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OCTOBER 2009

NATIONAL ACCOUNTS STATISTICS

2000 - 2008

**National Statistics Bureau
ROYAL GOVERNMENT OF BHUTAN**

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FOREWORD

Since 1987, the annual report on “National Accounts Statistics of Bhutan” has been a regular publication of the National Statistics Bureau (NSB), earlier known as the Central Statistical Organization (CSO). The report presents the estimates of Gross Domestic Product (GDP) and related macro-economic aggregates like final consumption of the households and the government, investment, saving etc. The main objective of the report is to measure the annual economic performance of the country.

Based on the latest available information from various sources, the estimates of some sectors have been revised. The base year of the estimates is shifted from 1980 to 2000.

Attempts have also been made to derive the estimates of GDP using the expenditure approach. The difference between the **production approach** and the **expenditure approach** has been treated as statistical discrepancy.

We would like to request all users to take note of the revised figures while using this report for analysis and planning purposes as the base year of estimates is shifted from 1980 to 2000.

Finally, we would like to express our sincere appreciation to all the government agencies, corporations and private agencies for providing the requested information on time, which enabled the timely publication of this report.

We look forward to receiving the same spirit of co-operation and assistance in future also.

October 2009

National Statistics Bureau
Thimphu: Bhutan

DATA SOURCES

ARMY WELFARE PROJECT
ARMY WELFARE SAWMILL
BHUTAN BROADCASTING SERVICE CORPORATION
BHUTAN POST
BHUTAN TELECOM LIMITED
BHUTAN POWER CORPORATION
BASOCHU HYDRO POWER CORPORATION
BHUTAN NATIONAL BANK
BANK OF BHUTAN
BHUTAN DEVELOPMENT FINANCE CORPORATION
BHUTAN BOARD PRODUCTS LIMITED
BHUTAN BOARD EXPORT LIMITED
BHUTAN CARBIDE & CHEMICALS LIMITED
BHUTAN POLYTHENE COMPANY LIMITED
BHUTAN POLYMER COMPANY LIMITED
BHUTAN FERRO ALLOYS LIMITED
BHUTAN FRUIT PRODUCTS LIMITED
BHUTAN AGRO INDUSTRY LIMITED
BHUTAN MARBLES & CHEMICALS LIMITED
CHUKHA HYDRO POWER CORPORATION
DEPARTMENT OF AGRICULTURE
DEPARTMENT OF LIVESTOCK
DEPARTMENT OF PUBLIC ACCOUNTS
DEPARTMENT OF REVENUE & CUSTOMS
DRUK AIR CORPORATION LIMITED

DEPARTMENT OF GEOLOGY AND MINES
DRUK CEMENT PVT. LIMITED
DRUK PLASTERS & CHEMICALS PVT LIMITED
DRUK SATAIR CORPORATION
DAMCHEN GAS SUPPLY DEPOT
DRALA FLOUR MILL
EASTERN BHUTAN COAL COMPANY LIMITED
FORESTRY DEVELOPMENT CORPORATION LIMITED
FOOD CORPORATION OF BHUTAN
KARMA FEEDS
KURICHU HYDRO POWER CORPORATION
KARMA STEEL FACTORY
KUENSEL CORPORATION LIMITED
MUNICIPALS/CITY CORPORATION
NATIONAL PENSION & PROVIDENT FUND
PENDEN CEMENT AUTHORITY LIMITED
ROAD SAFTEY & TRANSPORT AUTHORITY
ROYAL MONETARY AUTHORITY
ROYAL INSURANCE CORPORATION OF BHUTAN LIMITED
ROYAL SECURITIES EXCHANGE OF BHUTAN LIMITED
TASHI GAS SUPPLY DEPOT
WOOD CRAFT CENTRE
YANGZOM CEMENT INDUSTRY PVT. LIMITED
DEPARTMENT OF TRADE AND INDUSTRIES
HOUSEHOLD INCOME AND EXPENDITURE SURVEY 2003, 2007
POPULATION AND HOUSING CENSUS 2005

ECONOMIC INDICATORS

| <i>Economic Indicators</i> | <i>2005</i> | <i>2006</i> | <i>2007</i> | <i>2008</i> |
|---|-------------|-------------|-------------|-------------|
| 1. GDP in current market prices (million Nu.) | 35496.9 | 39571.3 | 49381.7 | 54149.9 |
| 2. GDP in current market price (million US\$) | 804.9 | 873.5 | 1192.8 | 1244.8 |
| 3. GNI/GNP in current prices (million Nu.) | 34956.1 | 39670.0 | 49166.2 | 53010.6 |
| 4. Real GDP growth rate (%) | 7.0 | 6.4 | 19.7 | 5.0 |
| 5. Implicit GDP deflator | 125.0 | 130.6 | 136.6 | 142.5 |
| 6. Exchange rate(calendar) Nu/US\$ | 44.1 | 45.3 | 41.4 | 43.5 |

| <u>Share to GDP by major sector (%)</u> | | | | |
|--|------|------|------|------|
| 1. Primary | 24.0 | 24.4 | 20.6 | 21.2 |
| 2. Secondary | 33.7 | 33.7 | 43.3 | 39.1 |
| 3. Tertiary | 42.3 | 41.9 | 37.1 | 39.7 |

Note: Primary sector includes agriculture, livestock, forestry and mining sectors.
 Secondary sector includes manufacturing, electricity and construction sectors.
 Tertiary sector includes trade, hotels & restaurants, transport & communication, finance, general government and private and recreational services.

National Accounts Statistics - 2008

Background

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 in the process of production and distribution of economic goods and services. Economic goods command a price in 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 boundary of the country and are available for final uses like consumption, investment and exports.

GDP can be measured both in current and constant prices. The current price estimate reflects the money value of goods and services produced in an accounting year measured in the prices of that particular year, where as the constant price estimates reflects the money value of base year price or in other words, it can be said as volume increase or decrease.

The objective of National Accounts report is to provide timely, comprehensive and reliable description of the condition and performance of the Bhutanese economy by means of gross domestic product (GDP) and gross national product/gross national income (GNP/GNI). The report provides comprehensive set of information, which is indispensable for monitoring, analysis, and evaluation of the performance of the economy.

ECONOMIC PERFORMANCE – 2008

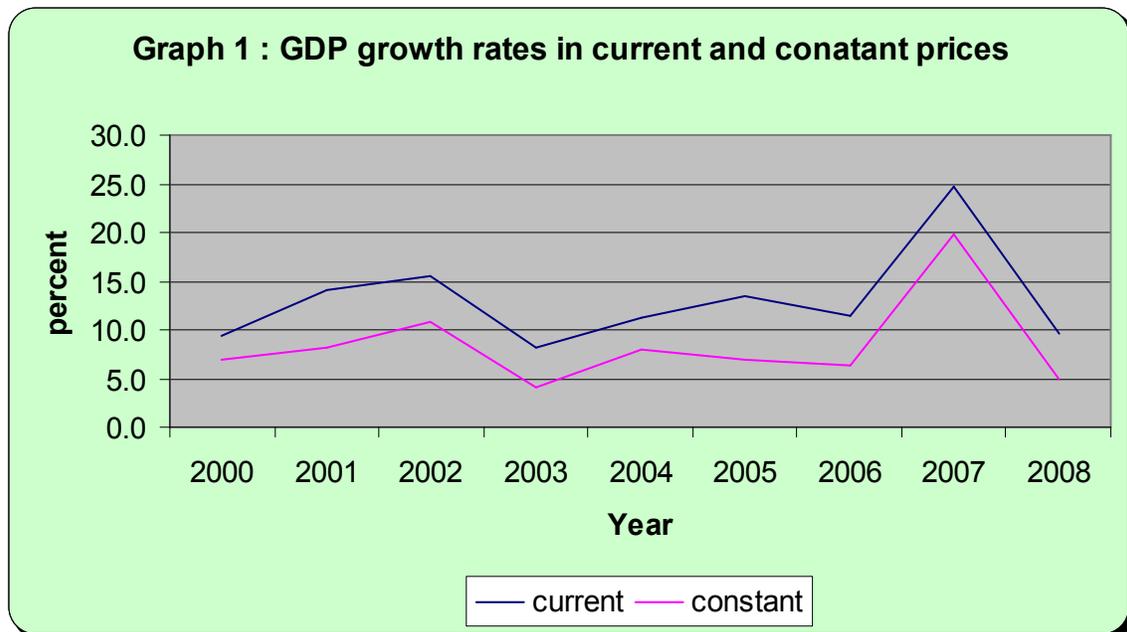
The real GDP increased from Nu.36170.3 million in 2007 to Nu.37964.2 million, with a growth rate of 5.0 percent in 2008 compared to 19.7 percent in 2007.

The nominal GDP during 2008 is Nu.54149.9 million as compared to Nu.49381.7 million in 2007, showing a rise of Nu 4768.2 million. With the average exchange rate of Nu.43.5 per 1 US\$, Bhutan's GDP in US\$ is therefore estimated at US \$1244.8 million in 2008.

With the estimated population of 0.672 million, the per-capita GDP for 2008 is Nu. 80580.2 and in terms of US \$ it is 1852.4.

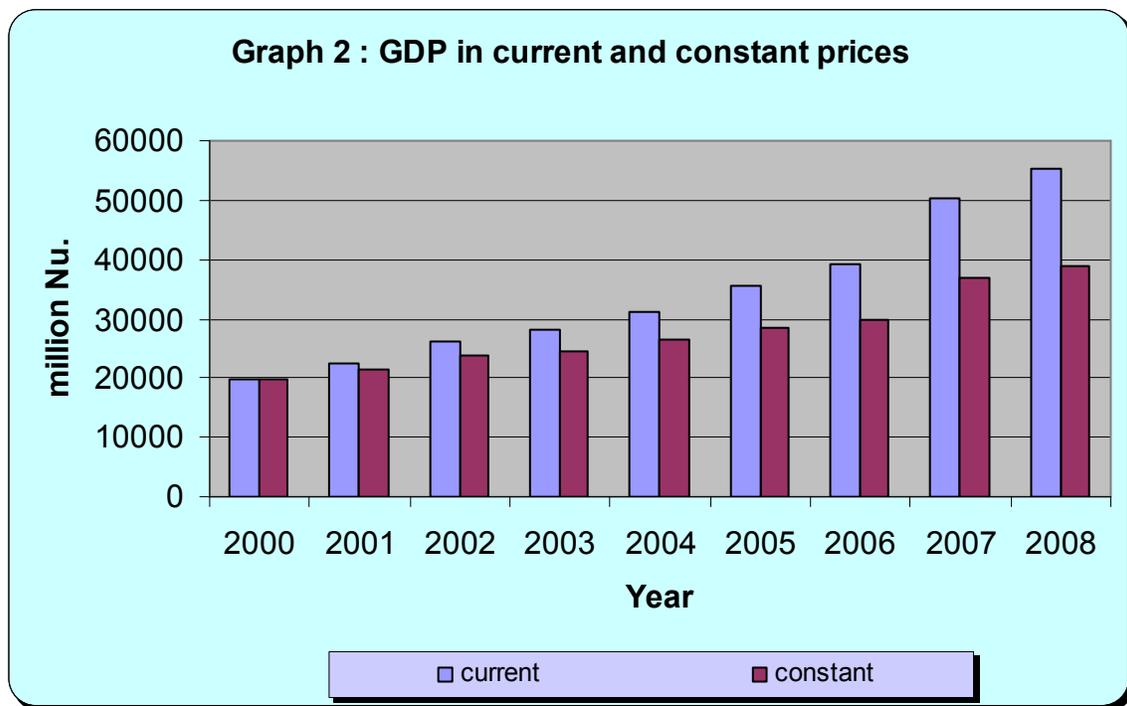
The agriculture sector had been the leading sector with the average share of 24.2% till 2006. However, since 2007 the electricity sector became the maximum contributor to the economy with 21.7 % during 2007 and 20.0 % in 2008 followed by agriculture and construction with 18.5 and 11.4 percent respectively.

The growth performance of electricity in 2008 was 2.6 percent and construction dropped to (-) 6.4 percent during the year as there were no major new activities carried-out.



The tertiary sector has been observed to be the fastest growing sector by 9.5 percent in 2008. Within the tertiary sector, the hotels and restaurants grew by 45.4 percent and financing and insurance by 27.0 percent during the period. However, in 2007, the secondary sector (service sector) had the highest growth of 49.5 percent due to the fully commissioning of tala hydro electricity generation.

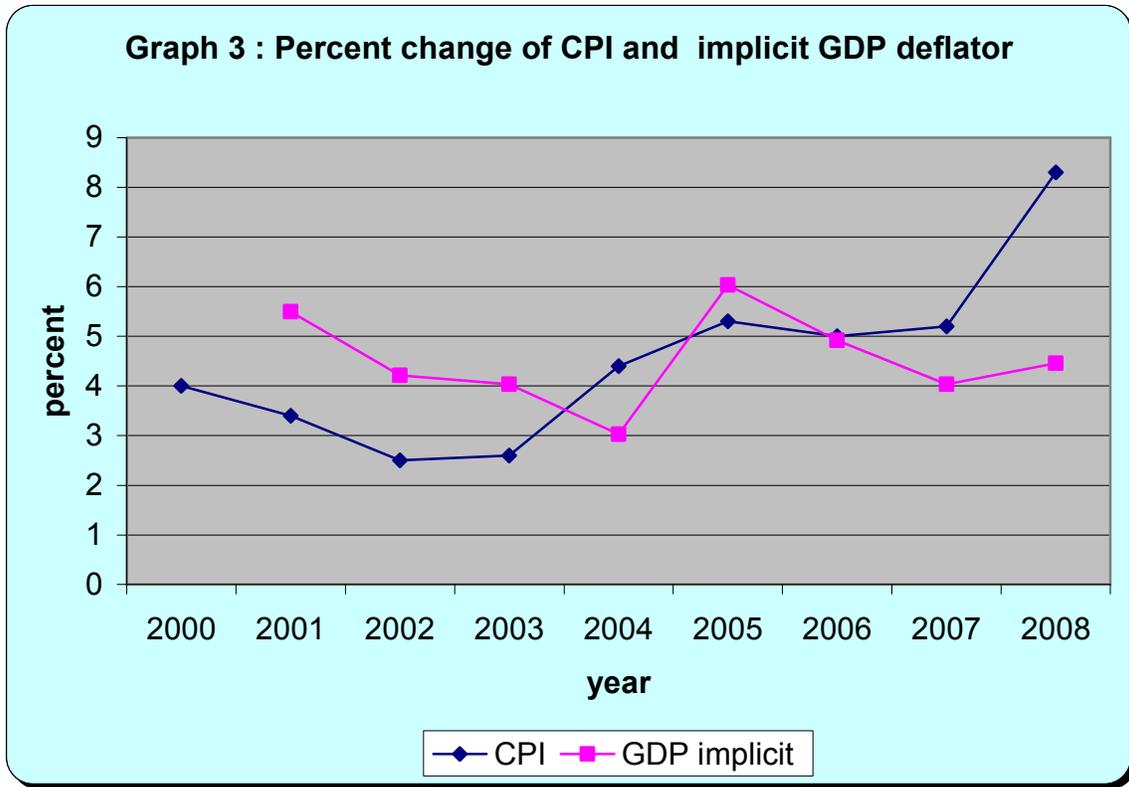
The nominal Gross National Product/Gross national Income (GNP/GNI) is estimated at Nu.53010.6 million in 2008 as compared to Nu.49166.2 million in 2007 with a growth of 7.8 percent during the year.



CONSUMER PRICE INDEX

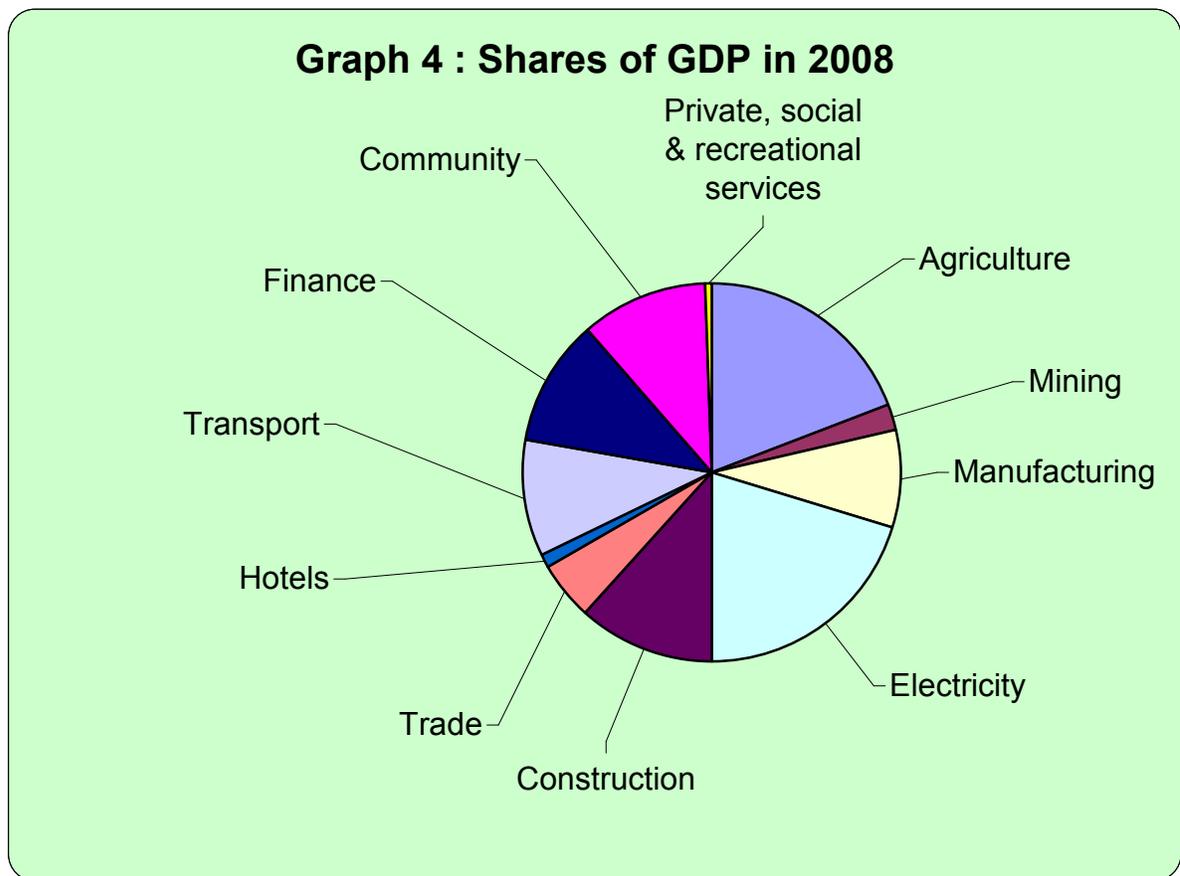
The consumer price index is a single number used to measure changes in the average retail prices of a fixed market basket of goods and services commonly purchased by households. It shows how much, on an average, the prices of goods and services have increased or decreased from a particular reference base year.

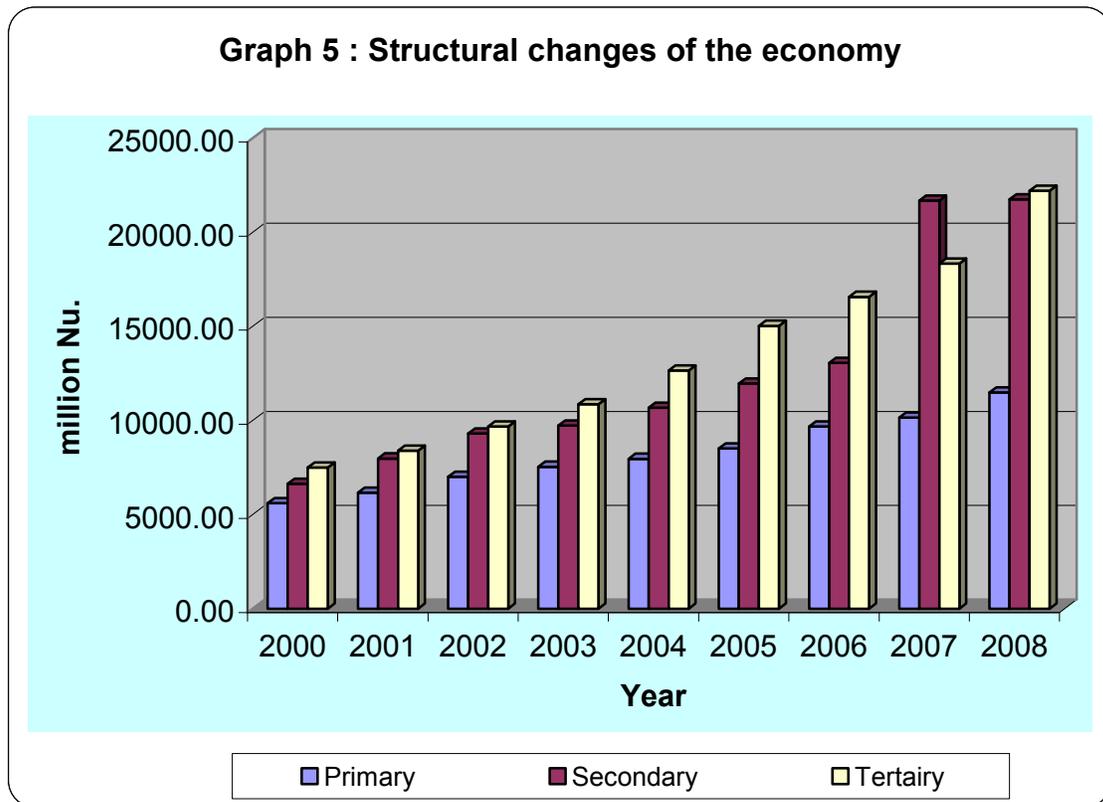
The inflation rate based on implicit GDP deflator (base year 2000) increases to 142.5 in 2008 as against 136.6 in 2007 indicating 4.3 percent increase in 2008. The consumer price index has shown an inflation rate of 8.3 percent in 2008 as compared to 5.2 percent in 2007.



STRUCTURE OF THE ECONOMY

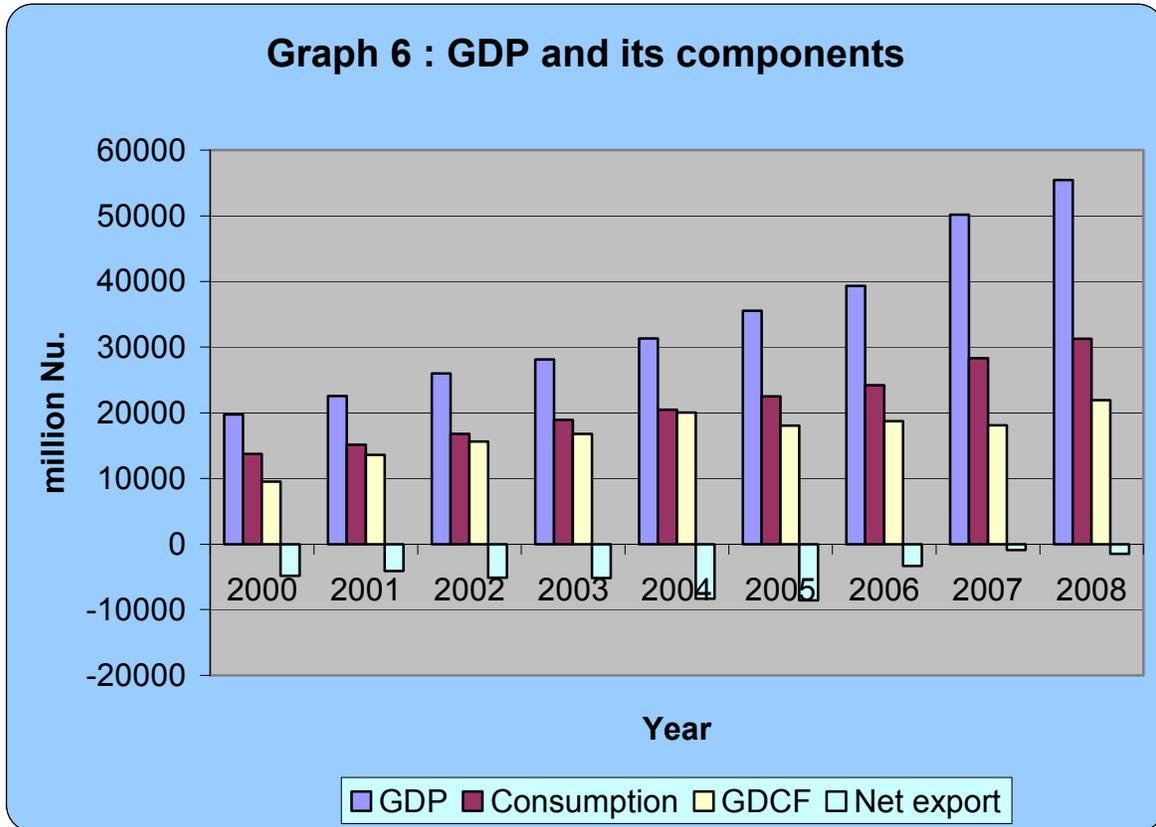
The structure of Bhutanese economy has undergone significant changes over the past several years. The share of primary sector consisting of agriculture and mining and quarrying has been gradually declining from 28.4 percent of the GDP in 2000 to 21.2 percent in 2008 and the secondary sector consisting of manufacturing, electricity, and construction has shown a marginal increase from 33.6 percent in 2000 to 39.1 percent in 2008. The share of tertiary sector which is composed of the entire service providing sector has increased from 38.0 percent of the GDP in 2000 to 39.7 percent in 2008.





GDP BY EXPENDITURE

GDP by expenditure indicates how the incomes generated in the country are being used for various purposes. According to the System of National Accounts (SNA), the three main aggregate uses in GDP are consumption of government and private households, investments and net export.



*Note: GDP= gross domestic product, GDCF= gross domestic capital formation
Net export includes both good and services*

The final consumption expenditure is divided into private household final consumption and government final consumption expenditures.

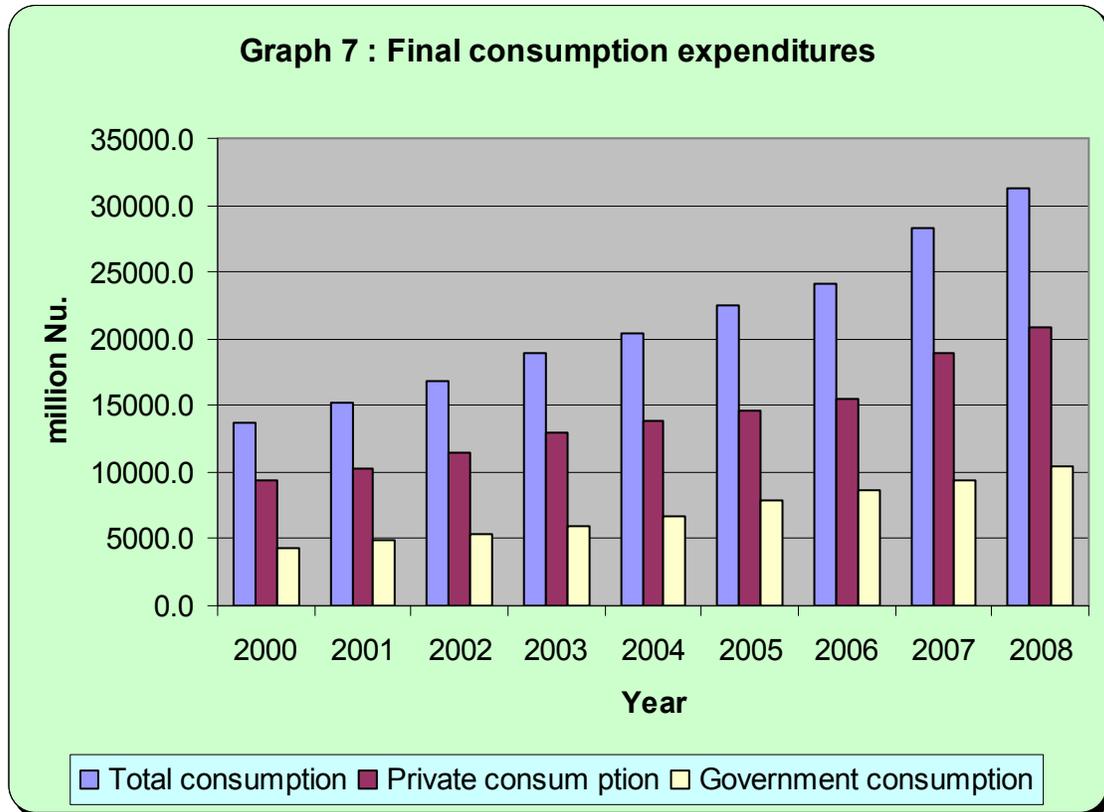
Private household final consumption expenditure is estimated based on the 2000 Household Income and Expenditure Survey (HIES) and Bhutan Living Standard Surveys (BLSS) of 2003 and 2007.

The share of private final consumption to the total consumption works out to 66.8 percent and government 33.2 percent in 2008 and total consumption to the GDP is about 57.7 percent.

The level of the private household final consumption expenditure in 2008 rose to Nu.20886.6 million from Nu.18864.1 million in 2007.

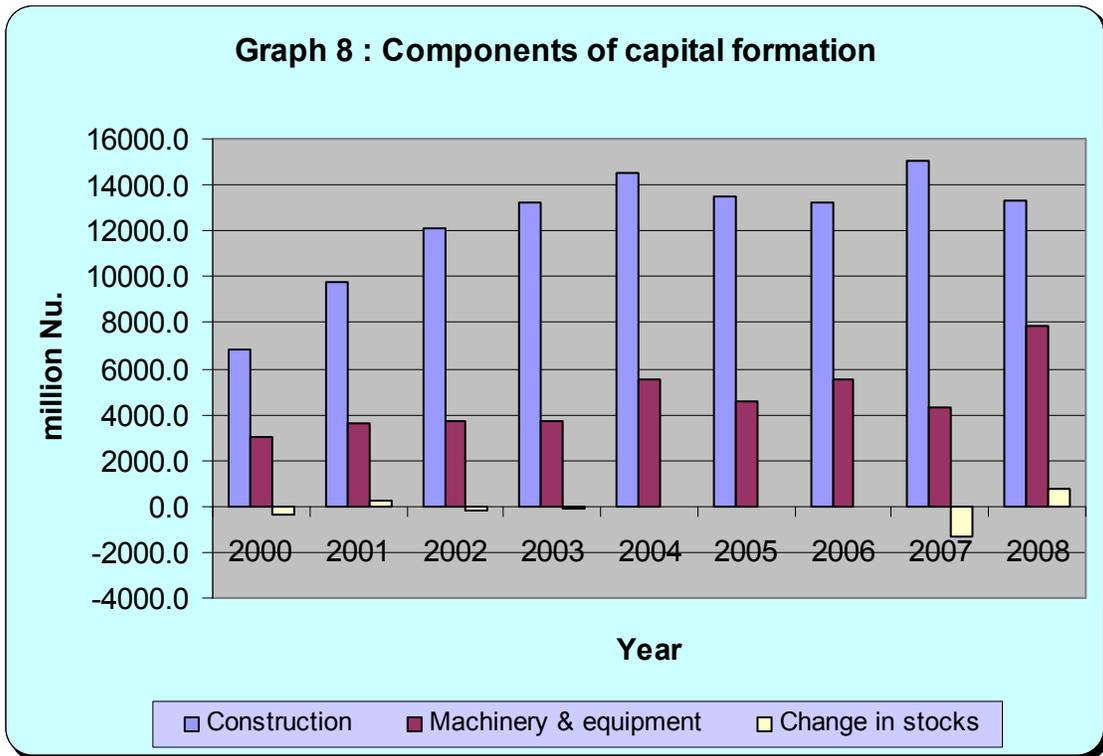
In real term the private expenditure stood at Nu.14449.5 million in 2008 as against Nu.14264.0 million in 2007, with a growth rate of about 1.3 percent.

The main source of information to estimate the **government final consumption** is the annual budget documents of the Ministry of Finance.

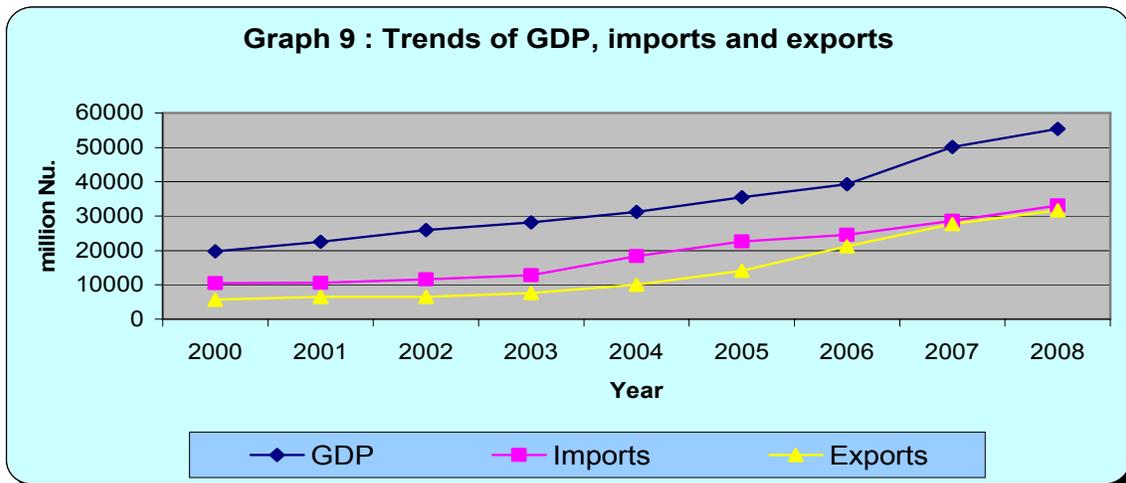


The total final consumption expenditure of the government stood at Nu. 10372.6 million in 2008 at current prices showing an increase of 10.0 percent compared to 2007 and in constant prices, the consumption rose to Nu.7916.7 million in 2008 against Nu. 7176.3 million in 2007.

The estimates of **gross domestic capital formation (GDCF)** consist of purchase of machinery & equipments, construction activities and change in stock. For machinery and equipment, the sources of data are mainly from trade documents and in absence of trade documents historical trends were used in the past.



The level of gross domestic capital formation in 2008 rose to Nu. 21930.7 million from Nu. 18066.5 million in 2007. The construction sector has the maximum contribution to the capital formation with 60.7 percent in 2008. In real term, the capital formation has grown by 14.6 percent in 2008 compared to negative growth observed in 2007 due to completion of tala hydro power project, express high way etc..



SECTOR-WISE PERFORMANCE

1. The **agriculture sector** consists of crops, livestock and forest. It has the share of 18.7 percent to the GDP in 2008. However, its share to GDP has been gradually declining over the years. The agriculture sector has shown a growth rate of about 1.0 percent in 2008 in real term compared to -0.3 percent in 2007. The decline in growth during 2007 was mainly due to the negative growth observed by the forestry and livestock activities but in 2008 the livestock showed 3.1 percent growth but the forestry still showed a negative growth of about 3 percent.

Table 2: Gross value of output of major crops in current prices (million Nu.)

| C R O P S | 2000 | 2004 | 2005 | 2006 | 2007 | 2008 |
|---------------------|--------|---------|---------|---------|---------|---------|
| 1. Paddy | 891.08 | 1090.29 | 1136.63 | 1189.40 | 1278.84 | 1467.62 |
| 2. Maize | 789.38 | 951.47 | 991.92 | 1037.97 | 1108.36 | 1263.25 |
| 3. Wheat/barley | 65.44 | 76.66 | 79.92 | 83.63 | 89.92 | 103.19 |
| 4. Buckwheat/millet | 90.69 | 106.83 | 111.37 | 116.54 | 124.44 | 141.83 |
| 5. Apples | 87.22 | 128.00 | 130.86 | 140.52 | 174.73 | 197.69 |
| 6. Oranges | 335.61 | 730.00 | 746.34 | 801.40 | 996.53 | 1127.46 |
| 7. potatoes | 340.40 | 495.39 | 572.84 | 644.12 | 708.95 | 743.88 |
| 8. Ginger | 12.05 | 13.11 | 15.16 | 15.81 | 17.41 | 18.26 |
| 9. Mustard | 26.89 | 33.00 | 38.16 | 40.59 | 44.67 | 46.87 |
| 11. Pulses | 25.27 | 38.71 | 44.77 | 51.70 | 56.90 | 59.71 |
| 12. Chilly | 71.98 | 100.30 | 115.98 | 123.36 | 135.78 | 142.46 |
| 13. cardamom | 52.44 | 58.48 | 67.62 | 71.92 | 79.16 | 83.06 |

Gross value of output of animal product in current prices (million Nu.)

| Gross output | 2000 | 2004 | 2005 | 2006 | 2007 | 2008 |
|--------------|-------|--------|--------|--------|--------|--------|
| MILK | 143.9 | 179.1 | 194.5 | 202.1 | 234.1 | 270.7 |
| BUTTER | 891.6 | 1113.4 | 1328.1 | 1398.8 | 1445.7 | 1617.8 |
| CHEESE | 541.8 | 702.9 | 838.5 | 934.6 | 968.1 | 1120.7 |
| PORK | 62.5 | 62.7 | 49.7 | 46.8 | 49.1 | 56.7 |
| EGGS | 42.0 | 46.4 | 36.0 | 51.9 | 57.6 | 73.0 |
| BEEF | 34.4 | 42.0 | 42.8 | 46.1 | 53.6 | 59.3 |
| CATTLE SKIN | 12.0 | 20.3 | 20.6 | 21.0 | 20.7 | 21.8 |
| WOOL | 6.3 | 7.1 | 5.3 | 5.0 | 4.4 | 4.2 |
| GOAT MEAT | 42.2 | 44.8 | 29.6 | 32.7 | 41.8 | 58.7 |

2. The mining and quarrying sector has performed with a growth rate of 16.9 percent during 2008 compared to 22.2 percent in 2007 in real term. The share of this sector to the GDP has been almost constant over several years with not more than 2.0 percent.

In the Bhutanese context, this sector has been treated as primary sector as no separate information on extraction and processing of minerals were available.

Table 3: Estimates of mineral production in MT

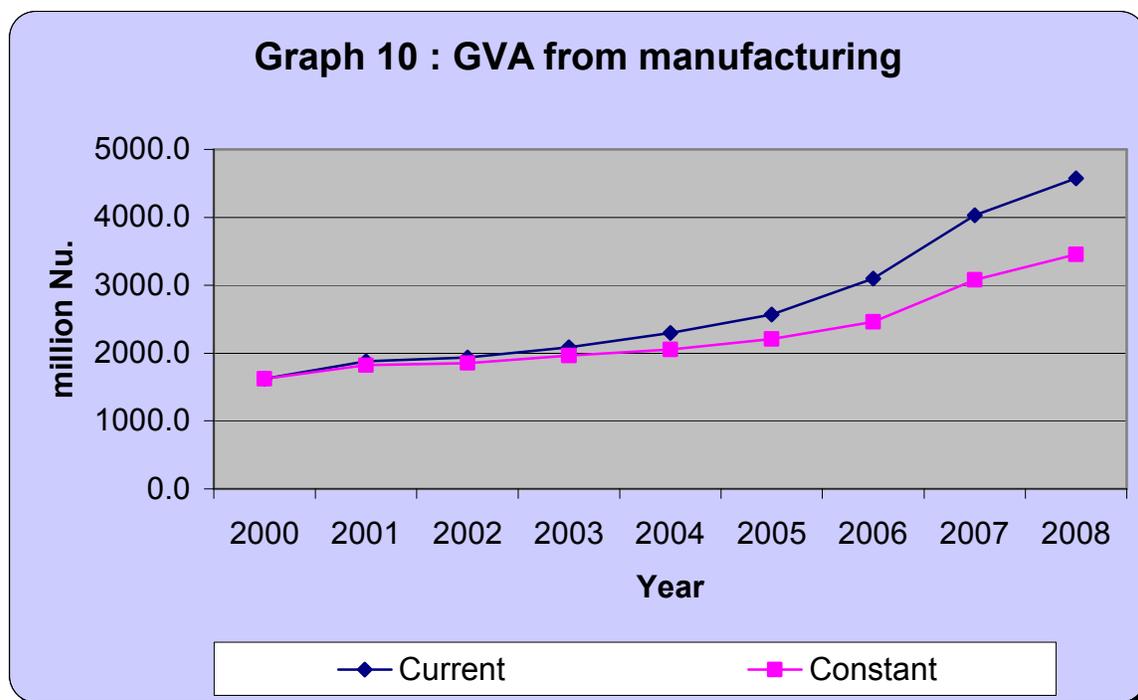
| Year | 2000 | 2004 | 2005 | 2006 | 2007 | 2008 |
|-----------------|----------|----------|--------|----------|--------|---------|
| Dolomites | 283744 | 448280 | 388711 | 476516 | 578551 | 1247568 |
| Limestone | 434920 | 560807 | 536030 | 581332 | 481266 | 583708 |
| Gypsum mines | 86951 | 131236 | 150585 | 204198 | 189197 | 248446 |
| Slate mines | 0 | 126789 | 2908 | 5873 | 78106 | 8227 |
| Coal mines | 65818 | 29631 | 85279 | 97965 | 105261 | 123704 |
| Marble | 33548 | 3385 | 4023 | 4032 | 74758 | 12304 |
| Talc mine | 8869 | 39411 | 42791 | 44930.55 | 61610 | 56077 |
| Quartzite mines | 43398.5 | 42521 | 52694 | 55328.7 | 64048 | 94688 |
| Stone Quarry | 4712.83 | 245460 | 146767 | 232187 | 378794 | 408944 |
| Sand Quarry | 13247.94 | 30034.04 | 46523 | 46523 | 142894 | 0 |
| Granite | | 2152 | 9435 | 8310 | 14430 | 2175 |

Gross value of output in million Nu.

| | 2000 | 2004 | 2005 | 2006 | 2007 | 2008 |
|-------------------|--------|--------|--------|--------|--------|--------|
| 1. Dolomite mines | 64.13 | 117.90 | 155.48 | 209.67 | 266.13 | 573.88 |
| 2. Lime | 100.03 | 182.26 | 174.21 | 207.83 | 191.06 | 231.73 |
| 3. Gypsum | 86.95 | 156.83 | 189.74 | 283.02 | 262.23 | 360.52 |
| 4. Slate) | 0.00 | 0.63 | 0.01 | 0.03 | 0.47 | 0.05 |
| 5.Coal | 111.89 | 50.37 | 144.97 | 183.19 | 211.47 | 346.37 |
| 6. Marble | 16.53 | 0.09 | 0.13 | 0.41 | 86.25 | 0.42 |
| 7. Talc mine | 9.31 | 29.56 | 32.09 | 37.07 | 55.45 | 50.47 |
| 8. Quartzite | 20.40 | 19.98 | 24.77 | 28.60 | 33.11 | 48.95 |
| 9. Stone | 0.94 | 49.09 | 29.35 | 51.08 | 83.33 | 89.97 |
| 10. Sand | 3.97 | 9.46 | 14.65 | 14.75 | 45.30 | 0 |

3. Manufacturing sector has been subdivided into forest based, agro based, cement and chemical based industries. The major registered industries under manufacturing sector are cement, food, basic iron & steel, and wood based industries. It also covers other small-unregistered industries such as weaving, thanangka painting and clay work etc. However, the cement industry is the dominant manufacturing industry in the country.

This sector has recorded an increase of 12.9 percent in 2008 compared to 25.1 percent of the previous year in real terms. The achievements of high growth in 2007 were mainly due to the coming up of new establishments, about 8 new firms and in 2008 there were about 5 new firms included in the estimates.



The manufacturing industries are clubbed together into 5 groups according to products and of the 5 main groups, other manufacturing has the highest value of output followed by agricultural industries and cement in 2008.

The share of this sector to the GDP in 2008 is about 8.5 percent.

Table 4: Gross value of output of the major industries in current prices (million Nu.)

| Year | 2000 | 2004 | 2005 | 2006 | 2007 | 2008 |
|----------------------------------|---------|---------|---------|---------|----------|----------|
| 1.Cement Industry | 843.19 | 1308.43 | 1372.26 | 1528.41 | 1843.18 | 1802.96 |
| 2.Wood Industry | 707.43 | 629.13 | 426.51 | 758.44 | 842.23 | 807.79 |
| 3.Agricultural Input Industry | 406.45 | 508.99 | 517.19 | 721.65 | 2798.64 | 2843.18 |
| 5.Other Manufacturing Industries | 997.13 | 1596.17 | 2128.07 | 2505.55 | 5658.67 | 7226.17 |
| Total out-put | 2954.19 | 4042.72 | 4444.03 | 5514.06 | 11142.72 | 12680.11 |

Negative growths were observed for cement, wood and agricultural input industries during 2008 compared to 2007 which may also be due to the completion of tala hydro power construction.

The output of the cement showed 2.2 percent negative growth over the previous year in current prices and wood based industries by -4.0 percent.

4. The electricity sector is subdivided into electricity and water. Gas supply, which is mainly the refilling of LPG cylinder, has been merged with the wholesale and retail trade.

The electricity in Bhutan is all generated from the hydropower plants and the generation of power purely depends on the availability of rainfall during monsoon in summer and the snowfall in winter.

The country has so far four generating plants: Chukha Power Authority, Kurichu Power Authority, Basochu and Tala Hydro Power Authority. The Bhutan Power Corporation is mainly involved with the activities of distribution and transmission of electricity in the country.

The electricity sector's share to the GDP in 2008 stands at 19.1 percent compared to 20.4 percent in 2007. The electricity sector contributes the maximum to the GDP in terms of shares during 2007 and 2008.

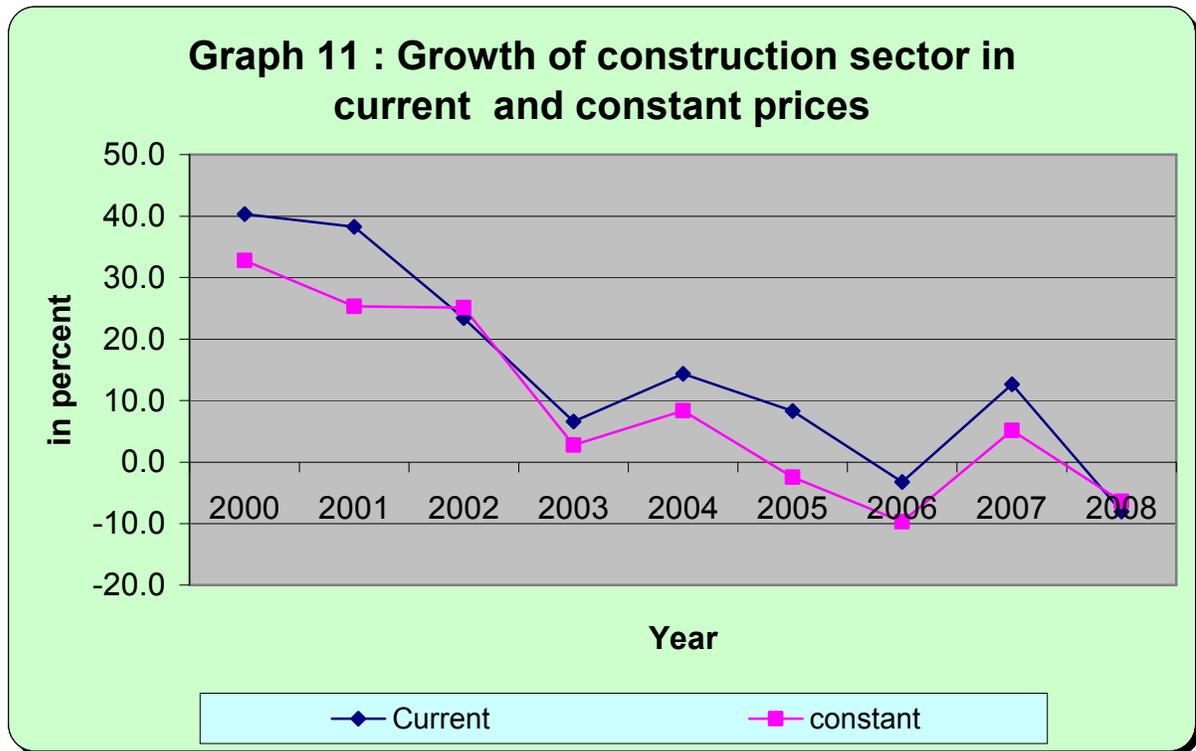
In real term, the growth in 2008 was 2.6 percent but in 2007 its growth was 117.3 percent due to the full commissioning of tala hydro power project.

The total power export in 2008 was Nu.14975.2 million compared to Nu. 10034.3 million in 2007 ¹/. The total revenue generation increased from Nu.10994.3 million in 2007 to Nu.16540.2 million in 2008. Of the total revenue generation, 9.5 percent was from domestic sales.

With increase in the outreach of the municipal services in the urban areas, the water supply and sewerage contributed Nu.26.2 million during the year as compared to Nu.22.7 million in 2007. In real terms it has increased by 15.3 percent in 2008 compared to 2007.

5. The Construction growth was negative 6.4 percent in real term in 2008. However, during 2007, the sector achieved a growth rate of 5.1 percent in real term and its share to the GDP is 11.5percent in 2008.

¹ / Source: Selected Economic Indicators, June 2009, RMA



6. **The wholesale and retail** trade sector has contributed Nu.2694.6 million in 2008 from Nu. 2497.1 million in 2007 showing 7.9 percent increase in nominal term. In real term, this sector has grown by about 1.0 percent over the previous year. Its share to the total GDP stands at 5.0 percent during 2008.

7. The performance of **hotels and restaurants** has a direct link to the number of tourist arrival. With the robust increase in the inflow of tourist and the completion of many tourist resorts and hotels in the country, the sector has experienced a high growth.

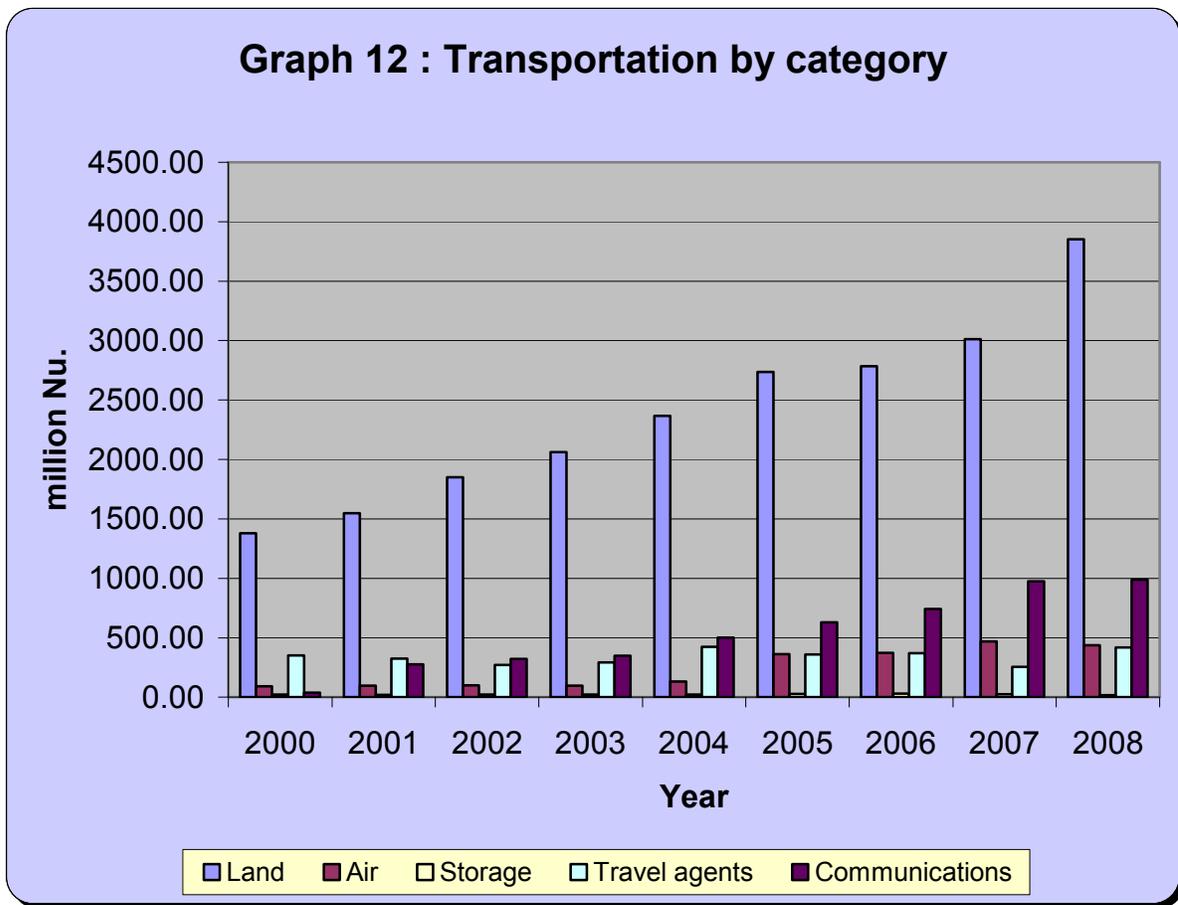
Table 5: Number of tourist arrival and revenue receipts, 2003 - 2007

| | <i>2004</i> | <i>2005</i> | <i>2006</i> | <i>2007</i> | <i>2008</i> |
|--------------------------------|-------------|-------------|-------------|-------------|-------------|
| Total no. of tourist (persons) | 9249 | 13626 | 17342 | 21094 | 27636 |
| Tourism revenue receipts | | | | | |
| Ngultrum (million) | 589.00 | 817.6 | 1083.6 | 1242.0 | 1696.5 |
| US Dollars (million) | 13.00 | 18.54 | 23.92 | 30.00 | 39.00 |

Source RMA monthly bulletin. June 2009

The contribution of this sector to the total economy during 2008 in current prices stood at Nu.569.2 million as against Nu.368.1 million in 2007 showing 54.6 percent increase over the previous year. In real term, its value reached to Nu.384.5 million in 2008 from Nu. 264.4 million in 2007 with a growth of 45.4 percent..

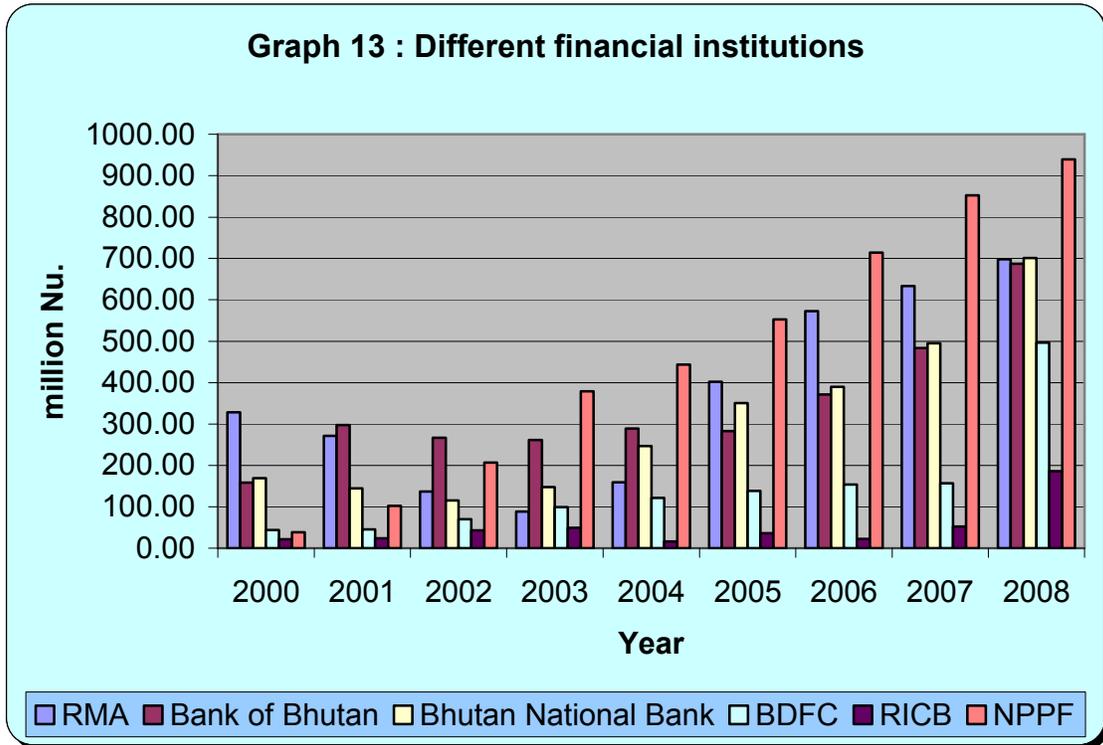
8. Transport, storage and communication are subdivided into transport by Air, buses, trucks, taxis and telecommunications. The main source of information are from the annual reports of Bhutan Telecom, Druk Air, Department of Revenue and Custom’s sales turnover information etc.. In case of trucks and taxis, their revenues are extrapolated by using the parameters obtained through case studies or sometimes on the basis of past trends.



The total value added of the transport, storage and communication is Nu.5365.8 million in current prices in 2008 compared to Nu 4489.8 million in 2007. In real (constant) term, its level reached to Nu.3197.3 million in 2008 from Nu.3083.1 million of the previous year with a growth of 3.7 percent.

In 2008, the share of land transport to the total transport recorded 67.0 percent followed by telecommunications 17.0 percent and air and other transport by 16.0 percent. Its share to the total GDP is 9.9 percent in 2008 compared to 9.1 percent in 2007.

9. Finance, insurance and real-estate sector covers activities of the Central Bank, commercial banks, agricultural credit institution (BDFC), investment companies etc. Also included are the renting, management and operation of real-estate activities.



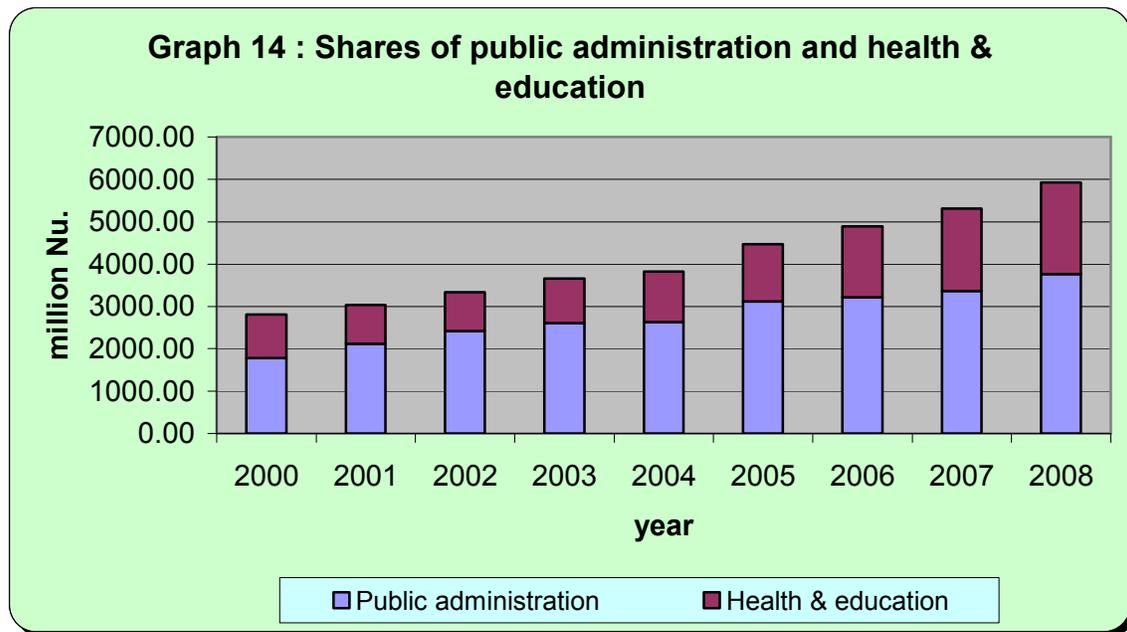
This sector has recorded a significant increase of 27.0 percent in 2008 compared to 7.9 percent of the previous year in real term.

The current price estimates of the financial institutions were converted to constant price by using the weighted index of lending, deposit, and consumer price index.

In current prices, the contribution of the financial institutions and real-estate sector to the GDP rose from Nu.3980.7 million in 2007 to Nu.5061.1 million in 2008. Its share to the GDP is 9.3 percent.

10. Community and social services (general government) produce services by engaging in activities such as public administration, defense, sanitary, education, medical and welfare services. The main source of information is the Annual Budget documents of the Ministry of Finance.

In SNA, the gross output of the government is defined as equal to its cost of production i.e. the sum of intermediate consumption, compensation of employees and consumption of fixed capital.



The contribution of this sector during 2008 rose to Nu. 5930.4 million in current prices from Nu. 5311.8 million in 2007. In constant prices it has achieved a growth rate of 3.1 percent. The overall share of this sector to the GDP stood at 11.0 percent in 2008.

11. Private, social and recreational services include services such as private health, recreation, personal etc. The main sources of information to estimate its contribution to the total GDP are from Bhutan Living Standard Surveys of 2003 and 2007. The estimates have been moved forward with the help of population and the consumer price index

In current prices, its share to the GDP during 2008 was Nu.269.5 million as against Nu. 241.9 million in 2007. In real term it has observed an increase of 2.5 percent in 2008.

Sources of information and methodology

I. Agriculture

1. Agricultural crops:

The contribution of agricultural crops to the economy was based on 2000 agricultural census carried out by the Ministry of Agricultural as the bench mark. The succeeding estimates were then moved forward with the help of population growth rates.

The prices of the crops were extrapolated with the help of CPI related commodities.

The **gross value added ratios** (GVAR) for the various crops were assumed as follows.

| | |
|-----------------|-------|
| 1. Paddy | 0.821 |
| 2. Maize | 0.925 |
| 3. Wheat/barley | 0.820 |
| 4. Millets | 0.900 |
| 5. Apple | 0.943 |
| 6. Orange | 0.912 |
| 7. Potato | 0.721 |
| 8. Chilly | 0.930 |
| 9. Cardamom | 0.802 |

The intermediate consumption for sector is only about 10 to 20% and it may be because of labor intensive farming practices. The input may be only of seeds and pesticides being used by the farmers. Then farmers are intensively using their own farm yard manures and cow dung which are not meant for the market.

2. Livestock:

The estimates of this sector have been revised after having made all the information available to us by the ministry of Agriculture since 2000. The livestock population provided have been adjusted for the under reporting (13 to 20 %) for all the categories of animals.

The number of **milking animals** have been estimated to be around 30% of the total and it has been assumed that on an average local cattle would give 1.5 liters, improved varieties will give 5 liters and by yak slightly over 2 liters everyday.

The total **milk production** is further divided into milk consumed in fluid form of about 10% and 90 % milk going for its product.

It has been estimated that a Mt. of milk will give about **0.065 Mt** of butter and 0.09 Mt. of cheese.

In case of **Beef production**, a ratio of beef to the total cattle population have been worked out and accordingly applied.

Pork production: It has been assumed that 30 % of pigs would be slaughtered annually with the average weight of 60 kgs (local and improved).

Egg production: The number of eggs that a local bird would give is estimated to be around 60 eggs and 220 by improved birds annually.

The production of **hides & skins** has been estimated using the animal mortality rates of 20%.

Since the information on **intermediate inputs** was not available, it has been assumed to be around 10 % of the output both for livestock animal poultry birds. The intermediate input for the sector would be the expenses on feeds. The animal feeds collected by the households from the forest by themselves free of cost were not taken into consideration as they are not meant for market.

3. Forestry.

The main sources of information for the wood production are from Natural Resources Development Corporation. This organization is believed to be covering about 80 % of the activities in the country. The information provided by the above organization is adjusted for under coverage of 20 %.

The fire woods for rural and commercial purposes are estimated separately. The sources of information are from annual report of the NRDC Limited for the commercial. However, in the absence of data, the estimates are moved forward with

the help of population growth rates or other indicators. Rural fire wood supply is in back loads and its contributions are moved forward with the help of population growth rates.

II. Mining and quarrying:

The information for the mining and quarrying were as provided by the department geology and mines along with their pit head prices of the different minerals. There were about 15 different minerals being extracted. Most of the firms do not have book of accounts and as such the input or intermediate consumption for the different minerals were purely based on expert judgment.

III. Manufacturing:

This sector has been divided into registered and un-registered. The registered are those with trade or industrial license approved and issued by the Ministry of Economic affairs and un-registered are without any licenses and basically being carried out by the households in a small scale production. Almost every household in the rural areas do perform these activities. They are like thanka painting, weaving, wood crafts, cane work etc..

For the registered manufacturing, the information used for the estimates of their contribution is from their annual reports. The industries are subdivided into Food, Wood, cement, chemicals, rubber and basic metals.

The Gross value added ratios were worked out separately for cement and other manufacturing industries.

The deflators used are cement price index, Food index and non-food index.

IV. Electricity and water:

There are four electricity generating agencies in the country and the Bhutan power corporation does the transmission and distribution of electricity.

The estimates of gross value of output and intermediate consumption are being compiled from their annual reports and their prices supplied by Bhutan power corporation.

The information on revenue earned from water was supplied by the city corporations of Thimphu and P/ling. They are the main big towns in the country. It is also assumed that these two centers cover more than 80% of activities.

In case of intermediate consumption, the ratios for 2004 have been applied for 2007 and 2008 which was 30percent of output.

V. Construction:

The construction activities are being carried out both by the government and the private sectors. The construction is on buildings, roads, bridges, thatched and non-thatched houses and orchard developments.

The commodity flow approach is being used in this sector. The total cements supplied to various agencies were obtained from the various cement producing firms and wood supply from the Natural resources Development.

It was assumed the share of GVA to the gross output to be around 40 % for the cement and 65 % for wood going for non-thatched houses.

In case of thatched houses, the basis of its contribution were from the 2005 population and housing census. The Gross value added ratios of 60% were worked out.

The composite price index, consisting of bricks, steel rode, sand, cement, wood and labor were used as a deflator.

VI. Wholesale and retail Trade:

The estimates of its activities to the economy are based on the sales turn-over the firms. The total turn-over were available with the revenue department of the Ministry of Finance with the break down into commodities, petroleum and beverages.

The output of the sector has been estimated as 30% of the turn-over and intermediate consumption of about 20 percent of output. In order to estimate at constant price the deflators used are food price index and non-food price indexes.

VII. Hotels and restaurants:

This is also based on the sales turn-over. The reported figures of the revenue department has been adjusted for the under coverage by 90% as they have covered only few major hotels.

The intermediate consumption has been set to 35% of the output and Food price index used as the deflator.

VIII. Transport, storage and communication:

Transportations in the country are carried out by Air, passenger buses, trucks and taxis. Transportation is also being carried out by animals but due to lack of proper information and the methodology, it has been excluded. A storage activity is also included in the sector.

The Druk Air provides their annual reports and the estimate of its contribution is based on their report. In case of transportations by the buses and taxis and trucks , average gross earning were obtained through case studies. The gross value added ratios were also worked out from the case study.

In order to convert the current estimates to constant, the prices of fuel, bus fare, air fare, food price indexes were used.

IX. Financing, insurance and real estate:

The estimates of financial activities are all based on the annual reports of the firms. There are about 8 financial institutions carrying out the activities including RMA.

A composite price index has been developed by taking deposit rate, lending rate and the CPI and has been used as the deflator to convert the current estimates in to constant.

In case of real-estates, the activities are broken down into two parts: rural and urban dwellings. To estimate the gross output of rural dwellings, the receipts from the rural house tax was used as the bases and for the urban dwellings the BLSS 2003 were used as the basis.

X. Community and social services:

This sector is subdivided into government administration including defense, education and health services.

The output of the government is estimated as the sum of intermediate consumption plus compensation of employees plus depreciation from the budget document. Government follows the fiscal year accounting rules but for the inclusion in the GDP it is converted to calendar year by taking the average of two years.

The expenditures on architectural design, feasibility study of capital projects and the management of construction of roads, bridges, and other infrastructure are added to the construction activities ultimately forming the part of capital formation and design of data base and computer system, computer software are treated as capital formation (intangible assets).

The budget document does not include expenditures on defense. The compensation of employees in the armed forces is estimated indirectly from the value of provident fund contribution.

The current estimate of the sector is deflated by using the non-food price index of the CPI.

XI. Private social & recreational services:

The sector has been introduced since 2000. The basis of information is from the household expenditure survey 2000, BLSS 2003 and 2007. The items included are on household services of maid servants, health, recreation such as cinemas, annual tshechu, etc..

XII. Financial intermediation services indirectly measured (FISM):

Formerly known as imputed Bank service charges. The FISM is estimated as the difference between the interest received and payments made on loans and deposits. In order to distribute the FISM across the sectors, the information on loans outstanding

with various sectors were available in the RMA report. Bases on the above reports, ratios were worked out to distribute the FISM across the economic sectors.

XIII. Final Consumption:

There are two consumers, private household consumption and the government final consumption. Government consumption is compiled from the budget documents of the ministry of Finance and for the private; it is based on household expenditure surveys of 2000, 2003 and 2007. The private household consumptions were classified by commodities.

Government Final consumption is estimated as Gross output less capital formation on own account development of software, database and systems less sales of government services and administrative fees.

XIV. Capital formation:

The capital formation consists of Machinery & equipment, constructions and change in stocks. Capital formation from machinery & equipment were compiled from import data of the Revenue and customs. Of the total machineries imported only 80% were taken for the capital formation and rest 20% were assumed to be consumed by the private households as final consumption.

Capital formation from livestock were also estimated. It was of the view that of the total increments of livestock animals, the share would be around 70% for draught animals and horses and 30% for sheep.

The changes in stocks were compiled from the annual returns of the various firms and were deflated with help of over all consumer price index.

The machinery and equipment were deflated by using non-food price index and machinery and equipment coming from livestock by livestock prices.

In case of construction, the construction outputs were adjusted for repair and maintenance. To convert the series to constant prices, the composite construction cost index has been applied.

XV. Net export:

The balance of payment report of Royal Monetary of Bhutan is the main source of information for the estimation of exports and imports. The information published was on fiscal year. They were converted to calendar year by taking the average of two fiscal years.

STATISTICAL TABLES

Table 1: GDP and its aggregates in current prices (million Nu.)

| | 2000 | 2004 | 2005 | 2006 | 2007 | 2008 |
|--|----------------|----------------|----------------|----------------|----------------|----------------|
| Net export | -4835.4 | -8353.8 | -8556.0 | -1795.5 | -280.9 | -2674.7 |
| Exports of Goods and Services | 5720.3 | 10053.2 | 14105.7 | 25464.9 | 31624.7 | 38270.1 |
| Imports of Goods and Services | 10555.7 | 18407.0 | 22661.7 | 27260.4 | 31905.6 | 40944.9 |
| Total Consumption (incl. statistical discrepancy) | 15059.0 | 19592.9 | 26003.9 | 22637.3 | 31596.1 | 34893.9 |
| Total Consumption | 13746.9 | 20456.4 | 22497.7 | 24197.9 | 28318.8 | 31259.2 |
| Public Consumption | 4331.0 | 6649.7 | 7911.5 | 8644.2 | 9454.8 | 10372.6 |
| Private Consumption | 9416.0 | 13806.7 | 14586.2 | 15553.7 | 18864.1 | 20886.6 |
| Statistical Discrepancy | 1312.1 | -863.6 | 3506.2 | -1560.7 | 3277.3 | 3634.7 |
| Gross Capital Formation | 9512.1 | 20045.6 | 18049.1 | 18729.4 | 18066.5 | 21930.7 |
| Gross Fixed Capital Formation | 9865.7 | 20078.2 | 18029.7 | 18775.0 | 19344.6 | 21173.6 |
| Government | 3080.1 | 3236.0 | 3669.7 | 5189.5 | 6302.4 | 6729.2 |
| Machinery & Equipment | 972.5 | 813.3 | 610.7 | 1084.0 | 868.6 | 1131.5 |
| Construction | 2107.6 | 2422.7 | 3059.0 | 4105.5 | 5433.9 | 5597.7 |
| Private | 6785.5 | 16842.2 | 14360.0 | 13585.5 | 13042.1 | 14444.4 |
| Machinery & Equipment | 2057.9 | 4741.5 | 3924.2 | 4445.9 | 3451.1 | 6727.6 |
| Construction | 4727.6 | 12100.8 | 10435.7 | 9139.6 | 9591.1 | 7716.8 |
| Change in Stocks | -353.5 | -32.6 | 19.4 | -45.6 | -1278.1 | 757.1 |
| GDP at current market prices | 19735.8 | 31284.7 | 35496.9 | 39571.3 | 49381.7 | 54149.9 |
| Net income from abroad | -22.3 | -750.5 | -540.8 | 98.7 | -215.5 | -1139.3 |
| Income received | 704.72 | 486.8 | 671.1 | 1337.5 | 1960.7 | 2118.9 |
| Income paid | 727.0 | -1237.3 | -1211.9 | -1238.8 | -2176.2 | -3258.2 |
| Net current transfers from abroad | 1982.9 | 3018.8 | 4274.1 | 5326.0 | 6744.4 | 8255.1 |
| Gross National Product | 19713.5 | 30534.2 | 34956.1 | 39670.0 | 49166.2 | 53010.6 |
| Gross Domestic Savings | 4676.8 | 11691.8 | 9493.0 | 16934.0 | 17785.5 | 19256.0 |
| Gross National Savings | 6637.4 | 13960.1 | 13226.4 | 22358.6 | 24314.4 | 26371.7 |
| Gross Disposable income | 21696.4 | 33553.0 | 39230.2 | 44995.9 | 55910.5 | 61265.6 |
| Net lending/borrowing | -4835.4 | -8353.8 | -8556.0 | -1795.5 | -280.9 | -2674.7 |

Note: PCE= Pvt. Consumption Expenditure GCE= Govt. Consumption Expenditure

Table 2: Gross domestic product by kind of activity in current prices (million Nu.)

| Sectors | 2000 | 2004 | 2005 | 2006 | 2007 | 2008 |
|---|----------------|----------------|----------------|----------------|----------------|----------------|
| 1. Agriculture, livestock & forestry | 5289.4 | 7524.0 | 7960.0 | 8796.7 | 9263.7 | 10256.4 |
| 1.1 agriculture proper | 2516.0 | 3480.7 | 3684.9 | 3925.7 | 4377.0 | 4904.9 |
| 1.2 livestock | 1468.4 | 1991.1 | 2261.2 | 2556.0 | 2560.5 | 2983.3 |
| 1.3 forestry and logging | 1305.1 | 2052.1 | 2013.9 | 2315.0 | 2326.2 | 2368.2 |
| 2. Mining and quarrying | 314.9 | 439.6 | 549.8 | 877.8 | 889.8 | 1228.8 |
| 3. Manufacturing | 1618.9 | 2297.0 | 2572.2 | 3097.1 | 4033.2 | 4597.9 |
| 4. Electricity and water | 2255.3 | 2634.8 | 3169.6 | 4216.1 | 10082.0 | 10340.5 |
| 5. Construction | 2761.4 | 5741.1 | 6219.2 | 6019.7 | 6781.0 | 6238.8 |
| 6. Wholesale & Retail Trade | 882.1 | 1725.7 | 2088.9 | 2317.2 | 2497.1 | 2694.6 |
| 7. Hotels and restaurants | 88.1 | 168.7 | 211.7 | 301.0 | 368.1 | 569.2 |
| 8. Transport, storage & communication | 1799.7 | 3295.1 | 3890.5 | 4095.1 | 4489.8 | 5365.8 |
| 9. Financing, insurance and real estate and business services | 1392.0 | 2280.3 | 2873.1 | 3405.4 | 3980.7 | 5061.1 |
| 9.1. Finance and Insurance | 761.0 | 1279.0 | 1764.6 | 2226.7 | 2676.7 | 3713.5 |
| 9.2. Real Estate & dwellings | 631.1 | 1001.3 | 1108.5 | 1178.7 | 1297.4 | 1324.6 |
| 9.3. Business services | | | | | 6.5 | 23.0 |
| 10. Community & social services | 2813.8 | 3822.9 | 4471.7 | 4895.0 | 5311.8 | 5930.4 |
| 10.1 Public administration | 1779.2 | 2636.7 | 3120.1 | 3220.8 | 3370.2 | 3762.7 |
| 10.2 Education and health | 1034.6 | 1186.1 | 1351.6 | 1674.1 | 1941.6 | 2167.7 |
| 11. Private social & recreational services | 96.2 | 144.3 | 172.3 | 212.6 | 241.9 | 269.5 |
| 12. Plus: taxes net of subsidies | 423.9 | 1211.3 | 1317.9 | 1337.6 | 1442.5 | 1596.8 |
| Gross domestic product | 19735.8 | 31284.7 | 35496.9 | 39571.3 | 49381.7 | 54149.9 |

Table 3: Sectoral growth rates over the preceding year in current prices (%).

| Sectors | 2000 | 2004 | 2005 | 2006 | 2007 | 2008 |
|---|------------|-------------|-------------|-------------|-------------|------------|
| 1. Agriculture, livestock & forestry | 11.3 | 8.2 | 5.8 | 10.5 | 5.3 | 10.7 |
| 1.1 agriculture proper | 9.8 | 9.1 | 5.9 | 6.5 | 11.5 | 12.1 |
| 1.2 livestock | 12.0 | 9.0 | 13.6 | 13.0 | 0.2 | 16.5 |
| 1.3 forestry and logging | 13.5 | 5.9 | -1.9 | 14.9 | 0.5 | 1.8 |
| 2. Mining and quarrying | -15.5 | -24.3 | 25.1 | 59.6 | 1.4 | 38.1 |
| 3. Manufacturing | 4.0 | 10.1 | 12.0 | 20.4 | 30.2 | 14.0 |
| 4. Electricity and water | -2.5 | 0.7 | 20.3 | 33.0 | 139.1 | 2.6 |
| 5. Construction | 40.3 | 14.3 | 8.3 | -3.2 | 12.6 | -8.0 |
| 6. Wholesale & Retail Trade | 24.6 | 19.3 | 21.0 | 10.9 | 7.8 | 7.9 |
| 7. Hotels and restaurants | 0.8 | 24.6 | 25.5 | 42.2 | 22.3 | 54.6 |
| 8. Transport, storage & communication | 10.0 | 25.5 | 18.1 | 5.3 | 9.6 | 19.5 |
| 9. Financing, insurance and real estate | 15.4 | 17.0 | 26.0 | 18.5 | 16.9 | 27.1 |
| 9.1. Finance and Insurance | 22.4 | 24.6 | 38.0 | 26.2 | 20.2 | 38.7 |
| 9.2. Real Estate & dwellings | 8.0 | 8.6 | 10.7 | 6.3 | 10.1 | 2.1 |
| 9.3. Business services | | | | | | 254.9 |
| 10. Community & social services | -6.7 | 4.3 | 17.0 | 9.5 | 8.5 | 11.6 |
| 10.1 Public administration | | 1.1 | 18.3 | 3.2 | 4.6 | 11.6 |
| 10.2 Education and health | | 12.5 | 13.9 | 23.9 | 16.0 | 11.6 |
| 11. Private social, & recreational Services | | 16.5 | 19.4 | 23.4 | 13.8 | 11.4 |
| 12. plus indirect taxes, net subsidies | -31.7 | 31.6 | 8.8 | 1.5 | 7.8 | 10.7 |
| Gross Domestic product | 9.4 | 11.2 | 13.5 | 11.5 | 24.8 | 9.7 |

Table 4: Sectoral shares in current prices (%).

| Sectors | 2000 | 2004 | 2005 | 2006 | 2007 | 2008 |
|--|--------------|--------------|--------------|--------------|--------------|--------------|
| 1. Agriculture, livestock & forestry | 26.8 | 24.1 | 22.4 | 22.2 | 18.8 | 18.9 |
| 1.1 agriculture proper | 12.7 | 11.1 | 10.4 | 9.9 | 8.9 | 9.1 |
| 1.2 livestock | 7.4 | 6.4 | 6.4 | 6.5 | 5.2 | 5.5 |
| 1.3 forestry and logging | 6.6 | 6.6 | 5.7 | 5.9 | 4.7 | 4.4 |
| 2. Mining and quarrying | 1.6 | 1.4 | 1.5 | 2.2 | 1.8 | 2.3 |
| 3. Manufacturing | 8.2 | 7.3 | 7.2 | 7.8 | 8.2 | 8.5 |
| 4. Electricity and water | 11.4 | 8.4 | 8.9 | 10.7 | 20.4 | 19.1 |
| 5. Construction | 14.0 | 18.4 | 17.5 | 15.2 | 13.7 | 11.5 |
| 6. Wholesale & Retail Trade | 4.5 | 5.5 | 5.9 | 5.9 | 5.1 | 5.0 |
| 7. Hotels and restaurants | 0.4 | 0.5 | 0.6 | 0.8 | 0.7 | 1.1 |
| 8. Transport, storage & communication | 9.1 | 10.5 | 11.0 | 10.3 | 9.1 | 9.9 |
| 9. Financing, insurance and real estate | 7.1 | 7.3 | 8.1 | 8.6 | 8.1 | 9.3 |
| 9.1. Finance and Insurance | 3.9 | 4.1 | 5.0 | 5.6 | 5.4 | 6.9 |
| 9.2. Real Estate & dwellings | 3.2 | 3.2 | 3.1 | 3.0 | 2.6 | 2.4 |
| 9.3 Business services | | | | | 0.0 | 0.0 |
| 10. Community & social services | 14.3 | 12.2 | 12.6 | 12.4 | 10.8 | 11.0 |
| 10.1 Public administration | 9.0 | 8.4 | 8.8 | 8.1 | 6.8 | 6.9 |
| 10.2 Education and health | 5.2 | 3.8 | 3.8 | 4.2 | 3.9 | 4.0 |
| 11. Private social, personal & recreational services | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| Plus: taxes net of subsidies | 2.1 | 3.9 | 3.7 | 3.4 | 2.9 | 2.9 |
| Gross domestic product | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

**Table 5: Gross domestic product by kind of activity at constant (2000) prices
(million Nu.)**

| Sectors | 2000 | 2004 | 2005 | 2006 | 2007 | 2008 |
|--|----------------|----------------|----------------|----------------|----------------|----------------|
| 1. Agriculture, livestock & forestry | 5289.4 | 5981.5 | 6025.0 | 6280.5 | 6264.7 | 6326.9 |
| 1.1 Crops | 2516.0 | 2824.1 | 2860.9 | 2898.1 | 2942.3 | 2987.2 |
| 1.2 Livestock | 1468.4 | 1648.6 | 1727.6 | 1849.7 | 1829.9 | 1885.8 |
| 1.3 Forestry and logging | 1305.1 | 1508.8 | 1436.5 | 1532.7 | 1492.5 | 1453.9 |
| 2. Mining and quarrying | 314.9 | 381.3 | 446.6 | 531.5 | 649.7 | 759.5 |
| 3. Manufacturing | 1618.9 | 2055.0 | 2211.1 | 2461.9 | 3080.7 | 3477.2 |
| 4. Electricity and water | 2255.3 | 2552.2 | 2843.9 | 3655.5 | 7944.2 | 8147.2 |
| 5. Construction | 2761.4 | 4819.8 | 4701.2 | 4247.5 | 4466.1 | 4181.9 |
| 6. Wholesale and retail trade | 882.1 | 1633.1 | 1878.1 | 1901.2 | 1975.7 | 1992.6 |
| 7. Hotel and restaurant | 88.1 | 157.0 | 186.0 | 246.1 | 264.4 | 384.5 |
| 8. Transport, storage & communication | 1799.7 | 2447.9 | 2660.6 | 2856.5 | 3083.1 | 3197.3 |
| 9. Financing, insurance & real estate | 1392.0 | 1991.1 | 2507.8 | 2937.9 | 3170.2 | 4025.4 |
| 9.1. Finance | 761.0 | 1291.7 | 1800.1 | 2218.3 | 2393.5 | 3224.0 |
| 9.2. Real estate | 631.1 | 699.4 | 707.7 | 719.6 | 771.8 | 784.3 |
| 9.3. Business services | | | | | 4.9 | 17.2 |
| 10. Community & social services | 2813.8 | 3378.5 | 3752.6 | 3912.2 | 4037.2 | 4160.8 |
| 10.1 Public administration | 1779.2 | 2330.3 | 2618.4 | 2574.2 | | 2640.0 |
| 10.2 Education and health | 1034.6 | 1048.3 | 1134.2 | 1338.0 | 1475.7 | 1520.9 |
| 11. Private social & recreational services | 96.2 | 127.0 | 144.4 | 166.5 | 178.0 | 182.5 |
| 12. Plus indirect taxes less subsidies | 423.9 | 1025.2 | 1054.5 | 1020.3 | 1056.4 | 1128.4 |
| Gross Domestic Product | 19735.8 | 26549.6 | 28412.0 | 30217.4 | 36170.3 | 37964.2 |

Table 6: GDP growth rates in constant (2000) price (%).

| Sectors | 2000 | 2004 | 2005 | 2006 | 2007 | 2008 |
|--|------------|------------|------------|------------|-------------|------------|
| 1. Agriculture, livestock & forestry | 5.4 | 2.2 | 0.7 | 4.2 | -0.3 | 1.0 |
| 1.1 Crops | 4.7 | 2.1 | 1.3 | 1.3 | 1.5 | 1.5 |
| 1.2 Livestock | 8.0 | 0.4 | 4.8 | 7.1 | -1.1 | 3.1 |
| 1.3 Forestry and logging | 3.8 | 4.3 | -4.8 | 6.7 | -2.6 | -2.6 |
| 2. Mining and quarrying | -2.8 | -5.2 | 17.1 | 19.0 | 22.2 | 16.9 |
| 3. Manufacturing | 2.7 | 4.5 | 7.6 | 11.3 | 25.1 | 12.9 |
| 4. Electricity & water | -9.8 | 9.4 | 11.4 | 28.5 | 117.3 | 2.6 |
| 5. Construction | 32.8 | 8.3 | -2.5 | -9.7 | 5.1 | -6.4 |
| 6. Wholesale and retail trade | 23.6 | 18.5 | 15.0 | 1.2 | 3.9 | 0.9 |
| 7. Hotel and restaurant | -0.4 | 21.9 | 18.5 | 32.3 | 7.4 | 45.4 |
| 8. Transport, storage & communication | 1.4 | 21.9 | 8.7 | 7.4 | 7.9 | 3.7 |
| 9. Financing, insurance & real estate | 20.1 | 12.4 | 26.0 | 17.1 | 7.9 | 27.0 |
| 9.1. Finance | 20.3 | 19.6 | 39.4 | 23.2 | 7.9 | 34.7 |
| 9.2. Real estate | 19.8 | 1.2 | 1.2 | 1.7 | 7.3 | 1.6 |
| 9.3 Business services | | | | | | 249.8 |
| 10. Community & social services | 1.6 | -0.2 | 11.1 | 4.3 | 3.2 | 3.1 |
| 10.1 Public administration | | -3.4 | 12.4 | -1.7 | -0.5 | 3.1 |
| 10.2 Education and health | | 7.5 | 8.2 | 18.0 | 10.3 | 3.1 |
| 11. private social & recreational services | | 11.1 | 13.7 | 15.3 | 6.9 | 2.5 |
| 12. Plus indirect taxes less subsidies | -34.5 | 27.9 | 2.9 | -3.2 | 3.5 | 6.8 |
| Total GDP | 6.9 | 8.0 | 7.0 | 6.4 | 19.7 | 5.0 |

Table 7: GDP by major sector in current prices (million Nu.)

| | 2000 | 2004 | 2005 | 2006 | 2007 | 2008 |
|--------------|---------|---------|---------|---------|---------|---------|
| 1. Primary | 5604.3 | 7963.6 | 8509.8 | 9674.5 | 10153.5 | 11485.2 |
| 2. Secondary | 6635.6 | 10672.8 | 11961.0 | 13332.9 | 20896.3 | 21177.2 |
| 3. Tertiary | 7495.9 | 12648.3 | 15026.1 | 16563.9 | 18331.9 | 21487.4 |
| Total GDP | 19735.8 | 31284.7 | 35496.9 | 39571.3 | 49381.7 | 54149.9 |

Note: Tertiary sector includes Taxes less of subsidies

Table 8: Shares of the major sectors in current prices

| | 2000 | 2004 | 2005 | 2006 | 2007 | 2008 |
|--------------|-------|-------|-------|-------|-------|-------|
| 1. Primary | 28.4 | 25.5 | 24.0 | 24.4 | 20.6 | 21.2 |
| 2. Secondary | 33.6 | 34.1 | 33.7 | 33.7 | 42.3 | 39.1 |
| 3. Tertiary | 38.0 | 40.4 | 42.3 | 41.9 | 37.1 | 39.7 |
| Total GDP | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

Table 9: GDP by major sector in constant prices (million Nu.)

| | 2000 | 2004 | 2005 | 2006 | 2007 | 2008 |
|--------------|---------|---------|---------|---------|---------|---------|
| 1. Primary | 5604.3 | 6362.8 | 6471.6 | 6812.0 | 6914.3 | 7086.5 |
| 2. Secondary | 6635.6 | 9427.0 | 9756.2 | 10364.9 | 15491.1 | 15806.2 |
| 3. Tertiary | 7495.9 | 10759.8 | 12184.1 | 13040.6 | 13764.9 | 15071.6 |
| Total GDP | 19735.8 | 26549.6 | 28412.0 | 30217.4 | 36170.3 | 37964.2 |

Table 10: GDP by expenditure in current prices (million Nu.)

| | 2000 | 2004 | 2005 | 2006 | 2007 | 2008 |
|---|------------------|------------------|------------------|------------------|-----------------|------------------|
| Final consumption expenditure | 13,746.9 | 20,456.4 | 22,497.7 | 24,197.9 | 28,318.8 | 31,259.2 |
| Household and NPISH | 9,416.0 | 13,806.7 | 14,586.2 | 15,553.7 | 18,864.1 | 20,886.6 |
| General government | 4,331.0 | 6,649.7 | 7,911.5 | 8,644.2 | 9,454.8 | 10,372.6 |
| Gross domestic capital formation | 9,512.1 | 20,045.6 | 18,049.1 | 18,729.4 | 18,066.5 | 21,930.7 |
| Construction | 6,835.2 | 14,523.5 | 13,494.8 | 13,245.1 | 15,025.0 | 13,314.5 |
| Machinery and equipment | 3,030.5 | 5,554.7 | 4,534.9 | 5,529.9 | 4,319.6 | 7,859.1 |
| Change in inventory | (353.5) | (32.6) | 19.4 | (45.6) | (1,278.1) | 757.1 |
| Net export of goods and services | (4,835.4) | (8,353.8) | (8,556.0) | (1,795.5) | (280.9) | (2,674.7) |
| Export of goods and services | 5,720.3 | 10,053.2 | 14,105.7 | 25,464.9 | 31,624.7 | 38,270.1 |
| Imports of goods and services | 10,555.7 | (18,407) | (22,662) | (27,260) | (31,906) | (40,945) |
| Total Expenditure on GDP | 18,423.7 | 32,148.2 | 31,990.7 | 41,131.9 | 46,104.4 | 50,515.1 |
| GDP , production | 19735.77 | 31284.67 | 35496.91 | 39571.26 | 49381.68 | 54149.85 |
| Statistical discrepancy | 1312.09 | -863.57 | 3506.20 | -1560.67 | 3277.31 | 3634.71 |

Table 11: Expenditures on GDP at constant price (million Nu.)

| Expenditure on Gross Domestic Product (at constant 2000 price) | | | | | | |
|---|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | 2000 | 2004 | 2005 | 2006 | 2007 | 2008 |
| Final consumption expenditure | 13,746.9 | 17,997.7 | 18,917.1 | 19,336.4 | 21,440.3 | 22,366.2 |
| Household and NPISH | 9,416.0 | 12,121.0 | 12,278.5 | 12,438.2 | 14,264.0 | 14,449.5 |
| General Government | 4,331.0 | 5,876.8 | 6,638.6 | 6898.3 | 7,176.29 | 7,916.70 |
| Gross domestic capital formation | 9,512.2 | 16,296.1 | 14,138.4 | 10,623.5 | 10,111.3 | 11,586.8 |
| Construction | 6,835.2 | 11,272.3 | 9,564.9 | 9,241.8 | 9,915.2 | 9,431.8 |
| Machinery and equipment | 3,030.5 | 5,047.5 | 4,540.9 | 1,417.7 | 1,161.0 | 1,644.8 |
| Change in inventory | (353.5) | (23.8) | 32.6 | (36.1) | (964.9) | 510.3 |
| Net export of goods and services | (4,835.4) | (7382.8) | (7184.2) | (1415.4) | (204.5) | (1748.2) |
| Export of goods and services | 5,720.3 | 8,884.6 | 11,844.0 | 20,075.0 | 23,022.1 | 25,013.6 |
| Imports of goods and services | 10,555.7 | (16,267.4) | (19,028.1) | (21,490.4) | (23,226.6) | (26,761.9) |
| Total Expenditure on GDP | 18,423.7 | 26911.18 | 25871.3 | 28544.5 | 31347.1 | 32204.8 |
| GDP by production | 19,735.8 | 26,549.6 | 28,412.0 | 30,217.4 | 36,170.3 | 37,964.2 |
| Statistical discrepancy | 1,312.0 | (361.4) | 2540.6 | 1673.0 | 4823.2 | 5759.4 |

Table 12: Private final consumption expenditures in current prices (million Nu.)

| | 2000 | 2004 | 2005 | 2006 | 2007 | 2008 |
|--|-----------------|------------------|------------------|------------------|------------------|------------------|
| Total Consumption | 9,415.96 | 13,806.72 | 14,586.17 | 15,553.70 | 18,864.06 | 20,886.62 |
| Food and non-alcoholic beverages | 4,207.95 | 4219.02 | 4501.03 | 4780.80 | 5924.4534 | 6721.82 |
| Alcoholic beverages, tobacco and narcotics | 365.87 | 395.42 | 444.12 | 482.38 | 534.63 | 600.06 |
| Clothing and footwear | 814.57 | 1387.23 | 1,426.42 | 1,520.59 | 1,598.44 | 1722.17 |
| Housing, water, electricity, gas and other fuels | 2,406.12 | 3822.37 | 4,030.84 | 4,338.96 | 4,771.09 | 5438.64 |
| Furnishings, household equipment and routine household maintenance | 459.49 | 610.33 | 676.45 | 716.54 | 981.912 | 1038.52 |
| Health | 54.46 | 383.90 | 399.07 | 424.16 | 431.0172 | 460.50 |
| Transport | 327.42 | 852.61 | 895.70 | 942.80 | 1048.176 | 1125.70 |
| Communication | 48.69 | 196.75 | 208.17 | 223.95 | 262.044 | 301.44 |
| Recreation and culture | 117.05 | 203.20 | 187.57 | 194.49 | 272.586 | 278.63 |
| Education | 54.18 | 134.96 | 137.05 | 149.33 | 270.327 | 293.79 |
| Restaurants and hotels | 8.57 | 302.41 | 306.38 | 310.36 | 1271.064 | 1287.59 |
| Miscellaneous goods and services | 551.60 | 1298.52 | 1,373.38 | 1,469.34 | 1,498.32 | 1617.77 |

Table 13: Private Final Consumption at constant price (million Nu.)

| | 2000 | 2004 | 2005 | 2006 | 2007 | 2008 |
|---|-----------------|------------------|------------------|------------------|------------------|------------------|
| Total consumption | 9,415.96 | 12,120.97 | 12,278.54 | 12,438.17 | 14,264.04 | 14,449.47 |
| Food and non-alcoholic beverages | 4,207.95 | 3,799.69 | 3,849.08 | 3,899.12 | 4,472.41 | 4,530.56 |
| Alcoholic beverages, tobacco and na | 365.87 | 371.24 | 376.07 | 380.96 | 389.04 | 394.09 |
| Clothing and footwear | 814.57 | 1,260.92 | 1,277.31 | 1,293.91 | 1,310.27 | 1,327.30 |
| Housing, water, electricity, gas and ot | 2,406.12 | 3,483.12 | 3,528.40 | 3,574.27 | 3,620.74 | 3,667.81 |
| Furnishings, household equipment ar | 459.49 | 426.32 | 431.86 | 437.48 | 584.29 | 591.89 |
| Health | 54.46 | 315.36 | 319.46 | 323.61 | 307.17 | 311.16 |
| Transport | 327.42 | 712.21 | 721.47 | 730.85 | 779.23 | 789.36 |
| Communication | 48.69 | 155.30 | 157.32 | 159.37 | 183.84 | 186.23 |
| Recreation and culture | 117.05 | 174.50 | 176.77 | 179.07 | 242.26 | 245.41 |
| Education | 54.18 | 112.32 | 113.78 | 115.26 | 193.21 | 195.72 |
| Restaurants and hotels | 8.57 | 259.19 | 262.56 | 265.97 | 1,089.26 | 1,103.42 |
| Miscellaneous goods and services | 551.60 | 1,050.80 | 1,064.46 | 1,078.30 | 1,092.31 | 1,106.51 |

Table 14: Gross domestic capital formation in current prices(million Nu.)

| In current prices | 2000 | 2,004 | 2,005 | 2,006 | 2,007 | 2,008 |
|----------------------------------|-------|--------|--------|--------|---------|--------|
| 1. Machinery and equipment | 3,030 | 5,555 | 4,535 | 5,530 | 4,320 | 7,859 |
| Govt. | 973 | 813 | 611 | 1,084 | 869 | 1,131 |
| Private | 2,058 | 4,741 | 3,924 | 4,446 | 3,451 | 6,728 |
| 2. Construction | 6,835 | 14,523 | 13,495 | 13,245 | 15,025 | 13,314 |
| Govt | 2,108 | 2,423 | 3,059 | 4,106 | 5,434 | 5,598 |
| Private | 4,728 | 12,101 | 10,436 | 9,140 | 9,591 | 7,717 |
| Gross fixed capital formation | 9,866 | 20,078 | 18,030 | 18,775 | 19,345 | 21,174 |
| Change in stock | (354) | (33) | 19 | (46) | (1,278) | 757 |
| Gross domestic capital formation | 9,512 | 20,046 | 18,049 | 18,729 | 18,066 | 21,931 |

Table 15: Gross domestic capital formation in constant price (million Nu.)

| In 2000 price | 2000 | 2,004 | 2,005 | 2,006 | 2,007 | 2,008 |
|----------------------------------|-------|--------|--------|--------|--------|--------|
| 1. Machinery and equipment | 3,031 | 5,048 | 4,541 | 1,418 | 1,161 | 1,645 |
| Govt. | 973 | 739 | 547 | 922 | 712 | 918 |
| Private | 2,058 | 4,308 | 3,994 | 495 | 449 | 727 |
| 2. Construction | 6,835 | 11,272 | 9,565 | 9,242 | 9,915 | 9,432 |
| Govt | 2,108 | 1,880 | 2,168 | 2,865 | 3,586 | 3,965 |
| Private | 4,728 | 9,392 | 7,397 | 6,377 | 6,329 | 5,466 |
| Gross fixed capital formation | 9,866 | 16,320 | 14,106 | 10,660 | 11,076 | 11,077 |
| Change in stock | (354) | (24) | 33 | (36) | (965) | 510 |
| Gross domestic capital formation | 9,512 | 16,296 | 14,138 | 10,623 | 10,111 | 11,587 |

Table 16: GDP projection in current and constant prices (million Nu.)

| <i>Description</i> | <i>Current</i> | | <i>Constant</i> | |
|---|----------------|--------------|-----------------|--------------|
| | 2009 | 2010 | 2009 | 2010 |
| GDP at market Prices | 61812 | 69891 | 40786 | 44367 |
| Net taxes on products | 1787 | 1999 | 1207 | 1292 |
| GDP at basic price | 60026 | 67893 | 39579 | 43075 |
| Agriculture, livestock, and forestry | 10996 | 11894 | 6437 | 6550 |
| Agriculture proper | 5077 | 5454 | 3041 | 3096 |
| Livestock | 3352 | 3658 | 1924 | 1962 |
| Forestry and logging | 2567 | 2782 | 1473 | 1492 |
| Industry | 26055 | 30118 | 17855 | 20165 |
| Mining and quarrying | 1529 | 1529 | 813 | 870 |
| Manufacturing | 5071 | 5592 | 3721 | 3981 |
| Electricity and water | 11023 | 12520 | 8498 | 9444 |
| Construction | 8591 | 10477 | 4824 | 5870 |
| Services | 22975 | 25880 | 15287 | 16360 |
| Wholesale and retail trade | 3112 | 3533 | 2192 | 2411 |
| Hotel and restaurant | 627 | 705 | 404 | 436 |
| Transport, storage and communications | 6404 | 7643 | 3517 | 3869 |
| Financing, insurance and real estate | 5476 | 5929 | 4196 | 4367 |
| Community, social and personal services (govt.) | 7059 | 7744 | 4785 | 5072 |
| Private social & recreational services | 297 | 326 | 193 | 205 |

**Table 17: Account 1, Gross Domestic Product and expenditure in current prices
(million Nu)**

| | 2000 | 2004 | 2005 | 2006 | 2007 | 2008 |
|--|--------------|------------------|--------------|--------------|--------------|--------------|
| | | OUT-GOING | | | | |
| Compensation of employees & operating surplus | 17865 | 27808 | 31563 | 35278 | 44056 | 48233 |
| Consumption of fixed capital | 1447 | 2265 | 2616 | 2956 | 3883 | 4320 |
| Indirect taxes less subsidies. | 424 | 1211 | 1318 | 1338 | 1443 | 1597 |
| Gross Domestic Product | 19736 | 31285 | 35497 | 39571 | 49382 | 54150 |
| | | INCOMING | | | | |
| Govt. final consumption | 4331 | 6650 | 7912 | 8644 | 9455 | 10373 |
| Private final consumption + | 10728 | 12943 | 18092 | 13993 | 22141 | 24521 |
| Increase in stocks | -354 | -33 | 19 | -46 | -1278 | 757 |
| Gross fixed capital formation | 9866 | 20078 | 18030 | 18775 | 19345 | 21174 |
| Exports of Goods & Services | 5720 | 10053 | 14106 | 25465 | 31625 | 38270 |
| Less import of goods and services | 10556 | -18407 | -22662 | -27260 | -31906 | -40945 |
| Expenditure on the Gross domestic product | 19736 | 31285 | 35497 | 39571 | 49382 | 54150 |

Statistical discrepancy added to private consumption

**Table18: Account 3: Income and its appropriation National Disposable.
(million Nu.)**

| | 2000 | 2004 | 2005 | 2006 | 2007 | 2008 |
|--|--------------|--------------|--------------|--------------|--------------|--------------|
| | | OUT - GOING | | | | |
| Govt. final consumption | 4331 | 6650 | 7912 | 8644 | 9455 | 10373 |
| Private final consumption | 10728 | 12943 | 18092 | 13993 | 22141 | 24521 |
| Net Saving | 6637 | 13960 | 13226 | 22359 | 24314 | 26372 |
| Appropriation of disposable income | 21696 | 33553 | 39230 | 44996 | 55911 | 61266 |
| | | INCOMING | | | | |
| Compensation of employees & operating surplus | 17865 | 27808 | 31563 | 35278 | 44056 | 48233 |
| Compensation of employees from ROW(net) | -22 | -750 | -541 | 99 | -216 | -1139 |
| Property and entrepreneurial income from ROW (net) | | | | | | |
| Indirect taxes less of subsidies | 424 | 1211 | 1318 | 1338 | 1443 | 1597 |
| Current transfers from ROW(net) | 3430 | 5284 | 6890 | 8282 | 10627 | 12575 |
| Disposable Income | 21696 | 33553 | 39230 | 44996 | 55911 | 61266 |

Table 19: Account 5: Income and outlay account in current prices (million Nu.)

| | 2000 | 2004 | 2005 | 2006 | 2007 | 2008 |
|--------------------------------------|-----------------|--------------|-------------|--------------|--------------|--------------|
| | OUTGOING | | | | | |
| Increase in stock | -354 | -33 | 19 | -46 | -1278 | 757 |
| Gross Fixed Capital Formation | 9866 | 20078 | 18030 | 18775 | 19345 | 21174 |
| Purchase of intangible assets nec. | | | | | | |
| Net Lending to the rest of the world | -4835 | -8354 | -8556 | -1795 | -281 | -2675 |
| Gross Accumulation | 4677 | 11692 | 9493 | 16934 | 17786 | 19256 |
| | INCOMING | | | | | |
| Net Saving | 6637 | 13960 | 13226 | 22359 | 24314 | 26372 |
| Consumption of fixed capital | 1447 | 2265 | 2616 | 2956 | 3883 | 4320 |
| Capital transfer from ROW (net) | -3408 | -4533 | -6349 | -8381 | -10412 | -11435 |
| Finance of Gross Accumulation | 4677 | 11692 | 9493 | 16934 | 17786 | 19256 |

**Table 20: Account 6: All accounts -External current transactions in current prices.
(million Nu.)**

| | 2000 | 2004 | 2005 | 2006 | 2007 | 2008 |
|--|-----------------|--------------|--------------|--------------|--------------|--------------|
| | OUTGOING | | | | | |
| Exports of goods and services | 5720 | 10053 | 14106 | 25465 | 31625 | 38270 |
| Compensation of employees from ROW Net | -22.28 | -750.50 | -540.77 | 98.71 | -215.53 | -1139.28 |
| Property and entrepreneurial from Row | | | | | | |
| Other current transfers from ROW(net) | 3430 | 5284 | 6890 | 8282 | 10627 | 12575 |
| Current receipts | 9128 | 14587 | 20455 | 33846 | 42036 | 49706 |
| | INCOMING | | | | | |
| Imports of goods and services | 10556 | -18407 | -22662 | -27260 | -31906 | -40945 |
| Compensation of employees to ROW | | | | | | |
| Property and entrepreneurial to ROW | | | | | | |
| Other current transfers to ROW | | | | | | |
| Surplus of the Nation on current transaction | -1428 | 32994 | 43117 | 61106 | 73942 | 90650 |
| Disposal of current receipts | 9128 | 14587 | 20455 | 33846 | 42036 | 49706 |

BRIEF DESCRIPTION OF UNITED NATIONS *System of National Accounts* (SNA):

The United Nations *System of National Accounts* (SNA) gives a complete description of the economic system. It consists of a coherent, consistent and integrated set of macroeconomic accounts and tables based on a set of internationally agreed concepts, definitions, classifications and accounting rules for the purposes of economic analysis and policy-making. The certain key aggregates of the System, such as GDP / GNP and NDP per capita have acquired an identity of their own and are widely used by analysts, politicians, press, business community and public at large as summary for the global indicators of economic activity and welfare. Movements of such aggregates, and their associated price and volume measures are used to evaluate the overall performance of an economy and hence to judge the relative success or failure of economic policies pursued by the nation. **Gross Domestic Product** (GDP) is a measure of production. The level of production is important because it largely determines how much a country can afford to produce, generate income, consume and save. It represents the aggregated final results of the production activities of all the production entities (Units) located within the territorial or geographical boundary of a country in a year or in an accounting year.

Production activities are normally those, which result in the production of goods and services for sale in the market and for own use. The Government activities related to public administration, defense and activities of non-profit institution should also be counted as economic activities even when their output is not sold in the market on a commercial basis. GDP includes the construction of buildings by households and enterprises for their own use, and the production of crops and livestock in the farms for self-consumption. This is simply because there are usually close market parallels for these activities. However, unpaid services rendered by housewives and other household members are not included in GDP. The variants of GDP are **Net Domestic Product** (NDP), **Gross National Product** (GNP) and **Net National Product** (NNP). All these can be estimated at factor cost and at market prices. Further, all the above flows are measured in current and constant prices. Interrelations among these flows can be seen from the Table 1 presented in this report. The establishments producing goods and services can be classified upon the nature of goods and services

produced by them into various categories termed as groups, major groups, divisions and major divisions. Major divisions represent the largest categories into which production activities can be classified. For measuring gross domestic product, *the UN System of National Accounts* (SNA) suggests the classification of the producers activities into nine major divisions like :-

- (1). *Agriculture, hunting, forestry and fishing.*
- (2). *Mining and quarrying.*
- (3). *Manufacturing.*
- (4). *Electricity and water.*
- (5). *Construction.*
- (6). *Wholesale and retail trade*
- (7). *Hotels and restaurants.*
- (8). *Transport, storage and communication.*
- (9). *Financing, insurance, real estate and business services.*
- (10). *Community, social and personal Services (Govt.).*
- (11). *Private, social and recreational services*

The above classification is also briefly known as *the Industrial classification of all Economic Activity*. Generally some part of the total output of each sector is purchased by other sectors to be used in the process of production as an intermediate consumption. Therefore, to estimate the value of gross domestic product of that particular sector, the total value of output of the sector minus its intermediate consumption is taken as its contribution to GDP. The GDP is represented by the aggregated value of gross domestic product of all the sectors and is also equal to the value of goods and services produced domestically which are available for final uses like consumption, saving and export.

Methods/ Approaches:

As per the SNA, there are three approaches for the measurement of GDP, which are known as

- (i) *The Production approach* ,
- (ii) *The Income approach* and
- (iii) *The Expenditure approaches* are explained briefly below.

The Production approach is a simple method. In economics, production means making a thing more useful by processing or addition to the utility which can be valued and which is scarce in relation to demand is known as value added or product. Thus, *production* means, “**Value added** ”. The gross value of output (GVO) minus the value of intermediate consumption (IC) is equal to gross value added or GDP. e.g. :-

$$\mathbf{GVO - IC = GDP.}$$

The Income approach can be measured as the sum of incomes paid out to employees by the Producer known as compensation of employees (CE), operating surplus (OS) of the producer and the consumption of the fix capital (CFC), which is also known as depreciation. The sum of all the three elements covering payments to the factors of production is also equal to gross value added at factor costs. If we add indirect taxes (IT) less subsidies on production, the measurement would be at producer's values.

e.g. :- $\mathbf{CE + OS + CFC + (IT) = GDP.}$

The Production approach and the Income approach give the same results. Thus, in an accounting year value of product (total value added) is the same as income earned by Factors of production.

The Expenditure approach is an aggregated approach, which accounts private consumption; government consumption, capital formation and net export ²/ during an accounting year. In other words, it is the sum of final consumption expenditure (FCE) of households / private and Government, Gross domestic capital formation (GDCF) or investment and Net export (export-import).

E.g.: - **FCE + GDCF + Net Export = GDP.**

The Final uses of GDP: -

The Final uses of GDP are Final consumption expenditure (FCE); Gross domestic capital formation and Net export (Export minus Import).

The Final consumption expenditure: -

The ultimate objective of economic activity is the final consumption of goods and services by directly by households or organized or financed collectively by government or by Private non-profit institutions. The final consumption consists of those goods or services, which are acquired and used either collectively or individually, by households in order to satisfy the needs or wants of the persons of which they are composed, during an accounting period. An individual consumption good or service is one acquired by individual households for the exclusive use of those households. A collective consumption service is a service provided to the community as a whole or to a particular section of the community and which is acquired and used by all members of the community. The final consumers are (a) *Households* ³/, (b) *Non-profit bodies*⁴/ and (c) *Government*⁵/.

²-/ *Export of goods and services less import of goods and services*

³-/ *The household consumption expenditure consists of the total expenditure, both actual and imputed, made by resident households for the purpose of acquiring individual consumption goods and services.*

⁴-/ *The Non-profit institution consumption expenditure is also like government consumption expenditure, which consists of expenditure on current non-durable goods and services serving households in the domestic market and abroad reduced by their sales of second hand goods, scraps and wastes. The consumption expenditures of non-resident households in the domestic market are excluded from consumption estimate as they are treated as export.*

⁵-/ *The total expenditures made by general government on both individual government goods and services and collective consumption services. It consist expenditures of the government on all types of*

In Bhutan, non-profit bodies form part of the government sector. Therefore, final consumers consist of only general government bodies and resident households. In other words, the final consumption of the households is measured as the outlays of resident households on new durable and non-durable goods and services less their net sales of second hand goods, scraps and wastes. *The Gross Capital Formation* is made up of *Gross Fixed Capital Formation* (GFCF) and *increase/decrease in stocks*. GFCF is measured as outlays (purchases and own-account production) of industries, general government (producers of government services) and non-profit bodies on additions of new durable goods to their stocks of fixed assets less their net sales of similar second-hand and scrapped goods. Excluded are the outlays of government services on durable military goods ⁶ /.

Included are the outlays on acquisitions of reproducible and non reproducible durable goods, the outlays on the reclamation, clearing and leveling of land for purposes of agriculture or construction, the outlays on clearing of forest for timber tracts, plantations, vineyards until they become productive, the acquisition of breeding stock, drought animals, dairy cattle and the transfer costs in connection with purchases and sales of land, mineral deposits and wells etc. *Increase / decrease in stocks* is measured as the difference between the stocks of materials, semi-processed or finished products or supplies held by producers pending their sale or for other use; work-in-progress in construction projects, livestock raised for slaughter, merchandise held by resident industries; stocks of strategic materials and emergency stocks of important products held by the government bodies, at the beginning and at the end of the accounting period, both valued at approximate average prices ruling over the period. *The*

goods and services of current nature (non-durable goods) including their purchases abroad for their embassies and extra-territorial bodies excluding goods of current nature sold by them in the accounting year and their expenditures on compensation of employees. Government consumption expenditure do not include transfers made by the government to the households and to the business communities; and expenditure of government on gross capital formation of assets.

⁶-/ *Consist of durable goods, which are purely for military use such as destructive military weapons, ships, planes, vehicles and others, the sole purpose of which is to use in, armed conflicts, a process which is evidently not production. It is proposed that durable military goods should be treated as capital goods if the same kind of good is acquired by civilian users for the purpose of production and if the good is regularly use in a same way as civilian.*

consumption of fixed capital (depreciation) accounts the difference between flows recorded "gross" and flow recorded "net" in the system. E.g. gross capital formation less consumption of fixed capital derives net capital formation. The consumption of fixed capital is the declining value of the durable goods between the beginning and end of the accounting period. The decline in value is attributed by the deterioration in the physical qualities in the course of production, deterioration due to passage of time, normal accidental damage and normal obsolescence due to technological progress in production method.

The Net Export is the difference between export and import. The export of goods and services consists of actual or imputed sales, or gifts or grants, of goods and services from resident to non-resident economic units and vice versa. The exports & imports of goods and services in balance of payments are related to movement of goods and services and other flows between custom frontiers or the territorial limits of the country. Thus, in national accounts, exports of goods and services consist of the outward movement of merchandise across the custom frontier and of other goods across the boundaries of the domestic territory including the direct purchases in the country of extra-territorial organizations and non-resident persons.

Exports of services include the cost of transport and insurance services provided by the resident producers of the country. Merchandise exports are expressed in f.o.b. (free on board). Import of goods and services include the value of inward movement of merchandise across the custom frontier of a country and of other goods across the boundaries of the domestic territory including direct purchases of the government services and the residents of the country abroad. Imports also include the charges of resident producers for transport and insurance services in respect of these imports. Merchandise imports are valued at C.I.F. (cost, insurance and freight).

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