

# मुलाल्ट्या द्वेया प्रवित्ता प्रविता विताल्ट्या

# National Accounts Statistics 2014

National Statistics Bureau Royal Government of Bhutan Thimphu : Bhutan

### **Foreword**

ational Statistics Bureau (NSB) is pleased to bring out the National Accounts Statistics, 2014. It presents Gross Domestic Product (GDP) estimates and other macro-economic aggregates such as final consumption of the households and the government, gross capital formation and saving for the period ending December 2013. This is the 26<sup>th</sup> publication in the series of National Accounts Statistics (NAS) published by National Accounts & Price Statistics Division, NSB.

The GDP estimates are compiled and presented in line with internationally accepted concepts, definitions and standards in order to enable international comparisons and assist decision makers and analysts in policy formulation, evaluation and monitoring of various development plans and programs.

Many individuals and agencies both from the government and private sector have assisted and contributed NSB in the publication of this report. We would like to sincerely thank and acknowledge their continued support and cooperation. Any feedback or comments for further improvement will be greatly appreciated.

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#### Statistical Abbreviations

e : estimated

p: provisional

r : revised estimates( ) : figure is negative

\_ : figure is zero or negligible

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#### **Abbreviations & Acronyms**

BLSS : Bhutan Living Standard Survey
CFC : Consumption of Fixed Capital

CFC : Consumption of Fixed Capital
CIF : Cost Insurance and Freight

CoE : Compensation of Employees

CPI : Consumer Price Index

DRC : Department of Revenue & Customs

DBA : Department of National Budget
DPA : Department of Public Accounts

DGM : Department of Geology & Mines

FoB : Free on Board

FISIM : Financial Intermediation Services Indirectly Measured

FC : Final Consumption

HIES : Household Income and Expenditure Survey

GDCF : Gross Domestic Capital Formation

GDFCF : Gross Domestic Fixed Capital Formation

GDP : Gross Domestic Product

GDE : Gross Domestic Expenditure

GNI : Gross National Income

GO : Gross Output

GVA : Gross Value Added

GVAR : Gross Value Added Ratio

GGFCE : General Government Final Consumption Expenditure

GCE : Government Consumption Expenditure

IC : Intermediate Consumption

ISIC : International Standard Industrial Classification of All

**Economic Activities** 

PHCB : Population and Housing Census of Bhutan

PFCE : Private Final Consumption Expenditure

PCE : Private Consumption Expenditure

MoF : Ministry of Finance

MoAF : Ministry of Agriculture & Forests

MoEA : Ministry of Economic Affairs

NNI : Net National Income

NPISH : Non-Profit Institutions Serving Households

NSB : National Statistic Bureau

RMA : Royal Monetary Authority of Bhutan

SNA : System of National Accounts

Table 1: Key Economic Indicators					
Indicators	2009	2010	2011	2012	2013
1. GDP (Nu. in Million)					
Current Prices	61,220.56	72,496.64	84,950.01	97,452.96	104,378.08
Constant Prices	40,661.69	45,432.04	49,017.39	51,503.11	52,556.35
2. GDP (USD Million)					
Current Prices	1,264.63	1,585.32	1,820.23	1,823.60	1781.50
Constant Prices	839.94	993.48	1,050.30	964.47	897.02
		60 <b>450</b> 05	<b>-</b> 0 (22 00	00.050.64	.=
3. GNI (Nu. Million)	58,772.52	68,473.97	79,633.98	89,858.64	97,585.39
4. GDP Growth (%)					
Current Prices	11.83	18.42	17.18	14.72	7.11
Constant Prices	6.66	11.73	7.89	5.07	2.05
Constant Precs	0.00	11.73	7.07	3.07	2.03
5. GDP Per Capita					
In Nu.	89,634.79	104,161.84	119,985.84	135,351.33	142,983.67
In USD	1,851.58	2,277.76	2,570.94	2,532.77	2,440.41
6. Inflation (%)					
Implicit GDP Deflator	4.85	5.98	8.61	9.10	4.95
CPI	4.41	7.02	8.86	10.92	8.77
	_				
7. Govt. Expenditure as % of GD					
Current	18.06	20.68	16.94	18.83	16.78
Capital	15.19	19.82	17.42	19.61	15.53
8. Govt. Revenue as % of GDP					
Tax Revenue	13.18	14.66	15.46	15.63	15.41
Non-tax Revenue	11.07	8.17	6.79	6.00	5.89
Non-tax revenue	11.07	0.17	0.79	0.00	3.67
9. Govt. Debt as % of GDP					
Total Debt	63.33	64.08	72.86	85.52	96.33
External Debt	61.47	62.75	71.70	84.42	95.91
10. Exchange Rates (Nu. Per	48.41	45.73	46.67	53.44	58.59
USD)	10.11	43.73	40.07	33,44	30.37
44 D. 1 .1 (1. 25.11)					
11. Population (in Million)	0.68	0.7	0.71	0.72	0.73

#### 1.1 Introduction

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

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

#### 1.2 Measurement

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

#### 1.3 Objectives

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

#### 1.4 GDP Revision

As a standard practice, the past published figures are revised when more recent and up-to-date information become available. However, such revisions, as a matter of internal policy, are limited to only two years and users are accordingly informed.

Readers will notice minor revisions in the published figures of 2011 and 2012 under few sectors. Agriculture sector data, unlike other sectors, are compiled and produced with a time lag of at least one year.

Gross Value Added (GVA) for the agriculture sector for 2013 is also based on projected production figures provided by the PPD, Ministry of Agriculture and Forests (MoAF). They are expected to undergo certain revision next year when MoAF comes up with final RNR data.

#### 1.5 Reporting Basis

The National Accounts Statistics is reported on a calendar year basis, while biannual or annual reports of the Ministry of Finance, Royal Monetary Authority, and National Pension and Provident Fund Ltd. are reported on a fiscal year basis.

Hence information received from the above agencies on a fiscal year basis are converted to calendar year for national accounts statistics purposes. All users must take note of this fact and exercise due care and diligence while referring or quoting figures from the report.

## Chapter 2 Economic Performance

#### 2.1 GDP

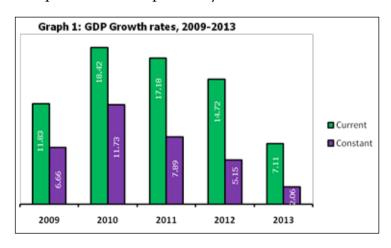
GDP in constant prices recorded Nu. 52,556.35 million in 2013, posting a growth rate of 2.05 percent from Nu. 51,503.11 million in 2012. The economy growth slowed down by about 3 percentage points in 2013 from 5.07 percent in the previous year. The average economic growth in the last five years (2009-2013) however recorded 6.70 percent.

The decline in the growth can be attributed to negative growth of Manufacturing by 7.22 percent; Community, Social & Personal Services by 5.16 percent and Construction Sector by 2.07 percent.

On the other hand, the sectors which performed relatively better and contributed to the overall growth in 2013 were Hotels and Restaurants with 17.11 percent; Electricity & Water Supply with 10.74 percent; Wholesale & Retail Trade with 7.85 percent, followed by Business Services with 7.21 percent.

#### 2.2 Nominal GDP

In nominal terms, the level of GDP reached Nu. 104,378.08 million in 2013 compared to Nu. 97,452.96 million in 2012. This was an increase of 7.11 percent over the previous year.



#### 2.3 GDP in USD and Per Capita Income

At an annual average exchange rate of Nu.58.59 in 2013, GDP in USD is estimated at 1,781.50 million, noting downward of 2.31 percent in 2013 from USD 1,823.60 million in 2012.

In terms of the Ngultrums, per capita GDP is estimated at Nu. 142,983.67, taking into account the country's projected population in 2013 at 0.73 million.

#### 2.4 Gross National Income (GNI)

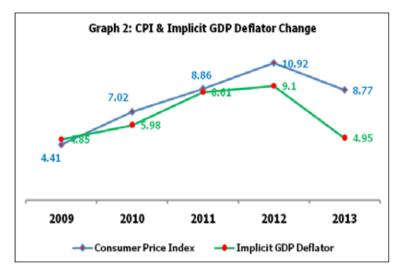
Gross National Income (GNI) at current prices recorded Nu. 97,585.39 million in 2013 as compared to Nu. 89,858.64 million in 2012 and it grew by 8.60 percent.

GNI is the adjustment of net primary income receipts from abroad to the GDP at market prices.

Primary income payments decreased by 8.60 percent from Nu. 8,514.82 million in 2012 to Nu. 7,785.57 million in 2013. On the other hand, primary income receipts showed around 7.90 percent increase (Nu. 992.88 million) in 2013 from Nu.920.50 million in 2012.

#### 2.5 Inflation

Implicit GDP Deflator, which is measured as ratio of GDP at current prices to GDP at constant prices, recorded a price level change of 4.95 percent in 2013.



The rate of inflation of consumer goods and services, as measured by Consumer Price Index (CPI), recorded 8.77 percent in 2013 as compared to 10.92 percent in 2012.

#### 2.6 Gross Capital Formation/Investment

The Gross Capital Formation or Investment in the economy recorded Nu. 21,393.41 million in 2013 which is almost 35 percent decrease from 2012 in constant prices. Government investment decreased by 22.5 percent in 2013 while the private investment decreased by 38.5 percent in 2013.

#### 2.7 Savings

Gross Domestic savings was recorded at Nu. 26,345.51 million in 2013, while gross national savings was Nu. 25,097.77 million, mainly propped up by net current transfers from abroad in the form of external grants and other transfers.

## **Chapter 3 GDP by Broad Economic Sectors**

This chapter presents GDP estimates at three broad aggregate levels; primary, secondary and tertiary sector.

#### 3.1 Primary Sector

Primary Sector consisting of crops, livestock, and forestry and logging activities contributed a total GVA of Nu. 16,888.98 million in 2013 at current prices. This was an increase of 8.55 percent from Nu. 15, 558.29 million in 2012.

Primary Sector represented 16.18 percent of the GDP in 2013. Its share to the overall GDP increased by 0.22 percentage points from 15.96 percent in 2012, partly because of sluggish growth of the other two sectors, and relatively better performance of agriculture proper, i.e., crops.

In real terms, the sector recorded a growth of 7.03 percent over the previous year.

(in %) 2013 16.18 42.30

41.52

100

Sectors	2009	2010	2011	2012	
Primary	18.23	16.80	16.33	15.96	
Secondary <sup>1</sup>	41.97	42.78	40.98	41.62	

40.42

100

**Table 2: Share of Major Economic Sectors** 

39.81

100

#### 3.2 Secondary Sector

Tertiary

**GDP** 

Secondary Sector, which is composed of Manufacturing, Electricity and Water Supply, and Construction sub - sectors contributed a total value added of Nu. 44,149.67 million at current prices, registering a 8.86 percent growth over the previous year.

42.69

100

42.42

100

Secondary Sector constituted 42.30 percent of the total GDP. Its share to

<sup>1</sup> Mining & Quarrying is included in the secondary sector.

the total GDP in 2013 increased by 0.68 percentage point.

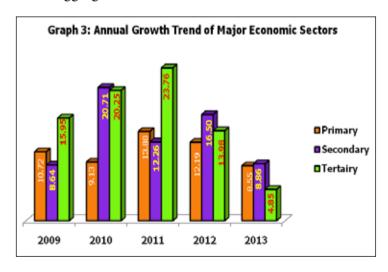
In real terms, the growth in the secondary sector in 2013 was one of the lowest at 2.02 percent, and it fell from 7.21 percent in 2012.

#### 3.3 Tertiary Sector

Tertiary Sector, which consists of all other sub-sectors such as Hotels & Restaurants, Wholesale and Retail Trade, Transport, Storage & Communications, Finance, Insurance and Real Estates, General Government, and Other Private and Recreational Services, noted a growth of 41.52 percent at current prices. Unlike in the past, the growth in the tertiary sector dropped by 0.90 percentage points from 42.41 percent in 2012.

The sector contributed a total value addition of Nu. 43,339.43 million at current prices. Its share to GDP has not changed and it stands at 42 percent.

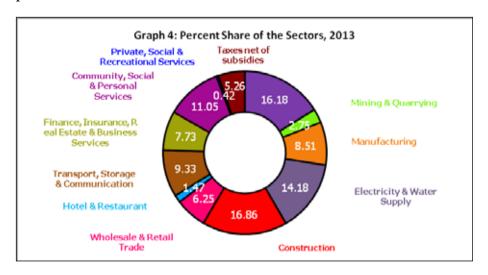
In real terms, although the sector recorded a sharp fall in the growth rate, from 4.47 percent in 2012 to 0.36 percent in 2013, the performance at the broad aggregate level was better.



#### 3. 4 Sub-Sectoral Contribution

At the sub-sectoral level, the contribution from Mining & Quarrying was the highest at 36.20 percent, followed by Electricity and Water Supply with 10.74 percent, Transport, Storage & Communication with 3.29 percent and Agriculture, Livestock & Forestry with 2.94 percent.

The contribution of the remaining sectors in 2013 recorded around 2 percent or less.



## **GDP by Industrial Origin - Sector Performance**

#### 4.1 Agriculture Proper

#### 4.1.1 Crops

Agriculture proper or crop production, which involves growing of crops and other cereal products, contributed a total value addition of Nu. 9,580.49 million (at current prices) as compared to Nu. 8,635.21 million in 2012.

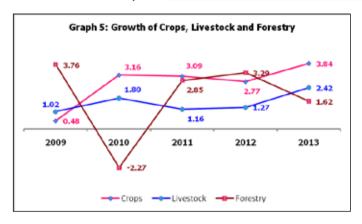
GVA of crops noted a growth of 10.91 percent in 2013, which is almost 2 percent points decrease from 12.93 percent in 2012.

**Table 3: Gross Output of Major Crops in Current Prices** 

Crops	2009	2010	2011	2012	2013 <sup>2</sup>
Paddy	1359.39	1622.17	1735.66	2151.99	2516.36
Maize	969.41	1012.93	1130.06	1354.23	1551.73
Wheat/Barley	95.59	93.27	121.06	136.01	178.53
Buckwheat	74.82	77.31	82.28	97.58	109.42
Millets	53.61	53.18	40.63	54.23	54.23
Apples	599.50	656.23	1,147.59	583.56	460.18
Oranges	1,755.20	1,996.59	2,177.93	2,433.09	2,738.21
Potatoes	858.86	996.83	1,041.10	930.04	1,066.50
Ginger	59.72	61.24	111.98	225.15	168.72
Mustard	48.23	41.39	30.13	22.42	11.41
Pulses	92.73	62.06	131.51	140.88	118.79
Chili	348.27	286.62	194.25	298.50	325.36
Cardamom	77.44	108.04	342.50	116.74	297.64
Other Veg.	56.21	193.28	216.03	392.67	324.01
Other Fruits	30.42	32.97	52.86	194.37	220.81
Areca Nuts	136.24	147.63	165.35	708.74	801.01
TOTAL	6,615.64	7,441.75	8,720.89	9,840.20	10,942.90

In real terms, crops achieved 3.84 percent growth in 2013 and it is one of the highest growth rates recorded so far in the five years period since 2009.

<sup>2</sup> Crop production figures are provisional estimates of PPD, MoAF and are subject to revisions when actual figures become available.



#### 4.1.2 Livestock

From the overall livestock population, local cattle recorded 0.42 percent growth, improved cattle 1.59 percent, Yak 2 percent and other livestock population with 1 percent or less. Other categories of livestock showed decline in the growth in 2013.

**Table 4: Growth in Livestock Population** 

(in %)

Livestock	2009	2010	2011	2012	2013
Local cattle	-6.85	-0.65	-2.68	-4.13	0.42
Improved cattle	3.00	0.47	5.18	3.59	1.59
Yak	-6.40	-10.87	6.86	-11.90	2.00
Buffalo	-34.72	-2.83	-8.30	-13.04	(14.13)
Horses	-14.74	0.77	-0.34	-3.19	0.40
Pigs	-19.33	-11.15	7.40	-9.35	(19.89)
Sheep	-7.43	3.28	-1.89	-13.45	(8.03)
Goats	-1.23	11.69	1.39	-10.78	1.00
Poultry	19.17	40.66	24.52	26.50	0.30

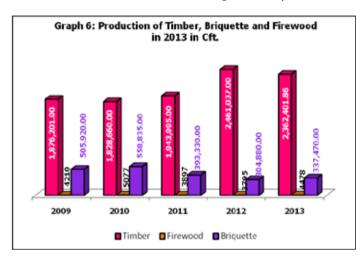
Source: PPD, MoAF

GVA for livestock sub-sector, estimated based on livestock population by different species and categories, amounted to Nu. 4,289.67 million at current prices, showing 7.33 percent growth over the previous year. Increased production of poultry and dairy products helped sustain the growth in 2013.

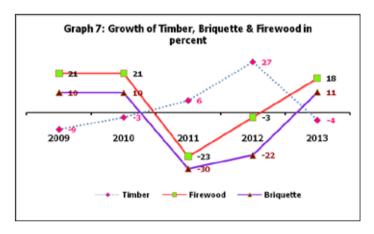
However in real terms, it noted a slight increase from 1.27 percent to 2.42 percent 2013. The share of livestock to the overall GDP remained more or less the same as the previous year at around 4 percent.

#### 4.1.3 Forestry & Logging

Total GVA contribution from Forestry & Logging sub-sector at current prices recorded Nu. 3,018.82 million. This was an increase of 3.16 percent from Nu. 2,926.29 million in the previous year.



Briquette and firewood production, unlike in 2012, saw marked increased in production by 11 percent and 18 percent respectively. The production of Timber on the other hand witnessed 4 percent decrease as compared to 27 percent in the previous year.



In real terms, it registered 1.62 percent growth; however its shares to the total GDP remained the same as the previous year at around 3 percent.

#### 4.2 Mining & Quarrying

GVA contribution at current prices from Mining and Quarrying recorded a nominal increase of 46.14 percent from Nu. 1,961.96 million in 2012 to Nu. 2,867.26 million in 2013.

In general, most minerals showed an increased in production as compared to 2012.

**Table 5: Mineral Production** 

(MTs) 2013 2009 2010 2011 2012 Dolomite 1028993 1210424 1082301 1499535 1,740,016 Limestone 649951 614948 649591 677129 1,006,235 Gypsum 299736 344034 373520 313230 351,421 Slate 18998 Coal 87815 108904 98731 77,744 48545 Quartzite 90,909 82579 111371 95016 88631 Stone 511781 438398 1842679 1494467 3,303,731

Source: DGM, MoEA

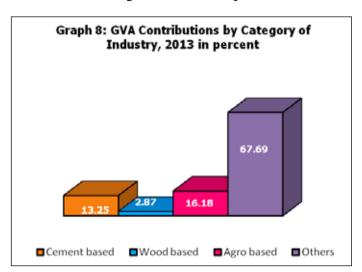
In real terms, the subsector registered positive growth of 36.20 percent in 2013. It noted a high growth in the mineral production.

The contribution of mining and quarrying to the overall GDP also increased from 2.01 percent in 2012 to 2.75 percent in 2013.

#### 4.3 Manufacturing

Manufacturing sector is broadly divided into formal and informal units. Formal units are those incorporated under the companies Act, while informal units refer to those which are not incorporated under the Act, but licensed to undertake manufacturing activities. Further, depending on the nature of the activities, formal units are categorized into Cement, Agro-based, Wood-based and others.

GVA contribution of the manufacturing sector at current prices amounted to Nu. 8,878.49 million in 2013, posting 2.96 percent growth over the previous year. Of the total GVA, Cement based industries contributed 13.25 percent, Wood based 2.87 percent, Agro based 16.18 percent and others which include major metal based and chemical industries



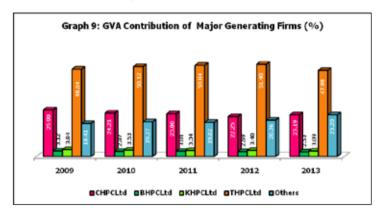
contributed the highest with 67.69 percent.

In real terms, the sector registered negative growth of 7.22 percent. As a result of poor performance in 2013, the share of the sector to the GDP composition also decreased to 8.51 percent from 8.85 percent in the previous year.

#### 4.4 Electricity and Water Supply

Electricity and Water Supply sector includes electricity generation & distribution, water supply & purification and distribution activities of municipal bodies.

GVA contribution of this sector increased to Nu. 14,801.51 million in 2013 from Nu. 12,303.14 million in the previous year. The average GVA contribution in the last five years from 2009 to 2013 was recorded at Nu. 12,718.66 million.



Of the generation and distribution, THPA contributed about 48 percent, CHPC & BHPC about 23 percent, KHPC about 3 percent and the remaining 23.2 percent pertains to generation and distribution activities under BPCLtd.

In terms of generation, THPC reported an increase of 11.54 percent, CHPC 9.29 percent and other two firms at 4.9 and 4 percent respectively. The overall generation increased by 10.57 percent from the previous year.

**Table 6: Electricity Generation by Generating Plants** 

(In MU.)

Plant	2012	2013	Variance (%)
THPA	4405.22	4913.63	11.54
CHPC Ltd.	1745.33	1907.44	9.29
KHPC Ltd.	360.93	378.60	4.90
BHPC Ltd.	299.78	311.77	4.00
Total	6811.26	7531.45	10.57

Source: DGPC

Although the share of water purification and distribution activities is small, its contribution to the overall GDP showed a gradual increase over the years. It increased to Nu. 29.17 million from Nu. 28.75 million in the previous year.

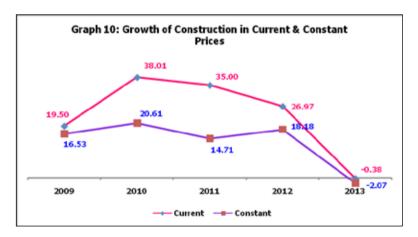
In real terms, the sector noted 10.74 percent growth. This is the first time the sector is experiencing a high growth in five years period from 2009 to 2013.

Distribution activities of BPC Ltd. also noted an increase of 47 percent in 2013.

The overall performance of the sector is contingent on the performance of major generating firms and its share to the GDP stood at 20.31 percent.

#### 4.5 Construction

GVA from construction sector at current prices was recorded at Nu. 17,602.41 million posting a negative growth of 0.38 percent from Nu. 17,669.80 million in 2012.



In real terms, the sector recorded a negative growth of 2.07 percent as against a positive growth of 18.18 percent in the previous year. The average growth in the last five years was around 13 percent.

Its share to the GDP composition stood at around 17 percent.

#### 4.6 Wholesale and Retail Trade

This sector includes services such as wholesale trade, retail trade, repair of motor vehicles and household appliances.

The GVA from wholesale and retail trade sector amounted to Nu. 6,526.92 million in 2013. There was an increase of 10.30 percent at current prices over the previous year. Trading activities performed much better than repair services.

In real terms, it recorded a growth of 7.85 percent as compared to 17.45 percent in the previous year. However, in terms of share it comprised only 6.25 percent of the GDP.



#### 4.7 Hotels & Restaurants

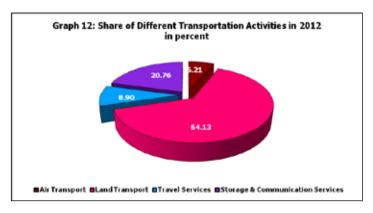
Hotels and Restaurants continue to be one of the top performers in the economy in 2013 as well. Its GVA contribution during the year was Nu. 1,536.06 million in current terms. At 18.26 percent growth over the previous year, it is one of the fastest growing sectors in the economy.

The share of the sector to the GDP stood at 1.47 percent in 2013 as compared to 1.33 percent in 2012. The strong performance of the sector is explained by increased number of tourist arrivals with 116,209 in 2013, marking 10.25 percent as compared to 105,407 in 2012. Hospitality industry, in general, did extremely well as indicated by increased tourist earnings, higher occupancy rate, and surge in regional visitors from India, Bangladesh and Maldives.

#### 4.8 Transport, Storage and Communications

The activities under this sector include land and air transport services, telecom services, publishing services, and travel services in the economy.

GVA contribution from this sector recorded Nu. 9,743.45 million, registering 5.27 percent increase over the previous year at current prices. Land transport constituted 64.13 percent, Air transport services 5.21 percent, storage & communications services 20.76 percent and other travel services 8.90 percent respectively of the total GVA contribution.



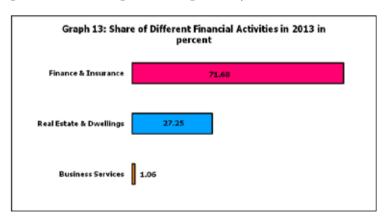
In real terms, it registered a growth of 3.29 percent which is contributed and sustained by improved performance of the tourism and hospitality industries.

In terms of its share to the GDP, it accounted for 9.33 percent in 2013.

#### 4.9 Finance, Insurance, Real Estates and Business Services

This sector consists of banking services, insurance services, real estates and dwelling services, and other business services.

Total GVA contribution at current prices recorded Nu. 8,064.75 million and its growth increased to 8.80 percent in 2013 from 5.77 percent in 2012. Finance and insurance contributed 71.68 percent of the total GVA, while real estate, dwelling and business services accounted for 27.25 percent and 1.06 percent respectively.



Among subsectors, finance and insurance increased sharply from 4.83 percent in 2012 to 7.36 percent, real estate and dwellings from 7.27 percent to 12.88 percent. The other business services declined sharply from 43.74 percent to 7.21 percent in 2013 in current prices.

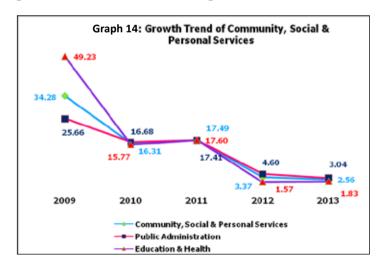
In real terms, the sector recorded a growth of 1.99 percent. The downfall came mostly from business services. The growth sharply decreased from 18.77 percent to a negative growth of 1.45 percent.

In terms of GDP share, the sector constituted about 8 percent of the total GDP. Finance and insurance constituted about 6 percent of the total GDP composition.

#### 4.10 Community and Social Services (General Government)

The general government is one of the major sectors in the economy. It constituted 11.05 percent of the economy in 2013. The activity covered under this sector includes public administration and education & health services.

Total GVA contribution from this sector was Nu. 11,536.50 million in current prices. On an average, the sector grew at a rate of 14.8 percent in the past five years from 2009 to 2013. The growth however fell from 3.37 percent in 2012 to under 2.56 percent in 2013.



In real terms, the sector noted a negative growth of 5.16 percent in 2013. Public administration registered a negative growth 4.73 percent and health & education services recorded a negative growth of 5.82 percent.

#### 4.11 Private, Social and Recreational Services

The share of this sector to the GDP constituted less than 8 percent. It includes activities such as social, recreational and sporting services.

GVA contribution from this sector was recorded at Nu. 436.44 million and in real terms, it registered 2.70 percent growth, which is more or less the same as in the previous year (2.66 percent).

### Chapter 5 GDP by Expenditure

#### 5.1 GDP by Expenditure

GDP by expenditure approach measures how final goods and services produced during the year is used for consumption, saving, and investment purposes.

GDP estimates by expenditure approach takes into account three main aggregates viz. Final Consumption Expenditure, Gross Capital Formation, and Net Exports.

#### 5.2 Final Consumption Expenditure

Final Consumption Expenditure consists of private and government consumption expenditure.

In 2013, the consumption expenditure of private and government was recorded at Nu. 78,032.57 million, which is about 42 percent increase over the previous year in current price. However in real terms it translated to a real growth of only 5.69 percent.

In terms of composition, 73 percent constituted private consumption component by households and NPISHs, and the remaining pertained to the general government consumption.

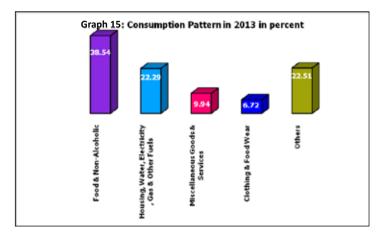
#### 5.2.1 Final Consumption Expenditure of Households

Final Consumption Expenditure of Households takes into account expenditure incurred by private households and NPISHs on consumer goods and services.

The level of the private household final consumption expenditure rose to Nu. 53,362.80 million in 2013 from Nu. 42,690.24 million in 2012. This translated to a real growth of 12.69 percent from the previous year. It constituted 51.12 percent of the GDP in 2013.

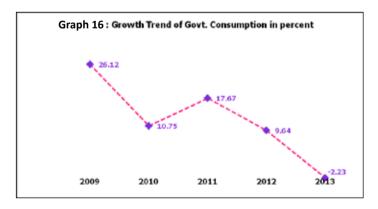
In terms of consumption pattern, 38.54 percent of the total consumption expenditure was on food and non-alcoholic beverages while about

22.29 percent were for housing, water, electricity, gas and other fuels. Miscellaneous goods & services and clothing & footwear account for about 9.94 percent and 6.72 percent of the total consumption expenditure respectively.



#### 5.2.2 General Government Consumption Expenditure

The total final consumption expenditure of the government, on account of compensation on employees, consumption of fixed capital, and other intermediate consumption expenditures, recorded Nu. 18,274.46 million as compared to Nu. 18,691.15 million in 2012. After adjusting the price effects, it translated to a real negative growth of 2.23 percent from the previous year.



Compensation of employees formed a major share of government

expenditure and has been continuously on the rise in the past five years owing to factors such as annual salary increments and new entries into and exit from the civil service. This is followed by office consumables such as repairs and maintenance expenses, S&M expenses, travels, utilities, and other operating expenses.

The sector constituted about 18 percent of the GDP.

#### 5.3 Gross Capital Formation

Gross Capital Formation (GCF) consists of machinery & equipment, construction activities, change in inventories, acquisition less disposal of valuables and non-produced assets.

Gross Capital formation at current prices recorded at Nu. 49,334.15 million in 2013. Of the total, construction accounts for Nu. 41,089.92 million while the remaining Nu. 7,846.74 million was for machinery & equipment, Nu.193.48 million for software and database development and Nu.215.65 million for valuables.

While Construction component grew at an average rate of 35 percent per annum from 2009 to 2013, during the current period the growth was negative 2 percent.



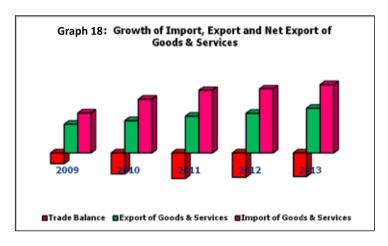
In real terms, the overall capital formation decreased by 34.61 percent in 2013. The decrease can be attributed to a negative growth of 4.16 percent in Construction and a negative growth of 28.34 percent in Machinery & Equipment.

#### 5.4 Net Exports

In 2013, the total import of goods and services was recorded at Nu. 65,625.05 million compared to Nu. 61,433.29 million in 2012 and showed an increase of 6.82 percent.

Exports, on the other hand was Nu. 42,636.41 million as compared to Nu. 37,739.40 million in 2012 which was 12.98 percent growth.

On the whole, the economy registered a negative trade balance of Nu. 22,988.64 million from Nu. 23,693.89 in 2012.



## Chapter 6 Electricity Account

#### 6.1 Introduction

Bhutan being a mountainous country is blessed with enormous water resources fed by the glacier and glacier lakes. The river systems and the mountainous terrain provide good opportunity to tap the rivers for hydropower development. As per the studies the country has the potential to generate about 30,000 MW of electricity through hydropower development. Given this huge hydropower potential and the comparative advantage in hydropower generation, the government has initiated development of many hydropower plants. Electricity exports forms one of major source of revenue for the government.

In our efforts to develop environmental statistics and more specifically energy accounts, the National Statistics Bureau is for the first time reporting the Electricity Accounts as part of our wider efforts in coming up with environmental accounts.

Electricity account is a modest attempt in developing environmental statistics and accounts. Electricity accounts are important for a number of reasons. Through these accounts we can understand the flow of electricity from the natural environment through the production process to end-users.

Accounts may be used for deriving many other indicators to address a wide range of policy issues relating to supply and use of electricity in the economy.

The chapter presents a set of accounts which are related to hydropower assets and accounts, supply and use of electricity in the economy. The Supply includes both domestic generation and import and Use accounts for how it has been used across various sectors of the economy.

#### 6.2 Measurement

The NSB has adopted the Supply and Use Table (SUT) to describe the flow. The supply table shows the gross production of electricity and import during the accounting period. Therefore, the total supply of

electricity of Bhutan is the sum of domestic production and imports. The use table shows the consumption of electricity by industries and private final consumption (Households).

#### 6.3 Accounting Formula

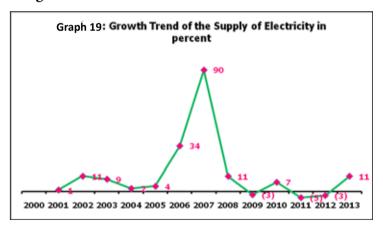
#### The total supply of electricity is accounted as:

S=DP+I; where S=Total Supply of Electricity; DP=Domestic Production and I=Import.

#### On the other hand the total use of electricity is accounted as:

U=DU+X+L; where U=Total Use of Electricity; DU= Domestic Use (i.e. Electricity use by Industries & Households); X=Export; L=Cable losses (i.e. loss of electricity through transmission & distribution).

#### 6.4 Weights

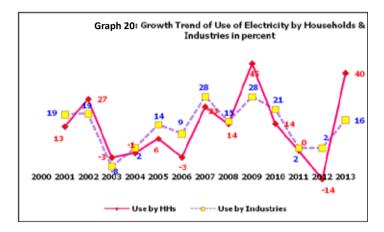


The weights reflect the relative consumption of electricity by industries and households. It was determined by using the information of BPC Ltd. on the consumption patterns of electricity by consumers during the weight reference period which is 2013. The weights were used to derive the consumption of electricity by various sectors of the economy.

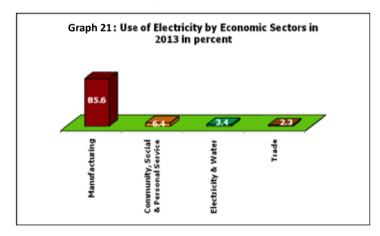
#### 6.5 Supply & Consumption of Electricity

The supply of electricity grew by 11 percent in 2013 as compared to a negative growth of 3 percent in 2012. The average growth of the supply of electricity was 13 percent from 2001 to 2013.

The import accounted 1.5 percent of the total supply in 2013. The use of electricity by industries or economic sectors grew by 16 percent from 1.8 percent in 2012 while the use by households grew by 40 percent. At an aggregated level, electricity consumption by households accounts only 10 percent of the total domestic consumption.



In terms of use of electricity, the Manufacturing sector accounted for 86 percent followed by Community, Social & Personal Services with 6 percent, Electricity and Water sector with 3 percent, Trade Sector with 2 percent and remaining 3 percent.



### 7.1 Agriculture

### 7.1.1 Agricultural Crops

GVA for agricultural crops is estimated based on agricultural census and survey data produced by MoAF from time to time. For 2013 estimates, provisional figures supplied by PPD, MoAF were used.

### 7.1.2 Livestock

The estimate for this sub-sector is based on livestock population supplied by MoAF. GVA is estimated separately for each livestock species and products and consolidated at the sub-sectoral level.

## 7.1.3 Forestry

Information from Natural Resources Development Corporation (NRDC Ltd.) and RNR data are used for estimating GVA from forestry and logging activities. NRDC Ltd. covers almost 80 percent of the total forestry activities in the country.

Production of firewood is estimated in terms of number of backloads (rural) and truck loads (urban). In cases where the information is not available, GVA is estimated using population growth rate.

### 7.2 Mining and Quarrying

GVA from mining and quarrying is estimated based on information provided by the Department of Geology and Mines, MoEA.

# 7.3 Manufacturing

Contribution from manufacturing activities is estimated from the audited annual reports of companies. In the absence of the audited annual reports, the GVARs of the similar companies/activities are accordingly applied.

## 7.4 Electricity and Water Supply

Gross value added from this sub-sector is estimated from the audited annual reports of all electricity generation, transmission and distribution companies.

Gross value added for water and sewerage is based on annual revenue collection figures of the municipal bodies.

### 7.5 Construction

Commodity flow approach is used to estimate GVA from construction activities. It includes construction of all infrastructures such as buildings, roads, bridges, thatched and non-thatched houses, orchard developments etc undertaken by the government and private sector during an accounting period.

The information on total cement consumption is obtained from the cement manufacturing firms while wood supply and utilization is obtained from NRDC Ltd.

### 7.6 Wholesale & Retail Trade

The estimate for this sector is based on the sales turnover of business firms. It is estimated using the total sales tax collection figures supplied by DRC, MoF.

### 7.7 Hotels & Restaurants

This is also based on sales turnover figures of hotels and restaurants provided by DRC, MoF.

# 7.8 Transport, Storage & Communications

GVA for air transport is estimated from the audited annual report of Druk Air Corporation Ltd. and Bhutan Airlines, while surface transport such as buses, trucks and taxis are estimated on information provided by RSTA, MoIC.

GVA for storage activities is computed from information provided by Food Corporation of Bhutan Ltd.

### 7.9 Finance, Insurance and Real Estates

GVA contribution from this sector is based on annual audited reports of the financial institutions, investment companies and real estate developers. The gross output of the government dwellings is based on the annual budget report of the Department of National Budget and the BLSS report for private dwellings.

# 7.10 Community and Social Services (General Government)

The source of information for this sector is the Annual Budget Report of the government.

### 7.11 Private, Social & Recreational Services

Estimation is based on findings and results of BLSS conducted by NSB every five years.

### 7.12 Final Consumption

Government consumption is estimated based on the Annual Budget Report, while household consumption is estimated based on BLSS report.

### 7.13 Capital Formation

Capital formation from machinery & equipment is obtained from the Annual Trade Statistics Report published by DRC, MoF. Construction outputs are estimated after making adjustments for minor repairs and maintenance. The change in stocks is estimated from the annual returns of the firms/establishments.

### 7.14 Net Export

The balance of payment report of Royal Monetary of Bhutan is the main source of information for the net export.



Table 1: National Accounts Aggregates

	2000	2009	2010	2011	2012	2013
1. Net Export	(3,732.11)	(10,715.53)	(20,501.25)	(24,874.52)	(23,693.89)	(22,988.64)
Export of Goods & Services	5,797.82	27,366.53	30,777.02	35,003.69	37,739.40	42,636.41
Import of Goods & Services	(9,529.93)	38,082.06	51,278.27	59,878.21	61,433.29	65,625.05
2. Total Consumption	13,864.63	43,935.54	48,265.73	52,354.98	54,966.02	78,032.57
Public Consumption	4,330.96	13,082.07	14,487.85	17,047.84	18,691.15	18,274.46
Private Consumption	9,533.67	30,853.47	33,777.89	35,307.14	36,274.88	59,758.11
3. Gross Capital Formation	9,603.26	28,000.55	44,732.16	57,469.55	66,180.82	49,334.15
Gross Fixed Capital Formation	9,956.78	28,269.94	44,359.98	57,785.35	66,252.82	49,345.80
Government	3,080.14	7,038.24	10,373.30	11,660.59	15,996.22	13,070.39
Machinery & Equipment	972.54	1,578.15	2,164.01	1,767.48	2,419.51	1,824.26
Construction	2,107.60	5,460.08	8,209.29	9,893.11	13,576.72	11,246.13
Private	6,785.59	20,766.14	32,069.59	45,138.11	49,921.07	35,866.28
Machinery & Equipment	2,057.98	11,176.58	15,415.00	21,513.46	21,894.61	6,022.49
Construction	4,727.60	9,589.56	16,654.58	23,624.65	28,026.45	29,843.79
Software Database Development	91.05	327.44	1,399.94	902.60	137.34	193.48
Valuables	0.00	138.12	517.15	84.05	198.19	215.65
Changes in Inventories	(353.53)	(269.39)	372.18	(315.80)	(72.00)	(11.65)
4. GDP at Current Prices	19,735.77	61,220.56	72,496.64	84,950.01	97,452.96	104,378.08
5. Net Income from Abroad	(22.28)	(2,448.04)	(4,022.68)	(5,316.03)	(7,594.32)	(6,792.69)
Income Received	704.72	887.53	758.03	814.38	920.50	992.88
Income Paid	727.00	3,335.57	4,780.71	6,130.41	8,514.82	7,785.57
6. Gross National Income (GNI)	19,713.49	58,772.52	68,473.97	79,633.98	89,858.64	97,585.39
7. Net Current Transfers from Abroad	1,982.94	3,916.23	5,281.46	8,492.70	8,954.98	5,544.95
8. Net Capital Transfers from Abroad	2,455.86	5,127.40	7,297.62	6,182.41	9,607.06	18,097.65
9. Gross Domestic Savings	5,871.15	17,285.02	24,230.91	32,595.03	42,486.93	26,345.51
10. Gross National Savings	7,831.80	18,753.21	25,489.69	35,771.70	43,847.59	25,097.77
11. Gross National Disposable Income (GNDI)	21,696.43	62,688.76	73,755.42	88,126.68	98,813.61	103,130.34
12. Saving Investment Gap	(6,032.82)	(25,182.33)	(22,776.05)	(16,583.28)	(11,118.44)	(52,934.80)
13. Net Lending(+)/Borrowing(-)	684 40	(4 119 94)	(1194485)	(1551544)	(12 726 17)	(6.138.73)

Table 2: GDP by Economic Activity at Current Prices

Sectors	2000	2009	2010	2011	2012	2013
1. Agriculture, Livestock & Forestry	5,289.42	11,158.67	12,177.83	13,868.37	15,558.29	16,888.98
1.1 Crops	2,515.98	5,668.24	6,530.14	7,665.37	8,635.21	9,580.49
1.2 Livestock	1,468.38	2,894.92	3,109.68	3,473.20	3,996.79	4,289.67
1.3 Forestry & Logging	1,305.07	2,595.51	2,538.01	2,729.79	2,926.29	3,018.82
2. Mining & Quarrying	314.91	1,392.03	1,616.89	1,941.73	1,961.96	2,867.26
3. Manufacturing	1,618.85	5,017.23	6,324.15	7,044.82	8,623.12	8,878.49
4. Electricity & Water Supply	2,255.30	11,813.45	12,763.60	11,911.61	12,303.14	14,801.51
5. Construction	2,761.41	7,469.68	10,308.86	13,916.57	17,669.80	17,602.41
6. Wholesale & Retail Trade	882.11	2,935.27	3,752.55	4,641.79	5,917.59	6,526.92
7. Hotels & Restaurants	88.14	537.61	608.01	948.65	1,298.83	1,536.06
8. Transport, Storage & Communications	1,799.67	5,989.87	6,943.32	8,526.11	9,256.04	9,743.45
9. Financing, Insurance, Real Estates & Business Services	1,392.03	4,962.11	5,545.89	7,007.73	7,412.13	8,064.75
9.1 Finance & Insurance	260.96	3,466.21	3,987.66	5,136.84	5,384.96	5,781.09
9.2 Real Estate & Dwellings	631.07	1,460.30	1,507.70	1,815.30	1,947.27	2,198.01
9.3 Business Services		35.60	50.53	55.59	79.90	85.66
10. Community, Social & Personal Services	2,813.84	7,963.33	9,262.50	10,882.24	11,248.97	11,536.50
10.1 Public Administration	1,779.24	4,728.37	5,517.28	6,478.03	6,775.74	6,981.50
10.2 Education & Health	1,034.60	3,234.96	3,745.21	4,404.22	4,473.23	4,555.00
11. Private Social & Recreational Services	96.24	276.42	297.97	338.03	390.05	436.44
12. Taxes Net of Subsidies	423.85	1,704.90	2,895.07	3,922.37	5,813.03	5,495.31
GDP	19,735.77	61,220.56	72,496.64	84,950.01	97,452.96	104,378.08

Table 3: GDP Growth by Economic Activity at Current Prices

Sectors	2000	2008	2009	2010	2011	2012	2013
1. Agriculture, Livestock & Forestry	11.32	9.14	10.72	9.13	13.88	12.19	8.55
1.1 Crops	9.84	15.62	12.01	15.21	17.38	12.65	10.95
1.2 Livestock	11.99	3.70	10.30	7.42	11.69	15.07	7.33
1.3 Forestry & Logging	13.52	2.88	8.46	(2.22)	7.56	7.20	3.16
2. Mining & Quarrying	(15.51)	40.60	11.19	16.15	20.09	1.04	46.14
3. Manufacturing	3.98	13.89	9.23	26.05	11.40	22.40	2.96
4. Electricity & Water Supply	(2.49)	14.58	2.26	8.04	(89.9)	3.29	20.31
5. Construction	40.33	(7.82)	19.50	38.01	35.00	26.97	(0.38)
6. Wholesale & Retail Trade	24.64	7.91	8.93	27.84	23.70	27.49	10.30
7. Hotels & Restaurants	0.76	54.61	(5.54)	13.10	56.03	36.91	18.26
8. Transport, Storage & Communications	96.6	20.07	11.63	15.92	22.80	8.56	5.27
9. Financing, Insurance, Real Estates & Business Services	15.44	11.48	8.42	11.76	26.36	5.77	8.80
9.1 Finance & Insurance	22.45	13.31	9.19	15.04	28.82	4.83	7.36
9.2 Real Estate & Dwellings	7.99	5.90	6.28	3.25	20.40	7.27	12.88
9.3 Business Services		336.04	26.24	41.94	10.00	43.74	7.21
10. Community, Social & Personal Services	1.73	11.65	34.28	16.31	17.49	3.37	2.56
10.1 Public Administration		11.65	25.66	16.68	17.41	4.60	3.04
10.2 Education & Health		11.65	49.23	15.77	17.60	1.57	1.83
11. Private Social & Recreational Services		10.68	3.24	7.80	13.44	15.39	11.89
12. Taxes Net of Subsidies	(31.75)	11.83	5.69	69.81	35.48	48.20	(5.47)
GDP	10.91	10.69	11.83	18.42	17.18	14.72	7.11

Table 4: GDP Sectoral Share at Current Prices

		0000	0,00	,,,,,	0,00	
Sectors	2000	2009	2010	2011	2012	2013
1. Agriculture, Livestock & Forestry	26.80	18.23	16.80	16.33	15.96	16.18
1.1 Crops	12.75	9.26	9.01	9.02	8.86	9.18
1.2 Livestock	7.44	4.73	4.29	4.09	4.10	4.11
1.3 Forestry & Logging	6.61	4.24	3.50	3.21	3.00	2.89
2. Mining & Quarrying	1.60	2.27	2.23	2.29	2.01	2.75
3. Manufacturing	8.20	8.20	8.72	8.29	8.85	8.51
4. Electricity & Water Supply	11.43	19.30	17.61	14.02	12.62	14.18
5. Construction	13.99	12.20	14.22	16.38	18.13	16.86
6. Wholesale & Retail Trade	4.47	4.79	5.18	5.46	6.07	6.25
7. Hotels & Restaurants	0.45	0.88	0.84	1.12	1.33	1.47
8. Transport, Storage & Communications	9.12	9.78	9.58	10.04	9.50	9.33
9.Financing, Insurance, Real Estates & Business Services	7.05	8.11	7.65	8.25	7.61	7.73
9.1 Finance & Insurance	3.86	2.66	5.50	6.05	5.53	5.54
9.2 Real Estate & Dwellings	3.20	2.39	2.08	2.14	2.00	2.11
9.3 Business Services	ı	90.0	0.07	0.07	0.08	0.08
10. Community, Social & Personal Services	14.26	13.01	12.78	12.81	11.54	11.05
11. Private Social & Recreational Services	0.49	7.72	7.61	7.63	6.95	7.60
12. Taxes Net of Subsidies	2.15	5.28	5.17	5.18	4.59	3.45
GDP	100	100	100	100	100	100

Table 5: GDP by Economic Activity at Constant Prices

					(in ]	(in Million Nu.)
Sectors	2000	2009	2010	2011	2012	2013
1. Agriculture, Livestock & Forestry	5,289.43	6,457.95	6,513.02	6,670.19	6,820.40	7,020.80
1.1 Crops	2,515.98	3,064.31	3,100.22	3,191.40	3,266.44	3,393.42
1.2 Livestock	1,468.38	1,864.22	1,919.03	1,941.24	1,965.84	2,013.48
1.3 Forestry & Logging	1,305.07	1,529.42	1,493.77	1,537.55	1,588.12	1,613.90
2. Mining & Quarrying	314.91	726.30	788.11	978.72	956.80	1303.18
3. Manufacturing	1,618.85	3,579.87	4,302.40	4,616.41	4,929.71	4,573.67
4. Electricity & Water Supply	2,255.30	8,904.13	9,389.38	8,872.26	8,821.79	9,768.94
5. Construction	2,761.41	4,672.21	5,635.11	6,464.00	7,639.27	7,481.26
6. Wholesale & Retail Trade	882.11	2,116.32	2,540.00	3,027.90	3,556.24	3,835.34
7. Hotels & Restaurants	88.14	334.85	347.81	491.00	576.64	675.33
8. Transport, Storage & Communications	1,799.67	3,546.78	3,941.00	4,488.91	4,748.99	4,905.31
9.Financing, Insurance, Real Estates & Business Services	1,392.03	3,661.04	3,973.09	4,841.00	4,492.57	4,576.39
9.1 Finance & Insurance	760.96	2,823.57	3,109.29	3,912.00	3,573.85	3,627.16
9.2 Real Estate & Dwellings	631.07	813.54	832.06	894.00	877.15	908.27
9.3 Business Services		23.93	31.74	35.00	41.57	40.97
10. Community, Social & Personal Services	2,813.84	5,350.23	6,047.34	6,254.16	5,852.01	5549.85
10.1 Public Administration	1,779.24	3,178.84	3,602.15	3,723.00	3,524.92	3358.29
10.2 Education & Health	1,034.60	2,171.39	2,445.19	2,531.16	2,327.09	2191.56
11. Private Social & Recreational Services	96.24	191.01	194.81	200.17	205.49	211.04
12. Taxes Net of Subsidies	423.85	1,121.00	1,759.97	2,112.66	2,903.20	2,655.25
GDP	19,735.78	40,661.69	45,432.04	49,017.39	51,503.11	52,556.35

Table 6: GDP Growth by Economic Activity at Constant Prices

	2000	5000	2010	2011	2012	2013
1. Agriculture, Livestock & Forestry	5.38	2.66	0.85	2.41	2.25	2.94
1.1 Crops	4.69	2.24	1.17	2.94	2.35	3.89
1.2 Livestock	8.04	2.35	2.94	1.16	1.27	2.42
1.3 Forestry & Logging	3.84	3.88	(2.33)	2.93	3.29	1.62
2. Mining & Quarrying	(2.77)	(6.91)	8.51	24.19	(2.24)	36.20
3. Manufacturing	2.70	88.9	20.18	7.30	6.79	(7.22)
4. Electricity & Water Supply	(9.82)	(2.65)	5.45	(5.51)	(0.57)	10.74
5. Construction	32.82	16.53	20.61	14.71	18.18	(2.07)
6. Wholesale & Retail Trade	23.63	6.21	20.02	19.21	17.45	7.85
7. Hotels & Restaurants	(0.41)	(12.90)	3.87	41.17	17.44	17.11
8. Transport, Storage & Communications	1.37	9.23	11.11	13.90	5.79	3.29
9. Financing, Insurance, Real Estates & Business Services	20.08	6.20	8.52	21.84	(7.20)	1.87
9.1 Finance & Insurance	20.32	6.77	10.12	25.82	(8.64)	1.49
9.2 Real Estate & Dwellings	19.79	3.91	2.28	7.44	(1.88)	3.55
9.3 Business Services		20.96	32.62	10.27	18.77	(1.45)
10. Community, Social & Personal Services	1.60	28.59	13.03	3.42	(6.43)	(5.16)
10.1 Public Administration		20.41	13.32	3.36	(5.32)	(4.73)
10.2 Education & Health		42.77	12.61	3.52	(8.06)	(5.82)
11. Private Social & Recreational Services		2.00	1.99	2.75	5.66	2.70
12. Taxes Net of Subsidies	(34.48)	(0.65)	57.00	20.04	37.42	(8.54)
GDP	6.93	99.9	11.73	7.89	5.07	2.05

Table 7: GDP by Major Sectors at Current Prices

(in Million Nu.)

					· ·	,
	2000	2009	2010	2011	2012	2012
1. Primary	5,289.42	11,158.67	12,177.83	13,868.37	15,558.29	16,888.98
2. Secondary	6,950.47	25,692.39	31,013.50	34,814.73	40,558.03	44,149.67
3. Tertiary	7,495.88	24,369.51	29,305.31	36,266.92	41,336.64	43,339.43
GDP	19,735.77	61,220.56	72,496.64	84,950.01	97,452.96	104,378.08

Table 8: GDP Growth by Major Sectors in Current Prices

(in %)

	2000	2009	2010	2011	2012	2013
1. Primary	11.32	10.72	9.13	13.88	12.19	8.55
2. Secondary	11.92	8.64	20.71	12.26	16.50	8.86
3. Tertiary	6.71	15.95	20.25	23.76	13.98	4.85
GDP	9.73	11.83	18.42	17.18	14.72	7.11

Table 9: Shares of GDP by Major Sectors in Current Prices

(in %)

						(111 /0)
	2000	2009	2010	2011	2012	2013
1. Primary	26.80	18.23	16.80	16.33	15.96	16.18
2. Secondary	35.22	41.97	42.78	40.98	41.61	42.30
3. Tertiary	37.98	39.81	40.42	42.69	42.41	41.52
GDP	100	100	100	100	100	100

Table 10: GDP by Major Sectors in Constant Prices

(in Million Nu.)

						,
	2000	2009	2010	2011	2012	2013
1. Primary	5,289.43	6,457.95	6,513.02	6,670.19	6,820.40	7,020.80
2. Secondary	6,950.47	17,882.51	20,115.00	20,931.39	22,347.58	23,127.05
3. Tertiary	7,495.88	16,321.23	18,804.02	21,415.81	22,335.13	22,408.50
GDP	9,735.78	40,661.69	45,432.04	49,017.39	51,503.11	52,556.35

Table 11: GDP Growth by Major Sectors in Constant Prices

(in %)

						(111 /0)
	2000	2009	2010	2011	2012	2013
1. Primary	5.38	2.66	0.85	2.41	2.25	2.94
2. Secondary	7.26	3.45	12.48	4.06	6.77	3.49
3. Tertiary	4.79	12.19	15.21	13.89	4.29	0.33
GDP	5.81	6.66	11.73	7.89	5.07	2.05

Table 12: Gross Value of Output by Economic Activity at Current Prices

					)	(In Mill. Nu.)
Sectors	2000	2009	2010	2011	2012	2013
1. Agriculture, Livestock & Forestry	5908.12	12558.31	13587.38	15411.50	17348.30	18985.71
1.1 Crops	2922.95	6615.64	7441.75	8720.89	9840.20	10942.90
1.2 Livestock	1353.56	2678.28	2620.24	2821.63	3049.49	3143.27
1.3 Forestry & Logging	1631.62	3264.40	3525.39	3868.98	4458.60	4899.54
2. Mining & Quarrying	416.95	1929.15	2207.70	2657.96	2674.5491	3944.6083
3. Manufacturing	3800.67	14382.80	21027.03	26483.47	27256.53	28175.24
4. Electricity & Water Supply	2276.54	14164.69	15527.03	14762.98	15235.32	19305.28
5. Construction	7360.50	16115.15	26714.38	36142.72	44854.56	44499.39
6. Wholesale & Retail Trade	1098.81	3884.84	6129.05	7872.12	9712.77	10725.16
7. Hotels & Restaurants	138.61	967.35	1084.78	1725.55	2413.17	2504.37
8. Transport, Storage & Communications	3003.84	11093.93	12847.42	16627.13	18984.31	20115.27
9. Financing, Insurance, Real Estates & Business Services	1505.39	6261.20	7040.22	8566.45	8178.47	8957.95
9.1 Finance & Insurance	854.80	4003.73	4347.66	5344.30	6019.30	6528.87
9.2 Real Estate & Other Business Services	62029	2257.47	2692.57	3222.14	2159.17	2429.08
10. Community, Social & Personal Services	4837.91	12919.81	15296.54	17387.61	18,229.40	18,229.24
11. Private Social & Recreational Services	164.90	471.74	499.91	572.32	651.01	726.17
Total value of output	30512.24	94748.99	121961.45	148209.82	165538.39	176168.39

Table 13: Gross Value of Output by Economic Activity at Constant Prices

					)	(In Mill. Nu.)
Sectors	2000	2009	2010	2011	2012	2013
1. Agriculture, Livestock & Forestry	5908.13	7175.35	7294.04	7481.74	7643.52	7884.07
1.1 Crops	2922.95	3494.81	3611.35	3724.48	3799.57	3957.93
1.2 Livestock	1353.56	1580.08	1545.02	1592.81	1647.92	1673.66
1.3 Forestry & Logging	1631.62	2100.46	2137.67	2164.45	2196.03	2252.48
2. Mining & Quarrying	417.28	973.82	1090.55	1374.86	1404.57	1925.40
3. Manufacturing	3800.67	10297.68	14534.49	17190.63	15710.43	14590.53
4. Electricity & Water Supply	2276.54	10636.26	11376.53	10924.08	10834.39	12300.67
5. Construction	7360.50	10248.80	14902.58	17647.06	19843.50	19240.94
6. Wholesale & Retail Trade	1098.81	2829.37	4457.75	5238.51	5896.31	6349.58
7. Hotels & Restaurants	138.61	616.35	635.38	917.35	1125.96	1147.14
8. Transport, Storage & Communications	3003.84	6721.98	7437.08	8844.42	9757.01	10271.85
9. Financing, Insurance, Real Estates & Business Services	1505.39	4158.23	4381.99	4871.13	4975.09	5107.58
9.1 Finance & Insurance	854.80	3270.26	3389.98	3878.14	3994.85	4096.33
9.2 Real Estate & Other Business Services	62029	887.97	992.00	992.99	980.24	1011.25
10. Community, Social & Personal Services	4837.91	8685.86	9681.35	9992.88	9,494.48	8,764.06
11. Private Social & Recreational Services	164.90	315.89	321.57	336.88	341.49	351.27
Total value of output	30512.57	62659.58	76113.31	84819.53	87026.76	87933.10

Table 14: GDP Expenditure at Current Prices

					j)	(in Million Nu.)
Description	2000	2009	2010	2011	2012	2013
1. Final Consumption Expenditure	13,746.92	40,284.29	46,239.96	51,975.16	61,381.39	71,637.26
Households & NPISHs	9,415.96	27,202.22	31,752.11	34,927.33	42,690.24	53,362.80
General Government	4,330.96	13,082.07	14,487.85	17,047.84	18,691.15	18,274.46
2. Gross Capital Formation	9,603.26	28,000.55	44,732.16	57,469.55	66,180.82	49,334.15
Construction	6,835.21	15,049.64	24,863.87	33,517.76	41,603.17	41,089.92
Machinery & Equipment	3,030.52	12,754.74	17,579.01	23,280.94	24,314.12	7,846.74
Software, Database Development	91.05	327.44	1,399.94	902.60	137.34	193.48
Valuables	0.00	138.12	517.15	84.05	198.19	215.65
Changes in Inventories	(353.53)	(269.39)	372.18	(315.80)	(72.00)	(11.65)
3. Net Export	(3,732.11)	(10,715.53)	(20,501.25)	(24,874.52)	(23,693.89)	(22,988.64)
Export of Goods & Services	5,797.82	27,366.53	30,777.02	35,003.69	37,739.40	42,636.41
Import of Goods & Services	(9,529.93)	38,082.06	51,278.27	59,878.21	61,433.29	65,625.05
GDP, Expenditure	19,618.07	57,569.31	70,470.87	84,570.19	103,868.32	97,982.77
GDP, Production	19,735.77	61,220.56	72,496.64	84,950.01	97,452.96	104,378.08
Statistical Discrepancy	117.70	3,651.25	2,025.77	379.82	(6,415.36)	6,395.31
% of SD	09:0	5.96	2.79	0.45	(6.58)	6.13

Table 15: GDP Expenditure at Constant Prices

					(i)	(in Million Nu.)
Description	2000	2009	2010	2011	2012	2013
1. Final Consumption Expenditure	13746.92	26766.10	29282.00	30023.31	30953.82	32715.89
Households & NPISHs	9415.96	17971.16	19823.11	20225.70	21230.19	23924.59
General Government	4330.96	8794.94	9458.90	9797.61	9723.62	8791.30
2. Gross Domestic Capital Formation	9603.26	19330.68	28237.62	31580.81	32716.12	21393.41
Construction	6835.21	9486.50	13783.69	15572.07	17715.57	16979.31
Machinery & Equipment	3030.52	9675.29	12818.92	15537.50	14813.91	4192.38
Software, Database Development	91.05	248.35	1020.91	602.27	83.60	103.44
Valuables	0.00	104.76	377.13	56.08	120.65	115.29
Changes in Inventories	(353.53)	(184.22)	236.97	(187.11)	(17.61)	2.99
3. Net Export	(3732.11)	(7098.19)	(12983.79)	(14294.89)	(12326.18)	(10995.56)
Export of Goods & Services	5797.82	18128.15	19491.62	20115.93	19633.03	20393.16
Import of Goods & Services	(9529.93)	25226.33	32475.41	34410.82	31959.21	31388.72
GDP, Expenditure	19618.07	38998.60	44535.83	47309.22	51343.75	43113.75
GDP, Production	19735.78	40661.69	45432.04	49017.39	51503.11	52556.35
Statistical Discrepancy	117.71	1663.10	896.21	1708.17	159.36	9442.60

Table 16: Private Final Consumption Expenditure in Current Prices

						(in	(in Million Nu.)
SI. No	SI. No Description	2000	2009	2010	2011	2012	2013
	Total Consumption	9,415.96	27202.22	31752.11	34927.33	42690.24	53362.80
01	Food & Non-Alcoholic Beverages	4,207.95	9391.16	11269.39	12396.33	16453.61	20567.01
02	Alcoholic Beverages, Tobacco & Narcotics	365.87	754.51	867.69	954.46	1216.32	1520.41
03	Clothing And Footwear	814.57	2165.65	2490.50	2739.55	2867.93	3584.92
04	Housing, Water, Electricity, Gas & Other Fuels	2,406.12	6838.56	7864.35	8650.78	9515.89	11894.86
05	Furnishings, Household Equipment & Routine Household Maintenance	459.49	1305.83	1501.71	1651.88	1592.10	1990.13
90	Health	54.46	579.04	68:599	732.48	1137.65	1422.07
07	Transport	327.42	1415.46	1627.78	1790.56	1992.61	2490.77
80	Communication	48.69	379.04	435.89	479.48	00.009	750.00
60	Recreation & Culture	117.05	350.35	402.90	443.19	478.68	598.35
10	Education	54.18	369.41	424.83	467.31	1267.30	1584.13
111	Restaurants & Hotels	8.57	1619.02	1861.87	2048.06	1324.80	1656.00
12	Miscellaneous Goods & Services	551.60	2034.19	2339.32	2573.25	4243.34	5304.17

Table 17: Private Final Consumption Expenditure in Constant Prices

						(in	(in Million Nu.)
SI. No	SI. No Description	2000	2009	2010	2011	2012	2013
	Total Consumption	9,415.96	17971.16	19823.11	19869.35	21230.19	23924.59
01	Food & Non-Alcoholic Beverages	4,207.95	5795.36	6356.83	6353.95	7406.25	8562.76
02	Alcoholic Beverages, Tobacco & Narcotics	365.87	464.45	529.22	520.24	577.18	621.59
03	Clothing And Footwear	814.57	1642.55	1816.19	1828.01	1745.83	1916.62
04	Housing, Water, Electricity, Gas & Other Fuels	2,406.12	4512.73	5000.78	4829.84	4540.57	4959.50
05	Furnishings, Household Equipment & Routine Household Maintenance	459.49	727.44	756.77	791.76	716.86	823.70
90	Health	54.46	380.91	416.60	426.33	547.40	585.46
07	Transport	327.42	967.41	1099.56	1143.60	1191.82	1409.56
80	Communication	48.69	225.98	250.70	246.97	297.23	357.49
60	Recreation & Culture	117.05	254.27	261.90	269.75	277.84	286.18
10	Education	54.18	243.15	267.39	221.64	536.54	611.39
11	Restaurants & Hotels	8.57	1387.45	1595.57	1755.12	1135.31	1318.91
12	Miscellaneous Goods & Services	551.60	1369.47	1471.60	1482.14	2257.34	2471.42

**Table 18: Gross Capital Formation at Current Prices** 

(in Million Nu.)

Year	2000	2009	2010	2011	2012	2013
1. Machinery & Equipment	3,030.52	12754.74	17579.01	23280.94	24314.12	7846.74
Government	972.54	1578.15	2164.01	1767.48	2419.51	1824.26
Private	2,057.98	11176.58	15415.00	21513.46	21894.61	6022.49
2. Construction	6,835.21	15049.64	24863.87	33517.76	41603.17	41089.92
Government	2,107.60	5460.08	8209.29	9893.11	13576.72	11246.13
Private	4,727.60	9589.56	16654.58	23624.65	28026.45	29843.79
3. Software, Database Development	91.05	327.44	1399.94	902.60	137.34	193.48
4. Valuables		138.12	517.15	84.05	198.19	215.65
5. Gross Fixed Capital Formation	9,956.78	28269.94	44359.98	57785.35	66252.82	49345.80
6. Changes in Inventories	(353.53)	(269.39)	372.18	(315.80)	(72.00)	(11.65)
Gross Capital Formation	9,603.26	28000.55	44732.16	57469.55	66180.82	49334.15

**Table 19: Gross Capital Formation at Constant Prices** 

(in Million Nu.)

Year	2000	2009	2010	2011	2012	2013
1. Machinery & Equipment	3,030.52	9675.29	12818.92	15537.50	14813.91	4192.38
Government	972.54	1196.96	1578.10	1179.38	1472.85	975.31
Private	2,057.98	8478.33	11240.82	14358.12	13341.06	3217.07
2. Construction	6,835.21	9486.50	13783.69	15572.07	17715.57	16979.31
Government	2,107.60	3441.75	4550.95	4596.26	5781.27	4647.16
Private	4,727.60	6044.75	9232.74	10975.81	11934.30	12332.15
3. Software, Database Development	91.05	248.35	1020.91	602.27	83.60	103.44
4. Valuables	-	104.76	377.13	56.08	120.65	115.29
Gross Fixed Capital Formation	9,956.78	19514.90	28000.65	31767.92	32733.73	21390.42
Changes in Inventories	(353.53)	(184.22)	236.97	(187.11)	(17.61)	2.99
<b>Gross Capital Formation</b>	9,603.26	19330.68	28237.62	31580.81	32716.12	21393.41

Table 20: GDP Production & GDP Expenditure at Current Prices

					(in )	(in Million Nu.)
	2000	2009	2010	2011	2012	2013
	OUTGOINGS	S				
Compensation of Employees & Operating Surplus	17,864.97	54644.69	63903.62	74496.25	84312.06	90939.37
Consumption of Fixed Capital	1,446.95	4870.98	5697.95	6531.39	7327.87	7943.39
Indirect Taxes less Subsidies	423.85	1704.89	2895.07	3922.37	5813.03	5495.31
GDP, Production	19,735.77	61220.56	72496.64	84950.01	97452.96	104378.08
	INCOMINGS	S				
Govt. Final Consumption	4,330.96	13082.07	14487.85	17047.84	18691.15	18274.46
Private Final Consumption	9,624.79	30853.47	33777.89	35307.14	36274.88	59758.11
Change in Inventories	(353.53)	(269.39)	372.18	(315.80)	(72.00)	(11.65)
Gross Fixed Capital Formation	9,865.67	28269.94	44359.98	57785.35	66252.82	49345.80
Exports of Goods & Services	5,797.82	27366.53	30777.02	35003.69	37739.40	42636.41
Less Import of Goods & Services	(9,529.93)	38082.06	51278.27	59878.21	61433.29	65625.05
GDP, Expenditure	19,735.77	61220.56	72496.64	84950.01	97452.96	104378.08

Table 21: National Disposable Income and its Appropriation

					(in	(in Million Nu.)
	2000	2009	2010	2011	2012	2013
Govt. Final Consumption	4,330.96	4330.96	13082.07	14487.85	17047.84	18691.15
Private Final Consumption	9,624.79	9533.67	30853.47	33777.89	35307.14	36274.88
Net Saving	6,293.74	6384.85	13882.23	19791.74	29240.31	36519.72
Appropriation of Disposable Income	20,249.48	20249.48	57817.77	68057.47	81595.29	91485.75
Compensation of Employees & Operating Surplus	17864.97	54644.69	63903.62	74496.25	84312.06	90939.37
Compensation of Employees from ROW(Net)	(25.97)	(2448.04)	(4022.68)	(5316.03)	(7594.32)	(6792.69)
Property and Entrepreneurial Income from ROW (Net)						
Indirect Taxes Less Subsidies	423.85	1704.90	2895.07	3922.37	5813.03	5495.31
Current Transfers from ROW(Net)	1986.63	3916.22	5281.46	8492.70	8954.98	5544.95
Disposable Income	20249.48	57817.77	68057.47	81595.29	91485.75	95186.94

Table 22: Income and Outlay Account in Current Prices

					(i)	(in Million Nu.)
	2000	2009	2010	2011	2012	2013
		OUTGOINGS				
Increase in Stock	(353.53)	(269.39)	372.18	(315.80)	(72.00)	(11.65)
Gross Fixed Capital Formation	9956.78	28269.94	44359.98	57785.35	66252.82	49345.80
Purchase of Intangible Assets Nec.						
Net Lending to the ROW	684.40	(4119.94)	(11944.85)	(15515.44)	(12726.17)	(6138.73)
Gross Accumulation	10287.66	23880.61	32787.31	41954.10	53454.65	43195.42
		INCOMINGS				
Net Saving	6384.85	13882.23	19791.74	29240.31	36519.72	17154.37
Consumption of Fixed Capital	1446.95	4870.98	5697.95	6531.39	7327.87	7943.39
Capital Transfer From ROW (Net)	2455.86	5127.40	7297.62	6182.41	90.7096	18097.65
Finance of Gross Accumulation	10287.66	23880.61	32787.31	41954.10	53454.65	43195.42

Table 23: All Accounts - External Current Transactions in Current Prices

					(in	(in Million Nu.)
	2000	2009	2010	2011	2012	2013
	OUTGOINGS	NGS				
Exports of Goods and Services	5797.82	27366.53	30777.02	35003.69	37739.40	42636.41
Compensation of Employees from ROW (Net)	(25.97)	(2448.04)	(4022.68)	(5316.03)	(7594.32)	(6792.69)
Property and Entrepreneurial from ROW						
Other Current Transfers from ROW(Net)	1986.63	3916.22	5281.46	8492.70	8954.98	5544.95
Current Receipts	7758.48	28834.71	32035.80	38180.36	39100.06	41388.67
	INCOMINGS	NGS				
Imports of Goods and Services	(9529.93)	38082.06	51278.27	59878.21	61433.29	65625.05
Compensation of Employees to ROW						
Property and Entrepreneurial to ROW						
Other Current Transfers to ROW						
Surplus of The Nation on Current Transactions	17288.41	(9247.35)	(19242.47)	(9247.35) (19242.47) (21697.85) (22333.23)	(22333.23)	(24236.38)
Disposal of Current Receipts	7758.48	28834.71	32035.80	38180.36	39100.06	41388.67

**Table 24: Physical Account of Electricity (2000-2013)** 

(In Mill. Unit)

	SUF	PPLY				USE	
Year	Production	Import	Total	Exports	Losses*	Industries & Households	Total
2000	1921.70	34.39	1956.08	1460.48	35.30	460.30	1956.08
2001	1967.75	6.90	1974.65	1392.62	39.14	542.89	1974.65
2002	2173.08	24.30	2197.38	1476.37	68.06	652.94	2197.38
2003	2377.43	18.72	2396.15	1695.80	93.05	607.30	2396.15
2004	2423.27	22.80	2446.07	1707.19	122.72	616.17	2446.07
2005	2519.56	18.43	2537.99	1713.61	130.18	694.20	2537.99
2006	3354.67	34.69	3389.36	2526.15	117.20	746.01	3389.36
2007	6421.95	22.22	6444.17	5372.57	121.05	950.55	6444.17
2008	7158.17	9.38	7167.55	5922.31	150.59	1094.65	7167.55
2009	6922.95	64.16	6987.10	5400.47	165.47	1421.16	6987.10
2010	7327.73	131.56	7459.29	5579.29	166.99	1713.00	7459.29
2011	7067.55	40.32	7107.87	5272.95	93.98	1740.94	7107.87
2012	6826.48	59.36	6885.84	4895.58	84.17	1738.98	6718.74
2013	7549.84	112.26	7662.10	5557.48	43.06	2061.55	7662.10

<sup>\*</sup> Loss of Electricity through transmission and distribution

Source: Drukgreen Power Corporation Ltd.; Bhutan Power Corporation Ltd.

Table 25: Monetary Account of Electricity (2000-2013)

(In Mill. Nu.)

	SUF	PPLY				USE	
Year	Production	Import	Total	Exports	Losses*	Industries & Households	Total
2000	2307.26	51.58	2358.85	2190.72	38.22	129.90	2358.85
2001	2237.78	6.90	2244.68	2097.85	48.53	98.31	2244.68
2002	2530.55	24.30	2554.85	2289.82	85.75	179.28	2554.85
2003	2867.94	18.72	2886.66	2603.33	121.62	161.71	2886.66
2004	3005.05	30.73	3035.78	2711.75	149.47	174.56	3035.78
2005	3956.64	32.77	3989.41	3479.20	209.14	301.07	3989.41
2006	5552.83	63.13	5615.95	4976.18	247.25	392.52	5615.95
2007	10962.37	37.73	11000.10	10034.33	91.71	874.06	11000.10
2008	11883.00	14.26	11897.26	11032.60	103.94	760.73	11897.26
2009	11249.04	111.03	11360.06	10071.00	111.57	1177.50	11360.06
2010	11685.95	233.87	11919.82	10411.46	139.73	1368.63	11919.82
2011	11019.30	67.18	11086.48	9839.21	162.12	1085.15	11086.48
2012	11094.02	110.30	11204.32	9714.53	148.23	1341.56	11204.32
2013	12455.78	214.93	12670.71	11013.99	149.96	1506.76	12670.71

<sup>\*</sup> Loss of Electricity through transmission and distribution

Table 26: Gross Electricity Consumption by Household & Industry (2000-2013)

	(Mil	ll.Gwh)			(Mill. Nu.)	
Year	Household	Industry	Total	Household	Industry	Total
2000	64.01	396.30	460.30	14.54	115.36	129.90
2001	72.09	470.81	542.89	10.50	87.81	98.31
2002	91.28	561.67	652.94	20.16	159.11	179.28
2003	88.40	518.89	607.30	18.96	142.75	161.71
2004	87.59	528.57	616.17	19.98	154.58	174.56
2005	93.23	600.97	694.20	32.48	268.58	301.07
2006	90.37	655.64	746.01	38.12	354.40	392.52
2007	110.97	839.58	950.55	81.86	792.20	874.06
2008	126.42	968.23	1094.65	70.47	690.25	760.73
2009	183.03	1238.13	1421.16	121.80	1055.70	1177.50
2010	208.82	1504.18	1713.00	133.92	1234.72	1368.63
2011	209.55	1531.39	1740.94	104.74	980.41	1085.15
2012	179.96	1559.03	1738.98	131.64	1209.92	1341.56
2013	251.71	1809.84	2061.55	147.85	1358.91	1506.76

Note: Breakdown of consumption was being done by NSB based on the consumption information provided by BPC

(In Mill. Gwh)

 Table 27: Gross Electricity Consumption by Household & Industry by Economic Sector (2000-2013)

Recreational Services 0.08 0.10 0.03 0.03 0.0 0.04 0.04 0.05 0.05 90.0 70.0 90.0 90.0 Private, Social & 116.72 107.20 114.89 Personal Services 50.30 50.05 53.55 94.29 101.71 Community, Social & Business Services 0.55 0.62 0.72 92.0 .36 2.52 3.83 .08 .53 1.93 2.43 2.07 Real Estate & Other Finance, Insurance, Communication 7.62 3.47 3.32 5.63 2 Transport, Storage & 7.42 0.93 0.77 0.891.04 1.31 1.69 2.04 3.20 3.50 3.87 5.51 5.61 Hotel & Restaurant 34.39 42.44 Trade 2.48 3.32 6.24 6.38 7.40 9.04 24.02 30.02 33.87 1.97 7.29 8.91 Wholesale & Retail SECTOR 15.75 12.62 14.13 7.60 6.01 Construction Alddus 16.46 26.10 48.58 56.45 98.99 45.32 61.02 17.88 19.54 70.60 Electricity & Water 1029.06 1267.84 813.45 288.37 1345.23 1549.88 335.44 401.93 471.99 500.88 704.26 444.06 548.71 432.21 Manufacturing 90. 2.54 4.66 5.29 .26 .82 96 .75 2.54 3.62 3.52 Mining & Quarrying & Forestry 0.62 0.24 0.50 0.540.56 0.27 0.51 Agriculture Livestock 504.18 531.39 238.13 559.03 1809.84 839.58 396.30 561.67 518.89 528.57 600097 655.64 968.23 470.81 Total Industry

> 2002 2003 2004 2005 2006 2007 2008 2009

**Xear** 

2013

Table 28: Gross Electricity Consumption by Household & Industry by Economic Sector (2000-2013)

(In Mill. Nu.)

Recreational Services 0.08 0.01 0.01 90.0 0.06 0.07 0.01 0.0 0.0 Private, Social & 99.45 Personal Services 14.13 25.42 57.30 15.07 30.63 49.03 83.31 7.92 Community, Social & Business Services 0.11 0.20 0.21 3.24 0.470.62 1.27 1.08 .62 7 1.53 1.67 1.87 Real Estate & Other Finance, Insurance, Communication 6.33 0.55 3.43 5.05 0.94 1.71 Transport, Storage & 5.39 0.25 0.29 0.560.24 0.88 1.86 2.21 2.88 3.07 3.41 4.80 Hotel & Restaurant 22.35 29.30 25.42 Trade 32.91 6.94 3.64 3.39 7.47 4.01 1.71 4.01 Wholesale & Retail SECTOR 13.70 12.19 7.49 4.53 6.41 Construction Supply 47.33 41.56 58.76 59.80 47.33 14.54 3.87 5.22 5.44 4.96 8.99 Electricity & Water 1023.51 1145.95 116.66 127.53 219.69 291.38 653.96 570.82 862.03 810.66 1020.31 131.26 73.69 Manufacturing 0.39 0.29 2.99 5.43 0.64 0.67 0.51 0.97 1.7 3.23 4.96 4.63 5.41 Mining & Quarrying 4.81 & Forestry 0.44 0.49 0.10 0.36 0.30 0.46 0.47 0.38 Agriculture Livestock Total Industry 055.70 234.72 1209.92 115.36 159.11 142.75 154.58 268.58 354.40 792.20 690.25 980.41 1358.91 2013 2005 2006 2009 2010 2012 2001 2003 2004 2007 2008 2011 Year

(In Mill. Gwh)

Table 29: Total Supply and Use of Electricity by Sector (2000-2013)

						SEC	SECTOR							
Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
(I) Total Supply	1,956.08	1,974.65	2,197.38	2,396.15	2,446.07	2,537.99	3,389.36	6,444.17	7,167.55	6,987.10	7,459.29	7,107.87	6,885.84	7,662.10
Production	1,921.70	1,967.75	2,173.08	2,377.43	2,423.27	2,519.56	3,354.67	6,421.95	7,158.17	6,922.95	7,327.73	7,067.55	6,826.48	7,549.84
Import	34.39	6.90	24.30	18.72	22.80	18.43	34.69	22.22	9.38	64.16	131.56	40.32	59.36	112.26
(II) Total Use	1,956.08	1,974.65	2,197.38	2,396.15	2,446.07	2,537.99	3,389.36	6,444.17	7,167.55	6,987.10	7,459.29	7,107.87	6,718.74	7,662.10
1.Agriculture, Live Stock & Forestry	0.24	0.27	0.36	0.32	0.33	0.35	0.34	0.36	0.39	0.50	0.54	0.56	0.51	0.62
2.Mining & Quarrying	1.06	1.26	1.82	1.96	1.39	1.75	2.54	2.54	3.62	4.66	5.29	5.79	3.52	5.75
3.Manufacturing	335.44	401.93	471.99	432.21	444.06	500.88	548.71	704.26	813.45	1,029.06	1,267.84	1,288.37	1,345.23	1,549.88
4.Electricity & Water Supply	12.89	13.44	17.88	19.21	16.46	19.54	26.10	48.58	56.45	98.99	70.60	60.11	45.32	61.02
5.Construction	2.84	4.05	5.70	5.16	5.51	6.01	5.29	5.87	5.49	7.60	10.25	12.62	14.13	15.75
6.Wholesale & Retail Trade	7.29	8.91	12.48	11.97	13.32	16.24	16.38	17.40	19.04	24.02	30.02	33.87	34.39	42.44
7.Hotel & Restaurant	0.58	0.77	0.93	0.89	1.04	1.31	1.69	2.04	3.20	3.50	3.87	5.51	5.61	7.42
8.Transport, Storage & Communications	1.71	2.04	2.74	2.50	2.92	3.47	3.32	3.58	4.35	5.63	6.38	7.15	6.47	7.62

9.Finance, Insurance, Real Estate & Other Business Services	0.55	0.62	0.72	0.76	0.83	1.08	1.16	1.36	1.53	1.93	2.10	2.43	2.07	2.52
10.Community, Social & Personal Services	33.66	37.48	47.03	43.86	42.68	50.30	50.05	53.55	60.63	94.29	107.20	114.89	101.71	116.72
11.Private, Social & Recreational Services	0.03	0.03	0.04	0.04	0.04	0.05	0.05	0.06	0.07	0.08	0.09	0.09	0.08	0.10
Household	64.01	72.09	91.28	88.40	87.59	93.23	90.37	110.97	126.42	183.03	208.82	209.55	179.96	251.71
Export	1,460.48	1,460.48 1,392.62 1,476.37	1,476.37	1,695.80	1,707.19	1,695.80 1,707.19 1,713.61	2,526.15		5,372.57 5,922.31	5,400.47	5,579.29	5,272.95 4	4,895.58	5,557.48
Cable Losses	35.30	35.30 39.14	90.89	93.05	122.72	93.05 122.72 130.18 117.20 121.05 150.59 165.47 166.99 93.98	117.20	121.05	150.59	165.47	166.99	93.98	84.17	43.06

(In Mill. Nu.)

Table 30: Total Supply and Use of Electricity by Sector (2000-2013)

						SEC	SECTOR							
Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
(I) Total Supply	2,358.85	2,244.68	2,554.85	2,886.66	3,035.78	3,989.41	5,615.95	5,615.95 11,000.10 11,897.26 11,360.06 11,919.82 11,086.48 11,204.32 12,670.71	11,897.26	11,360.06	11,919.82	11,086.48	11,204.32	12,670.71
Production	2,307.26	2,237.78	2,530.55	2,867.94	3,005.05	3,956.64	5,552.83	10,962.37 11,883.00 11,249.04 11,685.95 11,019.30 11,094.02	11,883.00	11,249.04	11,685.95	11,019.30	11,094.02	12,455.78
Import	51.58	6.90	24.30	18.72	30.73	32.77	63.13	37.73	14.26	111.03	233.87	67.18	110.30	214.93
(II) Total Use	2,358.85	2,244.68	2,554.85	2,886.66 3,035.78	3,035.78	3,989.41	5,615.95	5,615.95 11,000.10 11,897.26 11,360.06 11,919.82 11,086.48 11,204.32 12,670,71	11,897.26	11,360.06	11,919.82	11,086.48	11,204.32	12,670.71
1.Agriculture, Live Stock & Forestry	0.07	0.05	0.11	0.09	0.10	0.16	0.19	0.36	0:30	0.46	0.47	0.38	0.44	0.49
2.Mining & Quarrying	0.39	0.29	0.64	0.67	0.51	0.97	1.71	2.99	3.23	4.96	5.43	4.63	4.81	5.41
3.Manufacturing	95.92	73.69	131.26	116.66	127.53	219.69	291.38	653.96	570.82	862.03	1,023.51	810.66	1,020.31	1,145.95
4.Electricity & Water Supply	3.87	2.59	5.22	5.44	4.96	8.99	14.54	47.33	41.56	58.76	59.80	39.68	42.14	47.33
5.Construction	0.95	0.87	1.86	1.64	1.86	3.10	3.30	6.41	4.53	7.49	9.73	9.34	12.19	13.70
6.Wholesale & Retail Trade	2.19	1.71	3.64	3.39	4.01	7.47	9.12	16.94	14.01	21.11	25.42	22.35	29.30	32.91
7.Hotel & Restaurant	0.16	0.14	0.25	0.24	0.29	0.56	0.88	1.86	2.21	2.88	3.07	3.41	4.80	5.39
8.Transport, Storage & Communications	0.55	0.42	0.86	0.76	0.94	1.71	1.98	3.73	3.43	5.30	5.78	5.05	5.64	6.33

### **Definitions & Terminologies of the System of National Accounts (SNA)**

#### UN SNA

The United Nations System of National Accounts (SNA) is 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.

# Aggregates

Key aggregates of the System comprises of GDP, GNI, GNDI, GCF, Saving, Net Exports, Net Current Transfers, Net Lending/Borrowings, GDP Per capita which are used as key indicators of economic activity to measure the overall performance of an economy.

### **GDP**

GDP is a measure of production, income and expenditure. It broadly determines how much a country can produce, generate income, consume and save. It represents the aggregated final results of the production activities of all the economic institutions located within the economic boundary of a country in a year or in an accounting year.

### **Production Activities**

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 institutions are also counted as economic activities even if their output is not sold in the market on a commercial basis. For instance, 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.

#### **GDP** Measurement

GDP is measured at basic price and at market price. It is also measured in current and constant prices to determine the actual performance of the

economy.

# Classification

The classification of economic activity is done based on the ISIC Rev. 3.1. It is classified into eleven major economic activities depending on the nature of goods and services produced. These activities are further grouped into primary, secondary, and tertiary sectors to allow the measurement of performance at the broad structural level. The following are the major economic activity groups.

- 1. Agriculture, Hunting, Forestry and Fishing.
- 2. Mining and Quarrying.
- 3. Manufacturing.
- 4. Electricity and Water.
- 5. Construction.
- Wholesale and Retail Trade.
- 7. Hotels and Restaurants.
- 8. Transport, Storage and Communications.
- 9. Financing, Insurance, Real Estate and Business Services.
- 10. Community, Social and Personal Services (General Govt.)
- 11. Private, Social and Recreational Services.

## Approach

Three approaches for measuring GDP are: production, income and expenditure approach.

## **Production Approach**

Production approach takes into account gross output and Intermediate consumption of all economic activities. Gross Output (GO) minus the value of intermediate consumption (IC) is equal to gross value added or GDP. (GO - IC = GVA/GDP).

## Income Approach

Income approach takes into account the sum of incomes paid as compensation to employees (CoE), interest on capital, rent, operating surplus (OS) and the consumption of the fixed capital (CFC), which is also known as depreciation. The sum total of all these elements which constitutes payments to the factors of production is also equal to gross value added at basic price. If taxes less subsidies on products are added, the measurement is at market price. (CoE + OS + CFC + (T-S) = GDP.)

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

### Expenditure Approach

This is an aggregated approach, which takes into account private household final consumption; government final consumption; capital formation and net export during an accounting year. In other words, it is the sum of Final Consumption Expenditure (FCE) of private and government, Gross Capital Formation (GCF) or investment and Net export (export-import). FCE + GCF + Net Export= GDP.

# Final Consumption Expenditure

It refers to the final consumption of goods and services *directly* consumed by households, collectively by Government, and by private non-profit institutions. An individual consumption of goods and services is one acquired by individual households for the exclusive use of those households, while a collective consumption refers to those goods and services consumed by the community as a whole or by a particular section of the community and which is acquired and used by all members of the community.

# **Gross Fixed Capital Formation**

Gross Fixed Capital Formation includes the purchase of machinery and equipments for production of goods and services by industries, general government, Non-profit institutions serving households, and the output of construction.

## Change in Stocks

Change in stocks is measured as the difference between the stocks of in materials, semi-processed or finished products or supplies held by Stock 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.

## Consumption of Fixed Capital

It refers to the decline in value attributed by the deterioration in physical qualities of fixed capital in the course of production, due to passage of time, and normal obsolescence. It is recorded as the difference between flows recorded "gross" and flows recorded "net" in the system.

### **Net Export**

Net export is the difference between export and import. The export of goods and services consists of actual or imputed sales, 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.

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).

### **Data Sources**

- 1. Department of Agriculture, MoAF
- 2. Department of Livestock, MoAF
- 3. Department of Forests, MoAF
- 4. Natural Resource Development Corporation Ltd.
- 5. Department of Geology & Mines
- 6. Druk Mining Pvt. Ltd.
- 7. Druk Satair Corporation Ltd.
- 8. Eastern Bhutan Coal Company Pvt. Ltd.
- 9. Jigme Mining Pvt. Ltd.
- 10. S.D Eastern Bhutan Coal Company
- 11. Basochu Hydro Power Corporation Ltd.
- 12. Bhutan Power Corporation Ltd.
- 13. Chukha Hydro Power Corporation Ltd.
- 14. Dagachhu Hydro Power Corporation Ltd.
- 15. Druk Green Power Corporation Ltd.
- 16. Kurichu Hydro Power Corporation
- 17. Municipal/City Corporation
- 18. Tala Hydro Power Corporation Ltd.
- 19. Alpine Builders Pvt. Ltd.
- 20. Bhutan Engineering Power Pvt. Ltd.
- 21. Bhutan Engineering Company Pvt. Ltd.
- 22. Construction Development Board
- 23. Punatsangchhu-1 & 2 HydropowerProject Authority
- 24. Damchen Gas Supply Depot
- 25. Peljorkhang Pvt. Ltd.
- 26. Singkhar Pvt. Ltd.
- 27. State Trading Corporation of Bhutan
- 28. Bhutan ECO Ventures Pvt. Ltd.
- 29. Druk Petroleum Corporation Ltd.
- 30. DRC, MoF
- 31. DoT, MoEA
- 32. Bhutan Resort Pvt. Ltd.
- 33. Wangchuk Group of Companies Pvt. Ltd.
- 34. Bhutan Broadcasting Corporation Ltd.

- 35. Bhutan Observer Pvt. Ltd.
- 36. Bhutan Postal Corporation Ltd.
- 37. Bhutan Telecom Corporation Ltd.
- 38. Bhutan Times Ltd.
- 39. Bhutan Tourism Corporation Ltd.
- 40. Druk Air Corporation Ltd.
- 41. Bhutan Airlines Pvt. Ltd.
- 42. DSB Enterprises Pvt. Ltd.
- 43. Food Corporation of Bhutan Ltd.
- 44. International Treks & Tours Pvt. Ltd.
- 45. Kuensel Corporation Ltd.
- 46. Mega Pvt. Ltd.
- 47. Road Safety & Transport Authority
- 48. Ministry of Education
- 49. DPA & DBA, MoF
- 50. BoB Ltd.
- 51. Bhutan Business solutions Pvt. Ltd.
- 52. BDB Ltd.
- 53. BNB Ltd.
- 54. DHI Ltd.
- 55. G4S Security Services Pvt. Ltd.
- 56. NPPF Ltd.
- 57. RICB Ltd.
- 58. RSEB Ltd.
- 59. RMA
- 60. T-Bank Ltd.
- 61. BILtd.
- 62. Tashi Dawa Consultancy Firm
- 63. Zorig Consultancy
- 64. Thimphu Tech-Park
- 65. NHDC Ltd.
- 66. Druk PNB Ltd.
- 67. Army Welfare Sawmill Ltd.
- 68. Army Welfare Project Ltd.
- 69. Bhutan Agro Industries Ltd.
- 70. Bhutan Beverages Pvt. Ltd.

- 71. Bhutan Bitumen Industries Pvt. Ltd.
- 72. Bhutan Board Exports Ltd.
- 73. Bhutan Board Products Ltd.
- 74. Bhutan Brewery Pvt. Ltd.
- 75. Bhutan Cables Industries Pvt. Ltd.
- 76. Bhutan Carbide & Chemicals Ltd.
- 77. Bhutan Concast Pvt. Ltd.
- 78. Bhutan Diary & Agro Products Ltd.
- 79. Bhutan Ferro Alloys Ltd.
- 80. Bhutan Fruits Products Ltd.
- 81. Bhutan Fruits Products Ltd.
- 82. Bhutan Health Food Products Pvt. Ltd.
- 83. Bhutan Marbles & Chemicals Pvt. Ltd.
- 84. Bhutan Marbles & Minerals Pvt. Ltd.
- 85. Bhutan Metals Pvt. Ltd.
- 86. Bhutan Polymers Company Ltd.
- 87. Bhutan Polythene Company Ltd.
- 88. Bhutan Rolling Mills Pvt. Ltd.
- 89. Bhutan Steel Industries Ltd.
- 90. Bumthang Brewery Pvt. Ltd.
- 91. Bhutan Battery Pvt. Ltd.
- 92. Department of Industries, MoEA
- 93. Druk Cement Pvt. Ltd.
- 94. Druk Ferro Alloys Pvt. Ltd.
- 95. Druk Plasters & Chemicals Pvt. Ltd.
- 96. Druk Wang Alloys Pvt. Ltd.
- 97. GreenWood Pvt. Ltd.
- 98. H& K Company Pvt. Ltd.
- 99. Jigme Industries Pvt. Ltd.
- 100. Jigme Polytex Pvt. Ltd.
- 101. K.K Steel Pvt. Ltd.
- 102. Kenpa Pvt. Ltd.
- 103. Kimpex Pvt. Ltd.
- 104. K.L.S. Wires & Cables