Druk Petroleum Corpn. Ltd.	120	62,370	7,484,400
Druk plaster & Chemicals Ltd.	200	100,000	20,000,000
Druk Satair Corpn. Ltd.	300	456,543	136,962,900
Druk Mining Ltd.	429	37,702	16,174,158
S.D Eastern Bhutan Coal Company Ltd.	300	521,000	156,300,000
Kuensel corporation Ltd.	100	500,000	50,000,000
Penden Cement Authority Ltd.	790	3,400,007	2,686,005,530
Royal Insurance Corpn. of Bhutan Ltd.	500	960,000	480,000,000
State Trading Corpn. of Bhutan Ltd.	190	200,000	38,000,000
Bhutan Times Ltd.	100	400,000	40,000,000
Jigme Mining Corporation Ltd.	800	284,300	227,440,000
Druk Wang Alloys Ltd.	100	1,670,000	167,000,000
TOTAL		**16,646,774**	**7,370,494,648**

Note: * Delisted in 2007

Source: Royal Securities exchange of Bhutan Ltd, Thimphu.

C M Y K

TABLE 11.12: ROYAL SECURITIES EXCHANGE OF BHUTAN LTD, VOLUME TRADED, BHUTAN 2004 TO 2008

Company	2004	2005	2006	2007	2008
Bhutan Beverages Company Ltd.*	3,912	2,965	1,867	..	..
Bhutan Board Products Ltd.	5,000	140	3,030	..	100
Bhutan Carbide & Chemicals Ltd.	..	9	61	1,000,000	970
Bhutan Dairy and Argo Products Ltd.	..	..	..	..	..
Bhutan Ferro Alloys Ltd.	100	..	..	..	534
Bhutan National Bank Ltd.	51,106	20,997	136,383	23,444	2,413,164
Bhutan Polymers Company Ltd.	720	..	50	71	..
Bhutan Tourism Corpn. Ltd	1,497	35	1,000	..	19,160
Bhutan Times Ltd.	..	..	..	400,000	..
Druk Petroleum Corpn. Ltd.	61,437	..	..	..	..
Druk Plaster & Chemicals Ltd.	..	33	70,000	50.0	..
Druk Satair Corpn. Ltd.	120,941	5,699	154	3,063	..
Druk Mining Ltd.	38,130	..	24,185	2,026	..
Druk Wang Alloys Ltd.	..	..	..	417,500	..
S.D Eastern Bhutan Coal Company Ltd.	..	537,013	4500	11,607	2,986
Kuensel Corporation Ltd.	..	..	245,000	..	216
Penden Cement Authority Ltd.	176	957	8,260	5,260	1,134,737
Royal Insurance Corpn. of Bhutan Ltd.	6,860	2,350	3,500	5,010	3,500
State Trading Corpn. of Bhutan Ltd.	370	..	..	..	30
Druk Wang Alloys Ltd.	..	..	..	..	1,252,500
Jigme Mining Corporation Ltd.	..	..	..	..	199,180
TOTAL	**290,249**	**570,198**	**497,990**	**1,868,031**	**5,027,077**

Note: * Delisted in 2007
Source:Royal Securities Exchange of Bhutan Ltd.

TABLE 11.13: ROYAL SECURITIES EXCHANGE OF BHUTAN LTD. TRADED VALUES, BHUTAN, 2004 TO 2008

Company	Sector	2004	2005	2006	2007	2008
Bhutan Beverages Company Ltd.	Primary	..	..	..	..	..
	Secondary	1.04	0.52	0.24	..	..
Bhutan Board Products Ltd.	Primary	..	..	..	..	0.02
	Secondary	0.45	0.13	0.30	..	..
Bhutan Carbide & Chemicals Ltd.	Primary	..	..	..	100.00	..
	Secondary	..	0.57	0.37	..	0.78
Bhutan Dairy and Argo Product Ltd.	Primary	..	..	..	..	..
	Secondary	..	..	..	..	..
Bhutan Ferro-Alloys Ltd.	Primary	..	..	..	..	..
	Secondary	0.05	..	..	..	0.29
Bhutan National Bank	Primary	..	..	77.74	..	236.52
	Secondary	34.36	13.85	11.31	17.40	21.00
Bhutan Polymers Company Ltd.	Primary	..	..	..	..	..
	Secondary	0.17	..	0.01	0.01	..
Bhutan Tourism Corpn. Ltd	Primary	..	..	..	..	..
	Secondary	2.49	0.06	0.17	..	5.75
Bhutan Times Ltd.	Primary	..	..	..	40.00	..
	Secondary	..	..	..	..	..
Druk Petroleum Corpn. Ltd.	Primary	..	..	..	..	..
	Secondary	6.31	..	..	..	..
Druk plaster & Chemicals Ltd.	Primary	..	..	..	..	..
	Secondary	..	0.01	7.00	0.01	..
Druk Satair Corpn. Ltd.	Primary	..	..	..	..	..
	Secondary	47.86	1.51	0.04	0.87	..
Druk Mining Ltd.	Primary	..	..	..	..	..
	Secondary	12.68	..	9.29	0.87	..
Druk Wang Alloys Ltd.	Primary	..	..	..	41.75	125.25
	Secondary	..	..	..	..	..
S.D Eastern Bhutan Coal Company Ltd.	Primary	..	..	..	..	..
	Secomdary	..	54.39	0.45	1.18	0.55
Kuensel corporation Ltd.	Primary	..	..	24.50	..	..
	Secondary	..	..	..	..	0.03
Penden Cement Authority Ltd.	Primary	..	..	..	..	113.34
	Secondary	0.94	0.97	6.16	3.64	1.12
Royal Insurance Corpn. of Bhutan Ltd.	Primary	..	..	..	..	..
	Secondary	2.40	0.86	1.22	1.61	1.46
State Trading Corpn. of Bhutan Ltd.	Primary	..	..	..	..	..
	Secondary	0.06	..	..	..	0.01
Jigme Mining Corporation Ltd.	Primary	..	..	..	..	19.90
	Secondary	..	..	..	..	0.15
Druk Wang Alloys Ltd.	Primary	..	..	..	..	..
	Secondary	..	..	..	..	..
TOTAL		**108.81**	**72.87**	**14.29**	**207.33**	**526.17**

Source: Royal Securities Exchange of Bhutan Ltd.

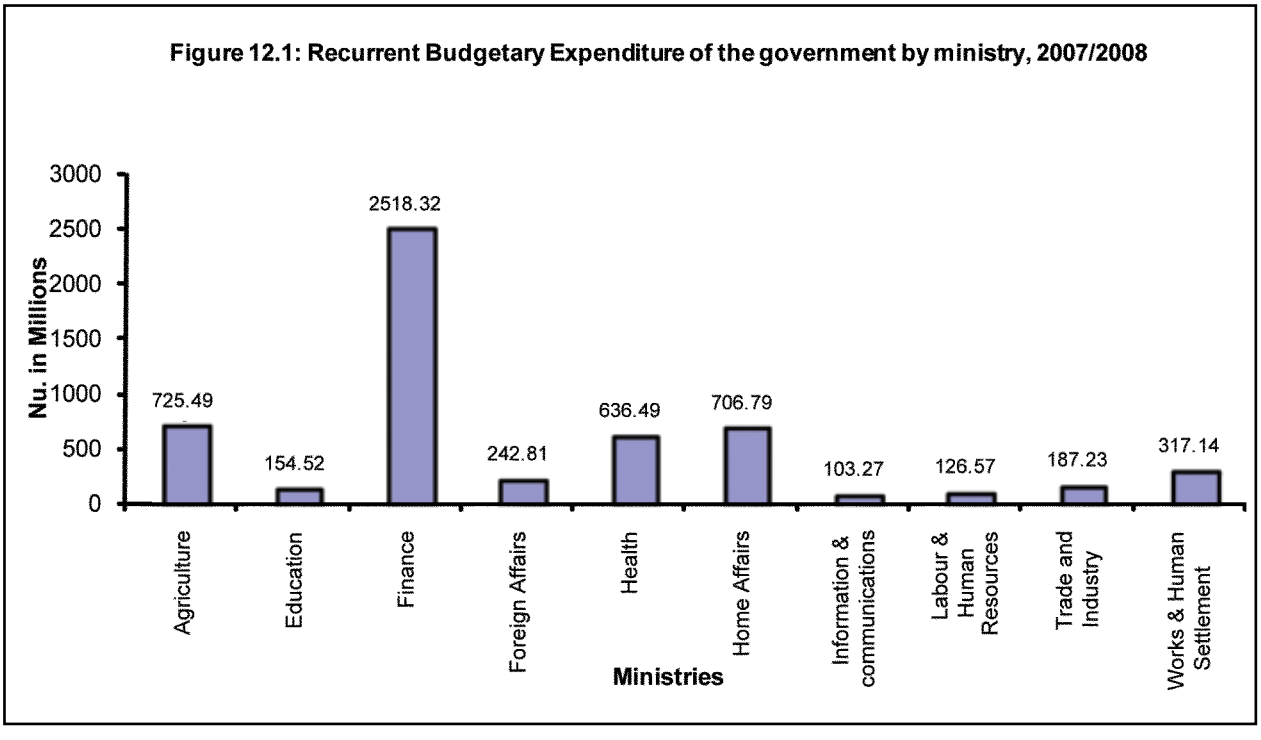
C M Y K

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.

Figure 12.1: Recurrent Budgetary Expenditure of the government by ministry, 2007/2008



C M Y K

TABLE 12.1: RECURRENT BUDGETARY EXPENDITURE OF THE GOVERNMENT BY MINISTRY/ AGENCYBHUTAN, 2003/04 TO 2007/08

(Nu. in Million)

Organization	2003/04 (actual)	2004/05 (actual)	2005/06 (actual)	2006/07 (actual)	2007/08 (actual)
Ministry	**3245.00**	**3271.80**	**3875.22**	**4215.69**	**5718.65**
Agriculture	533.70	607.80	697.58	725.71	725.49
Education	405.80	419.50	155.07	156.65	154.52
Finance	802.30	1049.20	1060.54	1181.54	2518.32
Foreign Affairs	196.90	190.50	207.29	220.84	242.81
Health	431.80	470.90	560.83	626.95	636.49
Home Affairs	414.90	23.80	562.12	603.39	706.79
Information & communications	58.30	70.10	94.16	100.68	103.27
Labour & Human Resources	82.80	70.30	90.53	114.88	126.57
Trade and Industry	102.20	123.60	158.45	178.07	187.23
Works & Human Settlement	216.20	246.10	288.65	306.98	317.14
Non Ministerial organization	**372.10**	**287.80**	**675.33**	**821.08**	**1283.79**
His Majesty's Secretariat	13.30	13.60	15.34	16.34	15.08
His Majesty's Secretariat (5th King)	n.a	n.a	na	na	16.54
National Assembly	20.50	26.90	29.02	28.49	19.16
Royal Advisory Council	7.30	8.90	9.38	10.47	13.01
Cabinet Secretarait	5.40	8.70	9.04	8.01	12.58
Royal Civil Service Commission	10.50	11.90	20.04	17.55	16.85
Judiciary	63.30	70.20	81.15	91.78	97.60
Royal Audit Authority	37.20	38.80	42.71	47.83	50.79
Bhutan Olympic Committee	7.40	5.90	10.63	23.44	25.94
Centre for Bhutan Studies	8.40	10.90	8.26	11.70	17.59
Council for Religious Affairs	150.90	25.60	192.62	205.12	242.27
Office of legal Affairs	8.50	8.60	16.72	7.14	na
Dzongkhag Development Commission	n.a	n.a	na	na	11.02
National Environment Commission	12.10	25.50	25.93	18.59	17.00
GNH commission	n.a	n.a.	na	11.57	17.91
Royal Institute of Management	21.80	25.10	17.80	20.49	21.26
Royal University of Bhutan	3.40	5.80	181.28	210.34	233.00
National Statistics Bureau	n.a	n.a	9.31	17.31	13.28
Anti-Corruption Commission	n.a	n.a	1.99	8.84	9.47
Office Of The Election Commission	2.10	1.40	4.12	54.31	256.26
HRH Trongsa Penlop's Secretariat	n.a	n.a	n.a	10.76	n.a
Bhutan Narcotic Control Agency	n.a	n.a	n.a	1.01	3.13
Office of the Attorney General	n.a	n.a	n.a	n.a	9.94
Bhutan Information Communication Media Authority	n.a	n.a	n.a	n.a	6.04
National Land Commission	n.a	n.a	n.a	n.a	59.01
Thimphu Thromdey Schools	n.a	n.a	n.a	n.a	99.05
Gewog Administration & Services (Local Government)	n.a	n.a	63.29	69.56	90.64
Dzongkhags Administration	1450.30	1741.50	2016.37	2529.87	2632.64
Total current expenditure	**5149.20**	**6170.60**	**6630.20**	**7636.19**	**9725.71**

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

C M Y K

TABLE 12.2: CAPITAL BUDGETARY EXPENDITURE OF THE GOVERNMENT BY MINISTRY/ AGENCY, 2003/04 TO 2007/08

(Nu. in Million)

Organization	2003/04 (actual)	2004/05 (actual)	2005/06 (actual)	2006/07 (actual)	2007/08 (actual)
Ministry	**3870.30**	**5538.19**	**5372.10**	**5365.07**	**7818.60**
Agriculture	605.27	348.15	588.58	408.91	511.37
Education	342.23	298.49	476.83	527.82	539.84
Finance	318.51	2219.56	510.30	543.11	1974.89
Foreign Affairs	72.35	5.82	19.22	16.05	38.70
Health	255.80	321.84	687.33	539.62	695.80
Home Affairs	109.77	118.02	130.40	200.45	241.88
Information & communications	33.61	64.36	279.94	161.84	141.87
Labour & Human Resources	100.28	90.69	125.19	150.90	110.83
Trade and Industry	827.37	246.50	543.14	503.76	595.41
Works & Human Settlement	1205.11	1824.76	2011.17	2312.62	2968.01
Non Ministerial organization	**207.14**	**144.42**	**318.22**	**551.21**	**720.86**
His Majesty's Secretariat	1.03	0.57	0.23	0.57	0.18
His Majesty's Secretariat (5th King)	n.a	n.a	n.a	n.a	44.21
National Assembly	11.43	0.78	6.28	12.98	55.79
Royal Advisory Council	0.33	0.23	0.71	0.45	20.72
Cabinet Secretarait	1.65	0.83	0.65	0.80	10.92
Royal Civil Service Commission	86.45	56.04	50.20	80.52	67.31
Judiciary	13.21	12.73	31.80	113.48	25.08
Royal Audit Authority	9.75	11.84	7.62	4.64	5.08
Bhutan Olympic Committee	0.10	0.73	1.41	0.07	1.63
Centre for Bhutan Studies	1.03	1.31	2.97	2.34	3.01
Council for Religious Affairs	35.67	21.61	33.61	35.92	43.55
Office of legal Affairs	7.10	3.41	3.95	5.17	na
Dzongkhag Development Commission	na	na	na	na	3.33
National Environment Commission	16.09	18.56	33.70	20.76	26.20
GNH commission	na	n.a	na	6.51	20.74
Royal Institute of Management	20.34	13.14	24.28	26.06	29.76
Royal University of Bhutan	2.96	2.64	108.41	116.03	191.11
National Statistics Bureau	na	n.a	1.76	1.67	7.53
Anti-Corruption Commission	n.a	n.a	7.38	5.48	11.46
Office Of The Election Commission	n.a	n.a	3.28	102.27	47.18
HRH Trongsa Penlop's Secretariat	n.a	n.a	n.a	14.27	n.a
Bhutan Narcotic Control Agency	n.a	n.a	n.a	1.22	2.24
Office of the Attorney General	n.a	n.a	n.a	n.a	4.76
Bhutan Information Communication Media Authority	n.a	n.a	n.a	n.a	1.69
National Land Commission	n.a	n.a	n.a	n.a	77.14
Thimphu Thromdey Schools	n.a	n.a	n.a	n.a	20.23
Gewog Administration & Services (Local Government)	n.a	n.a	254.93	407.07	255.21
Dzongkhags Administration	434.71	611.50	739.17	1206.53	1172.64
Total current expenditure	**4653.05**	**6615.25**	**6684.42**	**7529.88**	**9967.31**

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

C M Y K

TABLE 12.3: BUDGETARY RECEIPTS OF THE GOVERNMENT BY SOURCE, BHUTAN, 2003/04 TO 2007/08

(Nu. in Million)

Source of revenue	2003/04 (actual)	2004/05 (actual)	2005/06 (actual)	2006/07 (actual)	2007/08 (actual)
Tax revenue	**2689.90**	**3382.37**	**4124.68**	**4266.91**	**5238.36**
Direct tax	1908.02	2013.63	2420.09	2829.02	3386.78
Business Income Tax	404.02	423.16	356.54	367.65	464.94
Corporate Income Tax	1015.42	1022.08	1363.30	1566.94	1817.27
Rural tax	1.37	-	-	-	-
Health Contribution	30.71	36.00	44.06	49.42	58.19
Motor Vehicle Tax	65.70	72.54	85.25	93.27	107.95
Business & Prof. Licences	22.43	24.20	25.63	45.63	52.90
Royalties	243.34	332.24	407.40	498.61	572.95
Tax on payroll/PIT	113.52	84.61	113.35	174.46	264.66
Other Tax Revenue	11.50	18.81	24.56	33.04	47.92
Indirect tax	781.88	1368.74	1704.59	1437.88	1851.57
Bhutan Sales Tax	495.49	567.90	662.79	765.54	830.99
Export Tax	0.49	0.87	0.34	0.01	0.10
Excise Duty	129.28	565.62	879.54	519.39	877.72
Import duty	153.98	230.77	157.18	144.69	129.48
Other Indirect Tax	2.64	3.58	4.75	8.24	13.29
Non tax revenue	**2365.30**	**2683.73**	**2778.23**	**5815.25**	**7107.63**
Fees,Dividends,Profits	2291.76	2451.12	2610.40	5639.99	7023.27
Administrative Fees & Charges	149.06	187.57	197.13	214.73	238.57
Dividends	1753.09	1550.52	1542.43	2123.16	2479.82
Revenue from Govt. Departments	40.63	78.69	102.06	225.70	256.91
Transfer of Profits	198.41	384.48	503.27	2678.75	2366.13
Other Non-Tax revenue	150.58	249.86	265.51	397.65	1681.85
Capital Revenue	73.54	232.61	167.83	175.26	84.36
Total revenue	**5055.20**	**6066.10**	**6902.91**	**10082.16**	**12,345.99**

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

TABLE 12.4: SUMMARY OF BUDGETARY OPERATIONS, BHUTAN, 2003/04 TO 2007/08

(Nu. in Million)

Item	2003/04 (actual)	2004/05 (actual)	2005/06 (actual)	2006/07 (actual)	2007/08 (actual)
Revenue and Grants	**10,422.60**	**10,439.20**	**13,327.50**	**10,267.84**	**18,281.41**
Revenue	**5055.20**	**6066.10**	**6902.91**	**12782.16**	**12345.98**
Tax revenue	2689.90	3382.40	4124.68	4266.91	5238.36
Non-tax revenue	2365.30	2683.70	2778.23	8515.25	7107.63
Grants	**5367.40**	**4373.10**	**6424.59**	**6000.93**	**5935.42**
India	3534.70	2624.96	3417.22	4024.28	4671.11
Other	1832.70	1748.06	3007.37	1976.65	1264.31
Other Receipts(+)/Payments(-)	22.40	61.90	124.53	..	35.50
Total Expenditure	**10534.10**	**13360.80**	**13314.63**	**15166.11**	**19693.03**
Current	5149.20	6170.60	6630.20	7636.23	9725.72
Capital	4653.10	6615.30	6684.43	7529.88	9967.31
Lending	662.50	379.10	590.20	463.52	39.89
Net Advance/Suspense	69.30	195.80	124.99	486.69	25.72
Lending Minus Recoveries	(6.50)	(88.10)	289.09	87.32	(1805.39)
Repayment	467.10	397.90	2651.45	668.62	2076.78
Overall surplus/deficit	579.80	(2392.60)	(318.70)	287.77	403.55

Note: Figure in the brackets are negative

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

C M Y K

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, the Department of Planning) 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.

Until 1981 to 1982 the responsibility for making plan allocations, rising internal resources, and negotiations, foreign assistance etc. lay with the Planning Commission. In 1981 to 1982, a large part of the financial responsibilities of the Commission was transferred to the responsibilities for formulation of development plans and allocations of investments resources.

A substantial infrastructure for development of the economy had been built up in the first four plans so that by the end of the fourth plan, the planning process had gained a good deal of comprehensiveness and sophistication. These two factors enabled the economy to develop the capacity of absorbing much higher volumes of investment resources for development in the later five-year plans.

The Eighth Five Year Plan (1997 to 2002) laid emphasis towards attaining the objective of economic self-reliance, higher growth and greater distributional equity, the preservation and promotion of traditional values and ideals, and promotion of privatization. The Ninth Five Year Plan began in July 2002 will pursue maximization of Gross National Happiness as Development Goal and an Objective. Recognizing the wide ranges of factors that contribute to human well-being and happiness, four major areas are being identified as the pillars of Gross National Happiness. These are economic growth and development, preservation and promotion of cultural heritage, preservation and sustainable use of the environment, and good governance.

C M Y K

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

(Nu. in Million)

Organization	Recurrent	Capital	Total	Percent
Constitutional Bodies	**1,577.88**	**5,199.11**	**6,776.98**	**4.62**
Judiciary	611.89	724.51	1,336.40	0.91
Royal Audit Authority	289.02	53.56	342.57	0.23
Election Commission Of Bhutan	523.50	79.91	603.41	0.41
Anti Corruption Commission	64.66	125.37	190.03	0.13
Royal Civil Service Commission	88.81	4,215.76	4,304.57	2.94
Autonomous Agencies	**5,783.46**	**6,503.98**	**12,287.44**	**8.40**
His Majesty's Secretariat	147.22	100.00	247.22	0.17
Secretariat of His Majesty the Fourth King	89.33	50.00	139.33	0.10
National Assembly Secretariat	252.86	42.91	295.77	0.20
Royal Advisory Council (National Council)	149.59	56.99	206.58	0.14
Cabinet Secretariat	141.18	15.58	156.76	0.11
Office of the Attorney General	64.84	56.15	120.99	0.08
GNH Commission	170.08	1,050.00	1,220.08	0.83
National Land Commission	454.81	385.86	840.67	0.57
National Environment Commission	78.02	109.30	187.32	0.13
Dzongkha Development Commision	77.10	30.60	107.70	0.07
Council for Ecclesiasstical Affairs	1,864.27	633.55	2,497.82	1.71
National Statistics Bureau	129.20	45.29	174.49	0.12
Royal University of Bhutan	1,532.97	2,427.10	3,960.07	2.71
Royal Institute of Management	129.19	275.05	404.24	0.28
Centre for Bhutan Studies	45.50	50.00	95.50	0.07
Bhutan Narcotic Control Agency	23.00	21.40	44.41	0.03
Bhutan Olympic Committee	158.26	100.00	258.26	0.18
Bhutan Broadcasting service Corporation	-	406.78	406.78	0.28
National commission for Women and Children	70.82	64.21	135.02	0.09
Bhutan Information Communication Media Authority	38.32	10.50	48.82	0.03
Drug Regulatory Authority	16.15	-	16.15	0.01
Tourism Council ob Bhutan	150.75	572.71	723.45	0.49
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.

C M Y K

TABLE 13.2: OUTLAYS OF DEVELOPMENT PLANS, PERCENTAGE BY CATEGORY, FIFTH PLAN TO TENTH PLAN

Organization	Ninth Plan (%)	Tenth Plan (%)
Constitutional Bodies		**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		**8.40**
His Majesty's Secretariat	0.10	0.17
Secretariat of His Majesty the Fourth King	..	0.10
National Assembly Secretariat	0.10	0.20
Royal Advisory council (National Council)	0.10	0.14
Cabinet Secretariat	0.00	0.11
Office of the Attorney General	0.10	0.08
GNH Commission	0.20	0.83
National Land Commission	na	0.57
National Environment Commission	0.10	0.13
Dzongkha Development Commision	0.10	0.07
Council for Ecclesiasstical Affairs	1.10	1.71
National Statistics Bureau	na	0.12
Royal University of Bhutan	na	2.71
Royal Institute of Management	0.40	0.28
Centre for Bhutan Studies	0.00	0.07
Bhutan Narcotic Control Agency	na	0.03
Bhutan Olympic Committee	0.30	0.18
Bhutan Broadcasting service Corporation	0.50	0.28
National commission for Women and Children	na	0.09
Bhutan Information Communication Media Authority	..	0.03
Drug Regulatory Authority	..	0.01
Tourism Council ob Bhutan	0.30	0.49
Ministries		**67.56**
Ministry of Agriculture	6.5	5.55
Ministry of Education	3.7	7.09
Ministry of Finance	2.3	20.74
Ministry of Foreign Affairs	2.1	1.21
Ministry of Health	6.4	5.86
Ministry of Home and Cultural Affairs	0.9 & 0.6	4.99
Ministry of Information and Communication	14.8	2.97
Ministry of labour and Human Resources	0.4	1.50
Ministry of Econimic Affairs	12.2	4.66
Ministry of Works and Human Settlements	..	12.99
Others		**0.66**
Thimphu Thromdey Schools	..	0.66
Total (Constitutional Bodies, Autonomous Bodies and Ministries)		**81.24**
Dzongkhags and Gewogs	..	18.75
Dzongkhags	..	4.92
Gewogs	..	3.28
Total Outlay		**100.0**

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

C M Y K

TABLE 13.4: 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 13.5: DZONGKHAG WISE TENTH FIVE YEAR PLAN OUTLAY, 2008 TO 2013

(Nu.in Million)

Dzongkhags	Current	Capital	'Total
Bumthang	-	138.96	138.96
Chhukha	792.66	483.13	1,275.79
Dagana	294.21	273.00	567.21
Gasa	-	58.93	58.93
Ha	-	123.62	-
Lhuentse	226.90	284.51	511.41
Monggar	486.94	629.03	1,115.97
Paro	-	259.06	259.06
Pemagatshel	474.51	278.88	753.39
Punakha	277.35	219.10	496.45
Samdrup Jongkhar	-	358.01	358.01
Samtse	-	715.23	715.23
Sarpang	369.32	306.37	675.69
Thimphu	-	177.76	177.76
Trashi Yangtse	135.46	217.30	352.76
Trashigang	314.26	776.56	1,090.82
Trongsa	205.82	155.45	361.27
Tsirang	-	200.33	200.33
Wangdue Phodrang	426.89	233.25	660.14
Zhemgang	375.39	247.27	622.66
Total	**4,379.71**	**6,135.74**	**10,515.45**

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

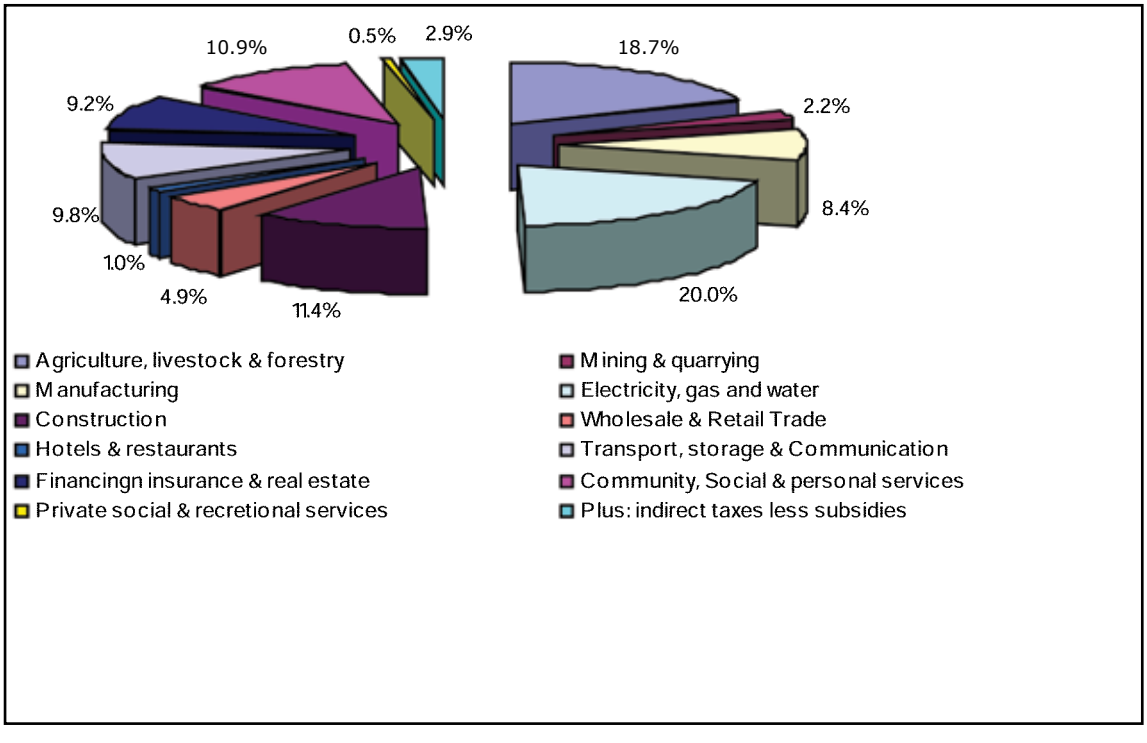
C M Y K

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.

Figure 14.3: Percent of share to GDP in current prices



C M Y K

TABLE 14.1: GROSS DOMESTIC PRODUCT BY KIND OF ACTIVITY AT CURRENT PRICES

(million Nu.)

Sectors	2004	2005	2006	2007	2008
Agriculture Livestock & forestry	7,524.0	7,960.0	8,796.7	9,263.7	10,256.4
Agriculture proper	3,480.7	3,684.9	3,925.7	4,377.0	4,904.9
Livestock	1,991.1	2,261.2	2,556.0	2,560.5	2,983.3
Forestry & logging	2,052.1	2,013.9	2,315.0	2,326.2	2,368.2
Mining and quarrying	439.6	549.8	877.8	889.8	1,228.8
Manufacturing	2,297.0	2,572.2	3,097.1	4,033.2	4,597.9
Electricity and water	2,634.8	3,169.6	4,216.1	10,082.0	10,340.5
Construction	5,741.1	6,219.2	6,019.7	6,781.0	6,238.8
Wholesale & Retail Trade	1,725.7	2,088.9	2,317.2	2,497.1	2,694.6
Hotels & Restaurants	168.7	211.7	301.0	368.1	569.2
Transport, storage & Communication	3,295.1	3,890.5	4,095.1	4,489.8	5,365.8
Financing, insurance & real estate	2,280.3	2,873.1	3,405.4	3,980.7	5,061.1
Finance and Insurance	1,279.0	1,764.6	2,226.7	2,676.7	3,713.5
Real Estate & dwellings	1,001.3	1,108.5	1,178.7	1,297.4	1,324.6
Business services				6.5	23.0
Community, Social services	3,822.9	4,471.7	4,895.0	5,311.8	5,930.4
Public administration	2,636.7	3,120.1	3,220.8	3,370.2	3,762.7
Education and Health	1,186.1	1,351.6	1,674.1	1,941.6	2,167.7
Private social, personal & recreational Services	144.3	172.3	212.6	241.9	269.5
Plus: taxes net of subsidies	1,211.3	1,317.9	1,337.6	1,442.5	1,596.8
Gross domestic product	**31,284.7**	**35,496.9**	**39,571.3**	**49,381.7**	**54,149.9**

Source: National Statistical Bureau

TABLE 14.2: GROSS DOMESTIC PRODUCT BY KIND OF ACTIVITY IN 2000 PRICES

(million Nu.)

Sectors	2004	2005	2006	2007	2008
Agriculture, livestock & forestry	5,981.5	6,025.0	6,280.5	6,264.7	6,326.9
Crops	2,824.1	2,860.9	2,898.1	2,942.3	2,987.2
Livestock	1,648.6	1,727.6	1,849.7	1,829.9	1,885.8
Forestry & logging	1,508.8	1,436.5	1,532.7	1,492.5	1,453.9
Mining & quarrying	381.3	446.6	531.5	649.7	759.5
Manufacturing	2,055.0	2,211.1	2,461.9	3,080.7	3,477.2
Electricity & water	2,552.2	2,843.9	3,655.5	7,944.2	8,147.2
Construction	4,819.8	4,701.2	4,247.5	4,466.1	4,181.9
Wholesale & Retail trade	1,633.1	1,878.1	1,901.2	1,975.7	1,992.6
Hotel & restaurants	157.0	186.0	246.1	264.4	384.5
Transport, storage & Communication	2,447.9	2,660.6	2,856.5	3,083.1	3,197.3
Financing, insurance & real estate	1,991.1	2,507.8	2,937.9	3,170.2	4,025.4
Finance	1,291.7	1,800.1	2,218.3	2,393.5	3,224.0
Real estate	699.4	707.7	719.6	771.8	784.3
Business services				4.9	17.2
Community, social & personal services	3,378.5	3,752.6	3,912.2	4,037.2	4,160.8
Public administration	2,330.3	2,618.4	2,574.2	2,561.5	2,640.0
Education and health	1,048.3	1,134.2	1,338.0	1,475.7	1,520.9
Private Social & recreational services	127.0	144.4	166.5	178.0	182.5
Plus: Indirect taxes less subsidies	1,025.2	1,054.5	1,020.3	1,056.4	1,128.4
Gross Domestic Product	**26,549.6**	**28,412.0**	**30,217.4**	**36,170.3**	**37,964.2**

Source: National Statistical Bureau

C M Y K

TABLE 14.3: SHARE OF GROSS DOMESTIC PRODUCT IN CURRENT PRICES

Percent

Sectors	2004	2005	2006	2007	2008
Agriculture, livestock & forestry	24.1	22.4	22.2	18.8	18.9
Agriculture proper	11.1	10.4	9.9	8.9	9.1
Livestock	6.4	6.4	6.5	5.2	5.5
Forestry & logging	6.6	5.7	5.9	4.7	4.4
Mining & quarrying	1.4	1.5	2.2	1.8	2.3
Manufacturing	7.3	7.2	7.8	8.2	8.5
Electricity and water	8.4	8.9	10.7	20.4	19.1
Construction	18.4	17.5	15.2	13.7	11.5
Wholesale & Retail Trade	5.5	5.9	5.9	5.1	5.0
Hotels & restaurants	0.5	0.6	0.8	0.7	1.1
Transport, storage & Communication	10.5	11.0	10.3	9.1	9.9
Financingn insurance & real estate	7.3	8.1	8.6	8.1	9.3
Finance & Insurance	4.1	5.0	5.6	5.4	6.9
Real estate & dewllings	3.2	3.1	3.0	2.6	2.4
Community, Social services	12.2	12.6	12.4	10.8	11.0
Public administration	8.4	8.8	8.1	6.8	6.9
Education & health	3.8	3.8	4.2	3.9	4.0
Private social, personal & recreational services	0.5	0.5	0.5	0.5	0.5
Plus: taxes net of subsidies	3.9	3.7	3.4	2.9	2.9
Gross Domestic Product	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: National Statistical Bureau

TABLE 14.4: GROSS DOMESTIC PRODUCT GROWTH RATES OVER THE PRECEEDING YEARS IN CURRENT PRICES

Percent

Sectors	2004	2005	2006	2007	2008
Agriculture, livestock & forestry	8.2	5.8	10.5	5.3	10.7
Agriculture proper	9.1	5.9	6.5	11.5	12.1
Livestock production	9.0	13.6	13.0	0.2	16.5
Forestry & logging	5.9	(1.9)	14.9	0.5	1.8
Mining & quarrying	(24.3)	25.1	59.6	1.4	38.1
Manufacturing	10.1	12.0	20.4	30.2	14.0
Electricity and water	0.7	20.3	33.0	139.1	2.6
Construction	14.3	8.3	(3.2)	12.6	(8.0)
Wholesale & Retail Trade	19.3	21.0	10.9	7.8	7.9
Hotels & restaurants	24.6	25.5	42.2	22.3	54.6
Transport, storage & Communication	25.5	18.1	5.3	9.6	19.5
Financingn insurance & real estate	17.0	26.0	18.5	16.9	27.1
Finance and Insurance	24.6	38.0	26.2	20.2	38.7
Real estate & dwellings	8.6	10.7	6.3	10.1	2.1
Business Services					254.9
Community, Social services	4.3	17.0	9.5	8.5	11.6
Public administration	1.1	18.3	3.2	4.6	11.6
Education & health	12.5	13.9	23.9	16.0	11.6
Private social, personal & recreational services	16.5	19.4	23.4	13.8	11.4
Plus: indirect taxes, net subsidies	31.6	8.8	1.5	7.8	10.7
Gross Domestic Product	**11.2**	**13.5**	**11.5**	**24.8**	**9.7**

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

C M Y K

TABLE 14.5: GROSS DOMESTIC PRODUCT GROWTH RATES OVER THE PRECEEDING YEARS IN 2000 PRICES

Percent

Sectors	2004	2005	2006	2007	2008
Agriculture, livestock & forestry	2.2	0.7	4.2	(0.3)	1.0
Crops	2.1	1.3	1.3	1.5	1.5
Livestock	0.4	4.8	7.1	(1.1)	3.1
Forestry & logging	4.3	(4.8)	6.7	(2.6)	(2.6)
Mining & quarrying	(5.2)	17.1	19.0	22.2	16.9
Manufacturing	4.5	7.6	11.3	25.1	12.9
Electricity and water	9.4	11.4	28.5	117.3	2.6
Construction	8.3	(2.5)	(9.7)	5.1	(6.4)
Wholesale & Retail Trade	18.5	15.0	1.2	3.9	0.9
Hotels & restaurants	21.9	18.5	32.3	7.4	45.4
Transport, storage & Communication	21.9	8.7	7.4	7.9	3.7
Financingn insurance & real estate	12.4	26.0	17.1	7.9	27.0
Finance	19.6	39.4	23.2	7.9	34.7
Real estate	1.2	1.2	1.7	7.3	1.6
Business services					249.8
Community, Social & personal services	(0.2)	11.1	4.3	3.2	3.1
Public administration	(3.4)	12.4	(1.7)	(0.5)	3.1
Education & health	7.5	8.2	18.0	10.3	3.1
Private social & recreational services	11.1	13.7	15.3	6.9	2.5
Plus: indirect taxes less subsidies	27.9	2.9	(3.2)	3.5	6.8
Gross Domestic Product	**8.0**	**7.0**	**6.4**	**19.7**	**5.0**

Note: Figure in the brackets ( ) are negative

Source: National Statistical Bureau

TABLE 14.6: GROSS DOMESTIC PRODUCT BY MAJOR SECTORS IN CURRENT PRICES

(Million Nu.)

Sectors	2004	2005	2006	2007	2008
Primary	7963.6	8509.8	9,674.5	10,153.5	11,485.2
Secondary	10672.8	11961.0	13,332.9	20,896.3	21,177.2
Tertiary	12648.3	15026.1	16,563.9	18,331.9	21,487.4
Gross Domestic Product	**31,284.7**	**35,496.9**	**39,571.3**	**49,381.7**	**54,149.9**

Source: National Statistical Bureau

TABLE 14.7: GROSS DOMESTIC PRODUCT BY MAJOR SECTORS IN 2000 PRICES

(Million Nu.)

Sectors	2004	2005	2006	2007	2008
Primary	6362.8	6471.6	6,812.0	6,914.3	7,086.5
Secondary	9427.0	9756.2	10,364.9	15,491.1	15,806.2
Tertiary	10759.8	12184.1	13,040.6	13,764.9	15,071.6
Gross Domestic Product	**26,549.6**	**28,412.0**	**30,217.4**	**36,170.3**	**37,964.2**

Source: National Statistical Bureau

C M Y K

TABLE 14.8: SECTORAL SHARE TO GROSS DOMESTIC PRODUCT IN CURRENT PRICES

Percent

Sectors	2004	2005	2006	2007	2008
Primary	25.5	24.0	24.4	20.6	21.2
Secondary	34.1	33.7	33.7	42.3	39.1
Tertiary	40.4	42.3	41.9	37.1	39.7
Gross Domestic Product	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: National Statistical Bureau

TABLE 14.9: GROSS DOMESTIC CAPITAL FORMATION IN CURRENT AND CONSTANT 2000 PRICES

(Million Nu.)

	2004	2005	2006	2007	2008
In current prices					
Machinary and Equipment	5,554.7	4,534.9	5,529.9	4,319.6	7,859.1
Govt.	813.3	610.7	1,084.0	868.6	1,131.5
Private	4,741.5	3,924.2	4,445.9	3,451.1	6,727.6
Construction	14,523.5	13,494.8	13,245.1	15,025.0	13,314.5
Govt.	2,422.7	3,059.0	4,105.5	5,433.9	5,597.7
Private	12,100.8	10,435.7	9,139.6	9,591.1	7,716.8
Gross fixed capital formation	20,078.2	18,029.7	18,775.0	19,344.6	21,173.6
Change in stock	(32.6)	19.4	(45.6)	(1278.1)	757.1
Gross Domestic capital formation	**20,045.6**	**18,049.1**	**18,729.4**	**18,066.5**	**21,930.7**
In constant 2000 prices					
Machinary and Equipment	5,047.5	4,540.9	1,417.7	1,161.0	1,644.8
Govt.	739.2	546.9	922.4	712.0	917.8
Private	4,308.3	3,994.0	495.3	449.1	727.0
Construction	11,272.3	9,564.9	9,241.8	9,915.2	9,431.8
Govt.	1,880.4	2,168.2	2,864.6	3,585.9	3,965.3
Private	9,391.9	7,396.7	6,377.1	6,329.3	5,466.4
Gross fixed capital formation	16,319.9	14,105.8	10,659.5	11,076.2	11,076.6
Change in stock	(23.8)	32.6	(36.1)	(964.9)	510.3
Gross Domestic capital formation	**16,296.1**	**14,138.4**	**10,623.5**	**10,111.3**	**11,586.8**

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

C M Y K

TABLE 14.10: EXPENDITURES ON GROSS DOMESTIC PRODUCT IN CURRENT PRICES

(Million Nu.)

Expenditures	2004	2005	2006	2007	2008
Final consumption expenditure	**20,456.4**	**22,497.7**	**24,197.9**	**28,318.8**	**31,259.2**
Household and NPISH	13,806.7	14,586.2	15,553.7	18,864.1	20,886.6
General Government	6,649.7	7,911.5	8,644.2	9,454.8	10,372.6
Gross domestic capital formation	**20,045.6**	**18,049.1**	**18,729.4**	**18,066.5**	**21,930.7**
Construction	14,523.5	13,494.8	13,245.1	15,025.0	13,314.5
Machinery and equipment	5,554.7	4,534.9	5,529.9	4,319.6	7,859.1
Change in inventory	(32.6)	19.4	(45.6)	(1278.1)	757.1
Net export of goods & services	**(8,353.83)**	**(8,556.05)**	**(1,795.5)**	**(280.9)**	**(2,674.7)**
Export of goods & services	10,053.2	14,105.7	25,464.9	31,624.7	38,270.1
Imports of goods & services	(18,406.99)	(22,661.75)	(27260.4)	(31905.6)	(40944.9)
Total Expenditure on GDP	**32,148.2**	**31,990.7**	**41,131.9**	**46,104.4**	**50,515.1**

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

TABLE 14.11: EXPENDITURES ON GROSS DOMESTIC PRODUCT AT CONSTANT 2000 PRICES

(Million Nu.)

Expenditures	2004	2005	2006	2007	2008
Final consumption expenditure	**17,997.7**	**18,917.1**	**19,336.4**	**21,440.3**	**22,366.2**
Household and NPISH	12,121.0	12,278.5	12,438.2	14,264.0	14,449.5
General Government	5,876.8	6,638.6	6,898.3	7,176.3	7,916.7
Gross domestic capital formation	**16,296.1**	**14,138.4**	**10,623.5**	**10,111.3**	**11,586.8**
Construction	11,272.3	9,564.9	9,241.8	9,915.2	9,431.8
Machinery and equipment	5,047.5	4,540.9	1,417.7	1,161.0	1,644.8
Change in inventory	(23.8)	32.6	(36.1)	(964.9)	510.3
Net export of goods and services	**(7,382.78)**	**(7,184.2)**	**(1,415.4)**	**(204.51)**	**(1,748.2)**
Export of goods nad services	8,884.6	11,844.0	20,075.0	23,022.1	25,013.6
Imports of goods and services	(16,267.4)	(19,028.1)	(21,490.4)	(23,226.6)	(26,761.9)
Total expenditure on GDP	**26,911.1**	**25,871.3**	**28,544.5**	**31,347.1**	**32,204.8**

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

C M Y K

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.

C M Y K

TABLE 15.1 CONSUMER PRICE INDEXES FOR FOOD AND NON-FOOD COMPONENTS, BHUTAN 1ST QTR. 2007 TO 2ND QTR. 2009

3rd Qtr. 2003=100

Item	Weight	2007				2008				2009	
		1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr
Index											
Food	31.67	116.32	125.52	124.73	125.3	129.1	140.98	140.35	140.02	140.51	150.38
Non-Food	68.33	118.35	121.64	121.73	121.55	122.82	130.38	131.19	130.96	130.71	131.83
Total	**100**	**117.71**	**122.87**	**122.68**	**122.74**	**124.81**	**133.74**	**134.09**	**133.83**	**133.81**	**137.7**
PERCENTAGE CHANGE YEAR ON YEAR											
Food	31.67	5.44	9.50	8.43	8.84	10.99	12.32	12.52	11.75	8.84	6.67
Non-Food	68.33	3.84	4.31	4.22	2.95	3.78	7.19	7.77	7.74	6.42	1.11
Total	**100**	**4.34**	**5.94**	**5.54**	**4.78**	**6.03**	**8.85**	**9.30**	**9.04**	**7.21**	**2.96**
PERCENTAGE CHANGE PERIOD TO PERIOD											
Food	31.67	1.04	7.91	(0.63)	0.46	3.03	9.20	(0.45)	(0.24)	0.35	7.02
Non-Food	68.33	0.24	2.78	0.07	(0.15)	1.04	6.16	0.62	(0.18)	(0.19)	0.86
Total	**100**	**0.49**	**4.38**	**(0.15)**	**0.05**	**1.69**	**7.15**	**0.26**	**(0.19)**	**(0.01)**	**2.91**
PURCHASING POWER OF NGULTRUM (PPN)											
	1.00	0.85	0.81	0.82	0.81	0.80	0.75	0.75	0.75	0.75	0.73

Source: National Statistical Bureau

TABLE 15.2 CONSUMER PRICE INDEXES FOR MAJOR COMPONENTS, BHUTAN 1ST QTR. 2007 TO 2ND QTR. 2009

3rd Qtr. 2003=100

Item	Weight	2007				2008				2009	
		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	115.82	125.02	124.22	124.25	128.41	140.64	139.85	139.13	139.36	149.99
Alcoholic Beverages, Tobacco & Narcotics	2.23	122.94	132.05	131.41	139.12	138.14	145.42	146.98	151.68	155.59	155.58
Clothing And Footwear	10.49	121.25	128.03	128.20	127.92	133.38	144.92	144.86	145.56	144.23	145.53
Housing,water,electricity,gas & other fuels	25.68	124.24	128.89	126.78	124.73	125.41	132.99	134.73	133.70	134.80	134.94
Furnishing, household equipment & routine household maintenance	5.68	115.14	122.53	122.04	121.42	122.37	129.51	128.03	127.40	127.77	128.00
Health	2.94	113.64	111.72	117.61	118.20	117.78	124.31	123.15	123.61	127.08	129.11
Transport	7.06	120.91	119.84	121.25	126.57	127.20	140.08	143.78	143.79	141.58	144.30
Communication	4.10	96.51	96.34	95.92	97.01	97.51	97.67	96.95	97.06	96.90	96.55
Recreation and Culture	2.62	114.84	113.80	125.02	126.00	126.02	128.84	129.38	130.29	130.13	131.04
Education	4.04	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Restaurants and Hotels	3.01	117.22	116.91	118.04	118.07	118.26	127.65	127.36	127.90	124.63	128.46
Miscellaneous Goods & Services	2.72	121.63	125.25	126.34	126.37	126.59	131.73	131.70	132.01	125.64	133.18
Total	**100.00**	**117.71**	**122.87**	**122.68**	**122.74**	**124.81**	**133.74**	**134.09**	**133.83**	**133.81**	**137.70**

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 Statistical Bureau

TABLE 15.3 CONSUMER PRICE INDEXES - MAJOR COMPONENTS, BHUTAN 1ST QTR. 2007 TO 2ND QTR. 2009

YEAR ON YEAR GROWTH RATE (%) — 3rd Qtr. 2003=100

Item	Weight	2007				2008				2009	
		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	5.47	9.54	8.53	8.52	10.87	12.49	12.58	11.98	8.53	6.65
Alcoholic Beverages, Tobacco & Narcotics	2.23	5.10	8.97	7.29	12.68	12.36	10.12	11.85	9.03	12.63	6.99
Clothing And Footwear	10.49	7.27	9.49	9.49	7.98	10.00	13.19	13.00	13.79	8.13	0.42
Housing,water,electricity,gas & other fuels	25.68	2.88	4.71	2.57	0.33	0.94	3.18	6.27	7.19	7.49	1.47
Furnishing, household equipment & routine household maintenance	5.68	4.85	8.85	9.28	5.43	6.28	5.70	4.91	4.93	4.41	(1.17)
Health	2.94	4.35	1.94	6.74	4.20	3.64	11.27	4.71	4.58	7.90	3.86
Transport	7.06	2.09	(0.93)	0.07	4.48	5.20	16.89	18.58	13.61	11.31	3.01
Communication	4.10	7.46	3.23	3.50	0.55	1.04	1.38	1.07	0.05	(0.63)	(1.15)
Recreation and Culture	2.62	8.78	1.87	11.61	9.79	9.74	13.22	3.49	3.40	3.26	1.71
Education	4.04	-	-	-	-	-	-	-	-	-	-
Restaurants and Hotels	3.01	1.05	0.53	0.91	0.20	0.89	9.19	7.90	8.33	5.39	0.63
Miscellaneous Goods & Services	2.72	2.14	1.20	2.04	2.31	4.08	5.17	4.24	4.46	(0.75)	1.10
Total	**100.00**	**4.34**	**5.94**	**5.54**	**4.78**	**6.03**	**8.85**	**9.30**	**9.04**	**7.21**	**2.96**

Source: National Statistical Bureau

TABLE 15.4 CONSUMER PRICE INDEXES - MAJOR COMPONENTS, BHUTAN, 1ST QTR. 2007 TO 2ND QTR.2009

PERIOD TO PERIOD GROWTH RATE (%) — 3rd Qtr. 2003=100

Item	Weight	2007				2008				2009	
		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	1.16	7.94	(0.64)	0.02	3.35	9.52	(0.56)	(0.51)	0.17	7.63
Alcoholic Beverages, Tobacco & Narcotics	2.23	(0.42)	7.41	(0.48)	5.87	(0.70)	5.27	1.07	3.20	2.58	(0.01)
Clothing And Footwear	10.49	2.35	5.59	0.13	(0.22)	4.27	8.65	(0.04)	0.48	(0.91)	0.90
Housing,water,electricity,gas & other fuels	25.68	(0.06)	3.74	(1.64)	(1.62)	0.55	6.04	1.31	(0.76)	0.82	0.10
Furnishing, household equipment & routine household maintenance	5.68	(0.03)	6.42	(0.40)	(0.51)	0.78	5.83	(1.14)	(0.49)	0.29	0.18
Health	2.94	0.18	(1.69)	5.27	0.50	(0.36)	5.54	(0.93)	0.37	2.81	1.60
Transport	7.06	(0.19)	(0.88)	1.18	4.39	0.50	10.13	2.62	0.01	(1.54)	1.92
Communication	4.10	0.03	(0.18)	(0.44)	1.14	0.52	0.16	(0.74)	0.11	(0.16)	(0.36)
Recreation and Culture	2.62	0.07	(0.91)	9.86	0.78	0.02	2.24	0.42	0.70	(0.12)	0.70
Education	4.04	-	-	-	-	-	-	-	-	-	-
Restaurants and Hotels	3.01	(0.53)	(0.26)	0.97	0.03	0.16	7.94	(0.23)	0.42	(2.56)	3.07
Miscellaneous Goods & Services	2.72	(1.53)	2.98	0.87	0.02	0.17	4.06	(0.02)	0.24	(4.83)	6.00
Total	**100.00**	**0.49**	**4.38**	**(0.15)**	**0.05**	**1.69**	**7.15**	**0.26**	**(0.19)**	**(0.01)**	**2.91**

Source: National Statistical Bureau

TABLE 15.5 CONSUMER PRICE INDEXES FOR FOOD ITEMS, SUB - COMPONENTS, BHUTAN 1ST QTR. 2007 TO 2ND QTR. 2009

PERIOD TO PERIOD GROWTH RATE (%) 3rd Qtr. 2003=100

Item	Weight	2007				2008				2009	
		1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr
Food	27.69	116.08	125.82	124.93	124.94	129.21	142.19	141.29	140.51	140.46	151.74
Bread and Cereals (ND)	7.93	110.66	115.21	116.29	117.52	127.17	138.14	139.10	138.45	143.32	147.87
Meat	3.27	109.14	127.75	125.99	126.11	128.12	138.21	135.88	136.88	139.12	172.21
Fish	1.03	107.49	109.68	111.27	113.29	116.61	126.88	127.89	129.10	130.96	137.08
Milk,cheese & Eggs	5.16	120.24	129.61	130.68	131.44	137.99	148.95	151.66	152.49	153.25	161.56
Oils and Fats	3.41	106.67	109.66	109.09	110.07	115.13	123.42	124.56	123.17	123.19	123.71
Fruits	1.35	147.88	170.79	144.05	144.74	145.82	190.16	172.05	170.41	161.57	194.44
Vegetables	4.12	122.82	142.39	143.42	138.91	132.11	150.13	145.03	139.89	131.09	147.76
Sugar, Jam & Etc	0.56	123.04	124.03	124.00	121.63	127.64	128.70	128.76	129.46	118.75	123.97
Food Products n.e.c (ND)	0.87	128.16	127.83	127.13	126.87	131.38	142.15	143.93	146.82	147.93	149.29
Non - Alcoholic Beverages	1.74	111.74	112.23	112.96	113.33	115.68	116.03	116.99	117.26	121.95	122.20
Alcoholic Beverages	1.22	114.28	126.36	123.84	126.14	123.47	129.50	131.17	134.71	129.52	130.82
Tobacco	0.33	173.93	184.34	183.85	180.65	180.42	188.25	190.29	197.61	211.16	211.82
Narcotics (ND)	0.69	114.19	117.41	120.03	142.49	144.16	153.41	154.54	160.06	175.58	172.91
Clothing	7.87	122.24	125.05	122.45	124.12	132.15	143.71	140.94	141.48	137.91	141.95
Actual Rentals for Housing	18.77	127.20	131.57	128.48	125.95	126.33	134.68	134.02	133.84	135.05	134.99
Electricity,gas&other fuels	6.04	116.62	122.73	123.11	122.20	123.80	128.27	137.33	134.38	134.51	135.16
Fules & Lubricants	3.20	116.14	113.81	116.81	120.16	120.67	144.20	144.56	144.12	141.08	142.22
Education	4.04	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Personal Care	2.72	121.63	125.25	126.34	126.37	126.59	131.73	131.70	132.01	125.64	133.18
Total	**100.00**	**117.71**	**122.87**	**122.68**	**122.74**	**124.81**	**133.74**	**134.09**	**133.83**	**133.81**	**137.70**

Source: National Statistical Bureau

TABLE 15.5 CONSUMER PRICE INDEXES FOR FOOD ITEMS, SUB - COMPONENTS, BHUTAN 1ST QTR. 2007 TO 2ND QTR. 2009

PERIOD TO PERIOD GROWTH RATE (%) 3rd Qtr. 2003=100

Item	Weight	2007				2008				2009	
		1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr
Food	27.69	116.08	125.82	124.93	124.94	129.21	142.19	141.29	140.51	140.46	151.74
Bread and Cereals (ND)	7.93	110.66	115.21	116.29	117.52	127.17	138.14	139.10	138.45	143.32	147.87
Meat	3.27	109.14	127.75	125.99	126.11	128.12	138.21	135.88	136.88	139.12	172.21
Fish	1.03	107.49	109.68	111.27	113.29	116.61	126.88	127.89	129.10	130.96	137.08
Milk,cheese & Eggs	5.16	120.24	129.61	130.68	131.44	137.99	148.95	151.66	152.49	153.25	161.56
Oils and Fats	3.41	106.67	109.66	109.09	110.07	115.13	123.42	124.56	123.17	123.19	123.71
Fruits	1.35	147.88	170.79	144.05	144.74	145.82	190.16	172.05	170.41	161.57	194.44
Vegetables	4.12	122.82	142.39	143.42	138.91	132.11	150.13	145.03	139.89	131.09	147.76
Sugar, Jam & Etc	0.56	123.04	124.03	124.00	121.63	127.64	128.70	128.76	129.46	118.75	123.97
Food Products n.e.c (ND)	0.87	128.16	127.83	127.13	126.87	131.38	142.15	143.93	146.82	147.93	149.29
Non - Alcoholic Beverages	1.74	111.74	112.23	112.96	113.33	115.68	116.03	116.99	117.26	121.95	122.20
Alcoholic Beverages	1.22	114.28	126.36	123.84	126.14	123.47	129.50	131.17	134.71	129.52	130.82
Tobacco	0.33	173.93	184.34	183.85	180.65	180.42	188.25	190.29	197.61	211.16	211.82
Narcotics (ND)	0.69	114.19	117.41	120.03	142.49	144.16	153.41	154.54	160.06	175.58	172.91
Clothing	7.87	122.24	125.05	122.45	124.12	132.15	143.71	140.94	141.48	137.91	141.95
Actual Rentals for Housing	18.77	127.20	131.57	128.48	125.95	126.33	134.68	134.02	133.84	135.05	134.99
Electricity,gas&other fuels	6.04	116.62	122.73	123.11	122.20	123.80	128.27	137.33	134.38	134.51	135.16
Fules & Lubricants	3.20	116.14	113.81	116.81	120.16	120.67	144.20	144.56	144.12	141.08	142.22
Education	4.04	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Personal Care	2.72	121.63	125.25	126.34	126.37	126.59	131.73	131.70	132.01	125.64	133.18
Total	**100.00**	**117.71**	**122.87**	**122.68**	**122.74**	**124.81**	**133.74**	**134.09**	**133.83**	**133.81**	**137.70**

Source: National Statistical Bureau

TABLE 15.6 CONSUMER PRICE INDEXES FOR FOOD ITEMS, SUB - COMPONENTS, BHUTAN 1ST QTR. 2007 TO 2ND QTR. 2009

PERIOD TO PERIOD GROWTH RATE (%) 3rd Qtr. 2003=100

Item	Weight	2007				2008				2009	
		1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr
Food	27.69	1.18	8.39	(0.71)	0.01	3.42	10.05	(0.63)	(0.55)	(0.04)	8.03
Bread and Cereals (ND)	7.93	0.22	4.11	0.94	1.06	8.21	8.63	0.69	(0.47)	3.52	3.17
Meat	3.27	0.55	17.05	(1.38)	0.10	1.59	7.88	(1.69)	0.74	1.64	23.79
Fish	1.03	(0.19)	2.04	1.45	1.82	2.93	8.81	0.80	0.95	1.44	4.67
Milk,cheese & Eggs	5.16	1.03	7.79	0.83	0.58	4.98	7.94	1.82	0.55	0.50	5.42
Oils and Fats	3.41	0.35	2.80	(0.52)	0.90	4.60	7.20	0.92	(1.12)	0.02	0.42
Fruits	1.35	25.49	15.49	(15.66)	0.48	0.75	30.41	(9.52)	(0.95)	(5.19)	20.34
Vegetables	4.12	(2.66)	15.93	0.72	(3.14)	(4.90)	13.64	(3.40)	(3.54)	(6.29)	12.72
Sugar, Jam & Etc	0.56	(2.43)	0.80	(0.02)	(1.91)	4.94	0.83	0.05	0.54	(8.27)	4.40
Food Products n.e.c (ND)	0.87	1.07	(0.26)	(0.55)	(0.20)	3.55	8.20	1.25	2.01	0.76	0.92
Non - Alcoholic Beverages	1.74	0.91	0.44	0.65	0.33	2.07	0.30	0.83	0.23	4.00	0.21
Alcoholic Beverages	1.22	(0.48)	10.57	(1.99)	1.86	(2.12)	4.88	1.29	2.70	(3.85)	1.00
Tobacco	0.33	(0.71)	5.99	(0.27)	(1.74)	(0.13)	4.34	1.08	3.85	6.86	0.31
Narcotics (ND)	0.69	(0.10)	2.82	2.23	18.71	1.17	6.42	0.74	3.57	9.70	(1.52)
Clothing	7.87	3.02	2.30	(2.08)	1.36	6.47	8.75	(1.93)	0.38	(2.52)	2.93
Actual Rentals for Housing	18.77	(0.12)	3.44	(2.35)	(1.97)	0.30	6.61	(0.49)	(0.13)	0.90	(0.04)
Electricity,gas&other fuels	6.04	0.07	5.24	0.31	(0.74)	1.31	3.61	7.06	(2.15)	0.10	0.48
Fules & Lubricants	3.20	(0.09)	(2.01)	2.64	2.87	0.42	19.50	0.25	(0.30)	(2.11)	0.81
Education	4.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Personal Care	2.72	(1.53)	2.98	0.87	0.02	0.17	4.06	(0.02)	0.24	(4.83)	6.00
Total	**100.00**	**0.49**	**4.38**	**(0.15)**	**0.05**	**1.69**	**7.15**	**0.26**	**(0.19)**	**(0.01)**	**2.91**

Source: National Statistical Bureau

TABLE 15.7 CONSUMER PRICE INDEXES, SUB-COMPONENTS, BHUTAN, 1ST QTR. 2007 TO 2ND QTR. 2009

YEAR ON YEAR GROWTH RATE

3rd Qtr. 2003=100

Item	Weight	2007				2008				2009	
		1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr
Food	27.69	5.62	9.95	8.88	8.90	11.31	13.01	13.10	12.46	8.71	6.72
Bread and Cereals (ND)	7.39	3.17	6.51	5.52	6.43	14.92	19.90	19.61	17.81	12.70	7.04
Meat	3.27	2.00	18.79	16.51	16.19	17.39	8.19	7.85	8.54	8.59	24.60
Fish	1.03	1.46	3.15	3.92	5.20	8.48	15.68	14.94	13.96	12.31	8.04
Milk,cheese & Eggs	5.16	11.26	12.43	12.35	10.44	14.76	14.92	16.05	16.01	11.06	8.47
Oils and Fats	3.41	1.18	3.67	2.85	3.55	7.93	12.55	14.18	11.90	7.00	0.23
Fruits	1.35	15.49	29.75	22.71	22.83	(1.39)	11.34	19.44	17.74	10.80	2.25
Vegetables	4.12	6.41	8.58	9.35	10.10	7.56	5.44	1.12	0.71	(0.77)	(1.58)
Sugar, Jam & Etc	0.56	8.11	0.44	(1.46)	(3.54)	3.74	3.77	3.84	6.44	(6.96)	(3.68)
Food Products n.e.c (ND)	0.87	5.94	2.93	1.30	0.06	2.51	11.20	13.21	15.72	12.60	5.02
Non - Alcoholic Beverages	1.74	3.02	2.60	2.73	2.35	3.53	3.39	3.57	3.47	5.42	5.32
Alcoholic Beverages	1.22	5.50	13.10	8.83	9.85	8.04	2.48	5.92	6.79	4.90	1.02
Tobacco	0.33	0.92	6.20	5.29	3.13	3.73	2.12	3.50	9.39	17.04	12.52
Narcotics (ND)	0.69	7.59	3.75	6.01	24.66	26.25	30.66	28.75	12.33	21.80	12.71
Clothing	7.87	8.42	6.23	3.92	4.60	8.11	14.92	15.10	13.99	4.36	(1.22)
Actual Rentals for Housing	18.77	3.52	4.63	1.56	(1.10)	(0.68)	2.36	4.31	6.26	6.90	0.23
Electricity,gas&other fuels	6.04	1.35	5.83	5.92	4.86	6.16	4.51	11.55	9.97	8.65	5.37
Fules & Lubricants	3.20	4.92	(2.12)	0.26	3.36	3.90	26.70	23.76	19.94	16.91	(1.37)
Education	4.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Personal Care	2.72	2.14	1.20	2.04	2.31	4.08	5.17	4.24	4.46	(0.75)	1.10
Total	**100.00**	**4.34**	**5.94**	**5.54**	**4.78**	**6.03**	**8.85**	**9.30**	**9.04**	**7.21**	**2.96**

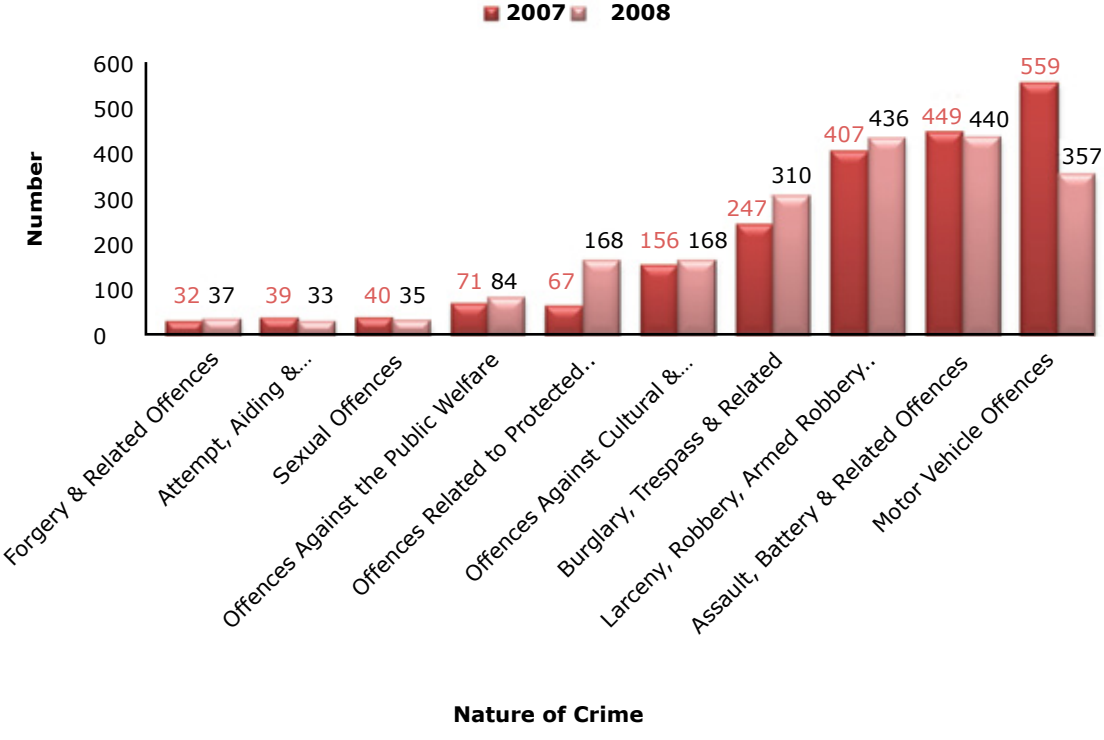
Source: National Statistical Bureau

CHAPTER 16 CRIMES

The data available in this sector are from the cases reported and registered by Royal Bhutan Police. The statistics presented here are those compiled by the Crime and Operations, Police Headquarter and reported to Ministry of Home and Cultural Affairs (MoHCA).

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

Figure 16.1: Top Most Reports by Nature of Crime, Bhutan 2007 & 2008



C M Y K

TABLE 16.1: SUMMURY OF CRIME REPORTS BY NATURE OF CRIME, BHUTAN, 2007 & 2008

(Incident)

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

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

C M Y K

TABLE 16.2: DETAILS OF CRIME REPORTS BY NATURE OF CRIME, BHUTAN , 2007 & 2008

(Incident)

Nature of Crime	2007	2008
ATTEMPT, AIDING AND ABETTING,SOLICITATION AND CRIMINAL CONSPIRACY		
Aiding and Abetting	0	1
Solicitation	0	0
Criminal Conspiracy	0	0
Criminal Attempt Murder	6	7
Criminal Attempt Rape	7	5
Criminal Attempt Burglary	3	7
Criminal Attempt Larceny	8	7
Criminal Attempt Suicide	15	6
TOTAL	**39**	**33**
HOMICIDE		
Murder	3	4
Voluntary Manslaughter	5	3
Involuntary Manslaughter	2	7
Negligent Homicide	3	3
Illegal Abortion	0	0
Custodial Death	0	0
Complicity in Suicide	0	0
Illegal Selling or Buying of Human Organs	1	1
Trafficking a Person	0	0
TOTAL	**14**	**18**
ASSAULT, BATTERY AND RELATED OFFENCES		
Assault	41	34
Battery	401	403
Reckless Endangerment	7	3
TOTAL	**449**	**440**
KIDNAPPING AND RELATED OFFENCES		
Kidnapping	0	0
Abduction	0	2
Criminal Elopement	4	4
Escape from Lawful Custody	1	0
Felonious Restriant	0	0
Infringement of Movement	0	0
TOTAL	**5**	**6**
SEXUAL OFFENCES		
Rape	22	11
Rape of a Married Person	1	3
Statutory Rape	4	5
Rape of a Child above twelve years of agae	3	3
Rape of a Pregnant Woman	0	0
Gang Rape	2	1
Gang Rape of a Married Person	0	0
Gang Rape of a Child below Twelve years of age	0	0
Gang Rape of a Child above twelve years of age	1	0
Gang Rape of a Pregnant Woman	0	0

Condt...

TABLE 16.2 (contd.): DETAILS OF CRIME REPORTS BY NATURE OF CRIME, BHUTAN , 2007 & 2008

(Incident)

Nature of Crime	2007	2008
Custodial Rape	0	0
Marital Rape	0	0
Child Molestation	4	4
Sexual Harrassment	2	4
Incest	1	1
Indecent Exposur	0	1
Bestiality	0	0
Un-Natural Sex	0	2
TOTAL	**40**	**35**
OFFENCE AGAINST INFANT, CHILD, MENTALLY DISSABLED AND INCOMPETENT PERSON		
Abandonment of an Infant or a Child	3	1
Abandonment of Dead Infant	1	2
Child Abuse	0	0
Endangerment of a Child	0	1
Pedophilia	0	0
Trafficking of a Child	1	0
Endangerment of a Mentally Dissabled or an Incompetent Person	0	0
TOTAL	**5**	**4**
ARSON AND RELATED OFFENCES		
Arson	5	3
Negligent Burning or Exploding	36	17
TOTAL	**41**	**20**
LARCENY,ROBBERY,ARMED ROBBERY AND RELATED OFFENCES		
Larceny	348	339
Larceny by Deception	1	2
Robbery	6	17
Armed Robbery	4	12
Extortion	0	0
Illegal Transfer of Immovable Property	0	0
Larceny of Property Lost, Mislaid or Delivered by Mistake	3	1
Possession of Stolen Property	0	0
Theft of Service	0	0
Un-Authorized use of Property	0	0
Breach of Trust	14	16
Criminal Misappropriation of Property	2	1
Reckless Endangerment of Property	1	1
Un-Lawful Posting of Advertisements	0	0
Auto Striping	25	44
Pick Pocketing	3	3
Total	**407**	**436**
MONEY LAUNDERING & SMUGGLING		
Money Laundering	0	0
Smuggling	12	15

Condt...

C M Y K

TABLE 16.2 (contd.): DETAILS OF CRIME REPORTS BY NATURE OF CRIME, BHUTAN, 2007 & 2008

(Incident)

Nature of Crime	2007	2008
Receiving of Smuggled Goods or Substances	0	0
Tax Evasion	0	0
Breach of Contract	4	2
TOTAL	**16**	**17**
EMBEZZLEMENT & BRIBERY		
Embezlement	7	3
Bribery	0	0
Cpommercial Bribery	0	0
Official Misconduct	1	0
TOTAL	**8**	**3**
BURGLARY,TRESPASS AND RELATED OFFENCES		
Burglary	237	303
Trespass	3	5
Impersonation	7	2
TOTAL	**247**	**310**
FROGERY & RELATED OFFENCES		
Frogery	13	10
Tampering with Public Records	0	0
Tampering with Documents	0	1
Execution of a Document by Deception	0	0
Fraudulent Cheque Writing	2	2
Counterfeiting	0	1
Deceptive Practice	17	23
Fraudulent Obtaining of Insurance	0	0
Fraudulent Insolvency	0	0
Fraud Involving a Security Interest	0	0
TOTAL	**32**	**37**
DEFAMATION & RELATED OFFENCES		
Defamation	3	4
Libel	1	0
Black Mail	0	1
False Advertising	0	0
TOTAL	**4**	**5**
TREASON, TERRORISM & RELATED OFFENCES		
Treason	1	2
Terrorism	1	11
Sedition	2	0
Espionage	0	0
Hijacking	0	0
Abettor of Mutiny	0	0
Harbouring of Deserter	0	0
Impersonation of Uniformed Personnel	0	0
Impersonation of an Official	2	3
TOTAL	**6**	**16**

Condt...

C M Y K

TABLE 16.2 (contd.): DETAILS OF CRIME REPORTS BY NATURE OF CRIME, BHUTAN, 2007 & 2008

(Incident)

Nature of Crime	2007	2008
OFFENCES AGAINST CULTURAL & NATIONAL HERITAGE		
Illegal sale of Cultural and National Heritage Property	0	1
Damage to Cultural or National Heritage Property and National Monuments	0	0
Damagae to Religious Objects	144	131
Offence against the Ku, Sung, Thuk-Ten or Zungs	10	16
Illegal Purchase or sale of Ku, Sung, Thuk-Ten or Zungs	0	0
Illegal Gift of Ku, Sung, Thuk-Ten or Zungs	0	0
Caretaker's Negligence causing loss or Larceny of Ku, Sung, Thuk-Ten or Zungs	0	15
Larceny of Antique	1	4
Illegal Purchase or sale of Antique	1	1
Illegal Gift of Antique	0	0
TOTAL	**156**	**168**
OFFENCES AGAINST JUDICIAL AUTHORITY		
Un-Authorized Hearing	0	0
Contempt of Court	0	0
Prejury	0	0
Cantankerous Litigation	0	0
TOTAL	**0**	**0**
PROSTITUTION & RELATED OFFENCES		
Prostitution	5	2
Promption of Prostitute	0	4
Patronizing a Prostitute	0	2
Trafficking a Person for Prostitution	0	0
Lewed and Lascivious Conduct	0	0
TOTAL	**5**	**8**
OFFENCES AGAINST THE PUBLIC WELFARE		
Public Intoxication	0	4
Use of Tobacco or Health Hazard Substances	23	22
Illegal Sale fo Tobacco or other Health Hazard Substances	4	6
Illegal Sale of Alcohol	2	0
Gambling	0	0
Malicious Mischief	39	52
Usury	0	0
Tampering with a Consumer Product	0	0
Black-Marketing	2	0
Anti-Trust	0	0
Endangerment of a Public Water Source	0	0
Environment Pollution	1	0
Criminal Nuisance	0	0
TOTAL	**71**	**84**
OFFENCES RELATED TO PUBLIC & CIVIC DUTIES		
Entrapment	0	0
Torture	0	0
Illegal Arrest	0	0
Hindering Prosecution	0	0

Condt...

C M Y K

TABLE 16.2 (contd.): DETAILS OF CRIME REPORTS BY NATURE OF CRIME, BHUTAN, 2007 & 2008

(Incident)

Nature of Crime	2007	2008
Obstruction of Lawful Authority	2	8
Obstruction of Public Service	0	0
Reporting of False Information	0	1
Failure to Assist Lawful Authority	0	0
Failure to Report a Crime	0	0
Tampering with a Dead Body	0	0
Abandonment of a Person in Danger	0	0
Malpractice	0	0
Crime Against Public Election	0	0
Illegal Immigration	0	1
Illegal Issue of Immigration Documents	0	0
Illegal Transportation of Immigrant	0	0
Drawing of illegal Document	0	0
TOTAL	**2**	**10**
OFFENCES RELATED TO PUBLIC ORDER AND TRANQUILLITY		
Breach of Public Order and Tranquillity	0	0
Unlawful Assemble	0	0
Disruption of a Lawful meeting or Gathering	0	0
Failure to Disperse	0	0
Rioting	0	0
Promotion of Civil Unrest	0	0
Disorderly Conduct	3	3
Harassment	3	5
Prowling	4	1
Obstruction of Through Fare	1	1
TOTAL	**11**	**10**
MISCELLANEOUS OFFENCES		
OFFENCES AGAINST PRIVACY		
Eavesdropping	0	0
Unauthorized oppening of Mail or Parcel	0	0
TOTAL	**0**	**0**
COMPUTER OFFENCES		
Tampering with Computer Material	0	1
Unlawful Possession of Computer Materials	0	0
Computer Pornography	0	0
TOTAL	**0**	**1**
OFFENCES RELATED TO FIREARMS AND WEAPONS		
Illegal Manufacturing of a Firearms, Ammunition, Explosive or other Lethal Weapons	0	1
Illegal Possession of Firearm, Ammunition, Explosive or other Lethal Weapons	5	14
Illegal Sale or Purchase of a Firearm, Ammunition, Explosive or other Lethal Weapons	1	0
Illegal Pointing of a Firearm	0	0
Display of Weapon	7	23
False Alarm	0	0
TOTAL	**13**	**38**

Condt...

C M Y K

TABLE 16.2 (contd.): DETAILS OF CRIME REPORTS BY NATURE OF CRIME, BHUTAN, 2007 & 2008

(Incident)

Nature of Crime	2007	2008
OFFENCES RELATED TO PROTECTED SPECIES, CONTROLLED AND OTHER HARMFUL SUBSTANCES		
Risking the Protedted Species	4	2
Illegal Hunting or Fishing	3	2
Genetic Interference	0	0
Illegal Cultivitation, Production or Manufacturing	0	0
Illegal Transaction of Contolled Substances	11	79
Possession of a Controlled Substances	44	71
Adulteration of Drugs	0	0
Sale of a Prescription for a controlled Substances	0	1
Illegal Sale and use of Harmful Chemical Substance	5	13
TOTAL	**67**	**168**
MOTOR VEHICLE OFFENCES		
M.V Accident	469	282
M.V Accident (Fatal)	18	27
Hit and Run	60	27
Cycle Accident	0	0
Pedestrain Accident	12	19
Traffic Violation	0	2
TOTAL	**559**	**357**
OTHERS		
Accidental Death	42	28
Accidental Injury	1	0
Absconding	0	0
Black Majic	1	0
Drowning	32	19
Natural Calamities	1	0
Missing of Person	19	2
Un-Natural Death	28	34
Suicide	50	53
TOTAL	**174**	**136**
TOTAL CRIMES	**2371**	**2360**

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

C M Y K

TABLE16.3: MONTHLY MOTOR VEHICLE ACCIDENTS BY TRAFFIC DIVISION, BHUTAN, 2008

(Incident)

Traffic Divisions	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Thimphu Division	8	8	7	9	7	10	13	8	7	6	5	2	90
Div-I Paro	2	1	2	7	1	4	1	2	2	1	0	1	24
Div-II Punakha	5	0	0	0	1	3	2	1	1	2	0	5	20
Div-III Phuentsholing	15	9	10	12	12	6	15	19	7	10	2	16	133
Div-IV Samtse	0	1	1	0	0	0	0	0	0	0	0	0	2
Div-V Gelephu	2	1	0	0	1	1	1	1	1	0	0	0	8
Div-VI Tsirang	2	0	2	1	2	0	0	0	0	0	0	2	9
Div-VII Trongsa	1	3	0	4	0	5	2	2	2	0	4	1	24
Div-S/Jongkhar	0	3	3	0	1	2	1	2	0	1	0	2	15
Div-IX Trashigang	2	3	3	5	1	2	0	0	0	1	0	2	19
Div-X Mongar	1	0	1	0	2	3	3	0	1	1	1	0	13
TOTAL	**38**	**29**	**29**	**38**	**28**	**36**	**38**	**35**	**21**	**22**	**12**	**31**	**357**

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

TABLE 16.4: CAUSES OF MOTOR VEHICLE ACCIDENTS BY TRAFFIC DIVISION, BHUTAN, 2008

(Incident)

Traffic division/ Type of Vehicle	Mechanical fault	Drunk driving	Bad weather	Without licence	Unknown causes	Other causes	All causes
Thimphu							
Truck	0	0	0	0	0	27	27
Buses	0	0	0	0	0	88	104
Light Vehicle	0	6		10	0	13	14
Two wheeler	0	0	0	1			
Total	**0**	**6**	**0**	**11**	**0**	**128**	**145**
Paro							
Truck	1	0	0	0	0	11	12
Buses	0	0	0	1	1	2	4
Light Vehicle	7	5	2	3	0	110	127
Two wheeler	0	0	0	2	0	5	7
Total	**8**	**5**	**2**	**6**	**1**	**128**	**150**
Punakha							
Truck	1	0	0	0	2	0	3
Buses	0	0	0	0	0	0	0
Light Vehicle	1	0	5	0	11	3	20
Two wheeler	1	0	0	0	0	0	1
Total	**3**	**0**	**5**	**0**	**13**	**3**	**24**
Phuentsholing							
Truck	8	5	6	0	1	34	54
Buses	1	0	2	2	0	6	11
Light Vehicle	7	3	13	2	6	60	91
Two wheeler	0	0	0	0	0	7	7
Total	**16**	**8**	**21**	**4**	**7**	**107**	**163**
Samtse							
Truck	0	1	0	1	0	0	2
Buses	0	0	0	0	0	0	0

Contd...

C M Y K

TABLE 16.4: (Contd..)CAUSES OF MOTOR VEHICLE ACCIDENTS BY TRAFFIC DIVISION, BHUTAN, 2008

(Incident)

Traffic division/ Type of Vehicle	Mechanical fault	Drunk driving	Bad weather	Without licence	Unknown causes	Other causes	All causes
Light Vehicle	0	0	0	0	0	0	0
Two wheeler	0	0	0	0	0	0	0
Total	**0**	**1**	**0**	**1**	**0**	**0**	**2**
Gelephu							
Truck	5	0	1	1	0	7	14
Buses	0	0	0	0	0	1	1
Light Vehicle	4	1	1	2	0	10	18
Two wheeler	0	0	0	1	0	2	3
Total	**9**	**1**	**2**	**4**	**0**	**20**	**36**
Tsirang							
Truck	0	0	0	0	0	0	0
Buses	0	0	0	0	0	0	4
Light Vehicle	0	0	0	2	0	2	1
Two wheeler	0	0	0	1	0	0	0
Total	**0**	**0**	**0**	**3**	**0**	**2**	**5**
Trongsa							
Truck	1	0	4	0	0	5	11
Buses	0	0	0	0	1	1	1
Light Vehicle	14	0	6	0	0	13	33
Two wheeler	2	0	1	0	0	0	3
Total	**17**	**0**	**11**	**0**	**1**	**19**	**48**
Samdrup Jongkhar							
Truck	2	0	0	0	0	2	4
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	**2**	**0**	**0**	**0**	**0**	**2**	**4**
Trashigang							
Truck	2	0	0	0	0	0	2
Buses	0	0	0	0	0	0	1
Light Vehicle	0	0	0	0	1	0	2
Two wheeler	0	0	0	0	0	0	0
Total	**2**	**0**	**0**	**0**	**1**	**0**	**5**
Mongar							
Truck	0	0	0	0	1	0	1
Buses	0	0	0	0	0	0	0
Light Vehicle	3	0	3	0	0	0	6
Two wheeler	0	0	0	0	0	0	0
Total	**3**	**0**	**3**	**0**	**1**	**0**	**7**
Bhutan	**62**	**21**	44	**29**	**24**	**409**	**589**

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

C M Y K

National Statistics Bureau
ROYAL GOVERNMENT OF BHUTAN
P.O. Box No.338 Thimphu
Telephone No: +975-2-322753/333296/325402
Fax: +975-2-323069

www.nsb.gov.bt

ISBN-978-99936-28-03-3

Catalogue No.101