



TWELFTH FIVE YEAR PLAN 2018-2023



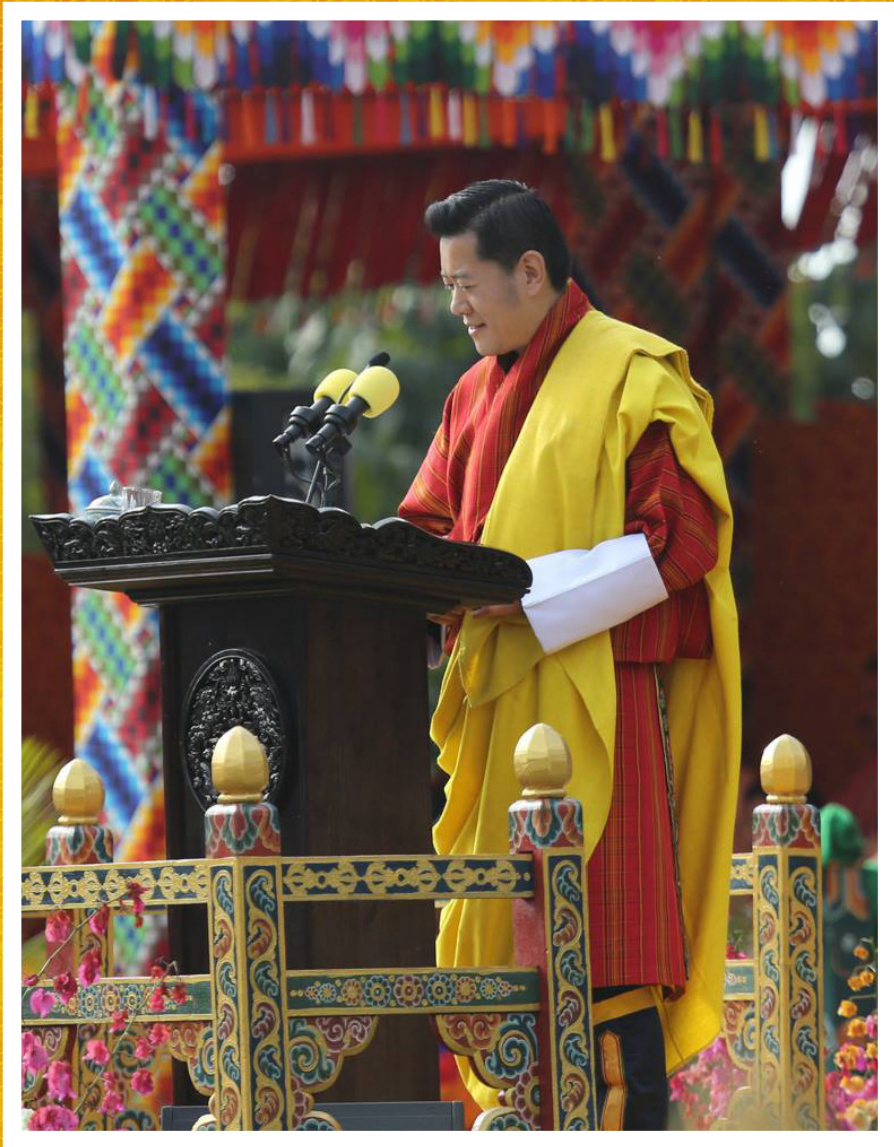
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“Looking ahead, we have a new five-year plan, and a great number of responsibilities of national importance before us. We must work together in order to build an extraordinary, strong, secure, and peaceful future for Bhutan.”

His Majesty The Druk Gyalpo
111th National Day, Samtse, 17th December, 2018

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Acronyms

ACC	Anti-Corruption Commission
ADB	Asian Development Bank
ADR	Alternative Dispute Resolution
AKRA	Agency Key Result Area
ANER	Adjusted Net Primary Enrolment Rate
BCAA	Bhutan Civil Aviation Authority
BCSE	Bhutan Civil Service Examination
BCSEA	Bhutan Council for School Examinations and Assessment
BESF	Bhutan Economic Stabilisation Fund
BFL	Bhutan For Life
BHSEC	Bhutan Higher Secondary Examination Certificate
BHTF	Bhutan Health Trust Fund
BICMA	Bhutan InfoComm and Media Authority
BLSS	Bhutan Living Standards Survey
BMIS	Bhutan Multiple Indicator Survey
BNLI	Bhutan National Legal Institute
CDP	Committee for Development Policy
CMI	Common Minimum Infrastructure
CSIs	Cottage and Small Industries
CSOs	Civil Society Organizations
DoRF	Division of Responsibilities Framework
ECB	Election Commission of Bhutan
ECCD	Early Childhood Care and Development
ECOSOC	United Nation's Economic and Social Council
EDP	Economic Development Policy
EVI	Economic Vulnerability Indicator
FDI	Foreign Direct Investment
FYP	Five Year Plan
GC	<i>Gewog</i> Centre
GDG	<i>Gewog</i> Development Grant
GDP	Gross Domestic Product
GER	Gross Enrolment Ratio
GHG	Green House Gas
GLOF	Glacial Lake Outburst Flood

GNH	Gross National Happiness
GNHC	Gross National Happiness Commission
GNI	Gross National Income
Gol	Government of India
GPMD	Government Performance Management Division
GPMS	Government Performance Management System
GST	Goods and Services Tax
GT	<i>Gewog Tshogde</i>
HAI	Human Asset Indicator
ICT	Information and Communication Technology
JDWNRH	Jigme Dorji Wangchuck National Referral Hospital
JSWSL	Jigme Singye Wangchuck School of Law
KGUMSB	Khesar Gyalpo University of Medical Sciences of Bhutan
KPIs	Key Performance Indicators
LDC	Least Developed Countries
LFS	Labour Force Survey
LG	Local Government
LGKRA	Local Government Key Result Area
MFCC	Macroeconomic Framework Coordination Committee
MoAF	Ministry of Agriculture and Forests
MoE	Ministry of Education
MoEA	Ministry of Economic Affairs
MoF	Ministry of Finance
MoFA	Ministry of Foreign Affairs
MoH	Ministry of Health
MoHCA	Ministry of Home and Cultural Affairs
MoIC	Ministry of Information and Communications
MoLHR	Ministry of Labour and Human Resources
MoWHS	Ministry of Works and Human Settlement
MPI	Multidimensional Poverty Index
NCD	Non-Communicable Diseases
NCHM	National Centre for Hydrology and Metrology
NCWC	National Commission for Women and Children
NECS	National Environment Commission Secretariat
NFE	Non-Formal Education
NKRA	National Key Result Area

OAG	Office of Attorney General
ODA	Overseas Development Assistance
OGOP	One Gewog One Product
PAR	Poverty Analysis Report
PHCB	Population and Housing Census of Bhutan
PISA	Programme for International Student Assessment
PPP	Public Private Partnership
RAA	Royal Audit Authority
RAF	Resource Allocation Formula
RBP	Royal Bhutan Police
RCJ	Royal Court of Justice
RIM	Royal Institute of Management
RUB	Royal University of Bhutan
SDG	Sustainable Development Goal
TCB	Tourism Council of Bhutan
TEIs	Tertiary Education Institutes
TFR	Total Fertility Rate
TT	<i>Thromde Tshogde</i>
TTIs	Technical Training Institutes
TVET	Technical and Vocational Education and Training
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
WHO	World Health Organization



PRIME MINISTER

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Royal Government of Bhutan

2nd February, 2019

FOREWORD

The 12th Five Year Plan (FYP) commences amid numerous auspicious occasions that hold special significance for all Bhutanese. Our Nation celebrated the 12th year of glorious reign of His Majesty The *Druk Gyalpo* and 111 years of the institution of Monarchy and nation building. The nation continues to enjoy the blessings of *Yabjey-Damba*, His Majesty The Fourth *Druk Gyalpo*. It witnessed the 22nd year of tireless service by His Holiness the 70th *Je Khenpo* for the wellbeing of the country and its people. The Nation's Son, His Royal Highness The *Gyalsey Jigme Namgyel Wangchuck* continues to be a source of unbounded joy for all Bhutanese citizens. The Third Parliamentary election was successfully held with increased people's participation in the electoral process. That the Election Commission of Bhutan and Bhutan Broadcasting Service were conferred well-deserved high awards by His Majesty The *Druk Gyalpo* reflects their eminent role in the success of the elections.

In addition, Bhutan will be graduating from the list of Least Developed Countries (LDC) by 2023. Meeting the eligibility criteria for graduation is a testament of the hard work of the people of Bhutan with the support of key development partners. Even though Bhutan has fulfilled the two required indicators for graduation, the fact that we are yet to cross the threshold for economic vulnerability is a source of concern. It is a reminder of the work that remains to address the last mile challenge of development and ensure continued progress towards creating an inclusive and prosperous Gross National Happiness (GNH) state. The 12th FYP will be Bhutan's last five year plan as an LDC. At this critical stage in our development history, Bhutan looks to the continued support of all its development partners to implement the 12th FYP. It is also a call to all public servants, the private sector, civil society organisations and citizens to work together to achieve the noble aspirations of the 12th FYP and live up to the trust bestowed on each one of us by His Majesty The *Druk Gyalpo*.

With the objective of *Just, Harmonious and Sustainable Society through enhanced Decentralisation*, the 12th FYP and its 17 national key result areas are drawn from the timeless vision and wisdom emanating from the Golden Throne. Reflecting Bhutan's status as an active member of the global

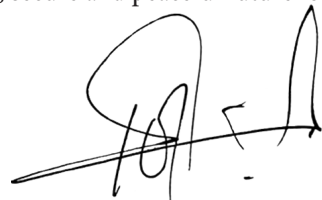
community, it also takes into consideration the Sustainable Development Goals and other regional and international commitments. The Plan has been shaped by extensive consultations held over a period of two years with wide ranging groups of stakeholders. The outcome is a 12th FYP that is a National Development Plan reflecting the aspirations and concerns of the people of Bhutan. Pledges of elected Government as well as selected pledges of the other three political parties have been incorporated into the Plan following rigorous assessment. Lessons learnt from 11th FYP have also proved useful in changing how we plan and implement better.

The 12th FYP formulation, execution and implementation are underpinned by the principles of coordination, consolidation and collaboration to achieve greater gains. True to the objective of enhancing decentralisation, resources have been doubled for LGs in the 12th FYP compared to 11th FYP resulting in an equal share of capital resources as the Central Agencies. The Division of Responsibilities Framework has also been revised to provide greater decentralisation of roles, functions and authority to the local governments. Another new feature of the 12th FYP is the Government's flagship programmes that aims to address issues of national priority. The programme areas have been chosen to ensure that critical issues such as youth unemployment, water security and poverty reduction are addressed in a coherent manner within a five year period.

Unlike past plan periods, the 12th FYP period commences from 1st November, 2018 and will end on 31st October, 2023 in order to align with the Government's tenure. Implementation will be rigorously monitored through the government performance management system to ensure that results are achieved. Progress will be reviewed during the annual and mid-term reviews to ensure that corrective measures and mid-course corrections are made in a timely manner.

The 12th FYP is unprecedented both in size and scope and will demand utmost dedication on the part of the over 54,000 public servants across the country. It sets out an ambitious agenda and will be the biggest plan implemented thus far with an outlay of Nu. 310 billion, an increase of nearly 38 percent over the 11th FYP. An inclusive plan has been formulated, adequate resources mobilised with qualified public servants to implement the activities. All required causes and conditions are in place to ensure that what has been planned can be delivered. I take this opportunity to call upon all Bhutanese as well as our development partners, civil society organisations, political parties, private sector and other stakeholders to work together to build a strong, secure and peaceful future for our nation.

TASHI DELEK.



(DR. LOTAY TSHERING)
CHAIRPERSON OF THE GNH COMMISSION

CHAPTER

1

CURRENT SITUATION

1.1 Country Background

The Kingdom of Bhutan is a small landlocked country located in the eastern Himalayas. It has a total land area of approximately 38,394 square kilometres with altitudes ranging from 150 to 7,500 meters above sea level (masl)¹. Of the total land area, 71 percent is under forest cover, seven percent under year-round snow and glaciers, about three percent of cultivable agricultural lands, meadows and pastures occupy four percent, and the remaining is barren, rocky or scrubland². It has three distinct climatic zones: alpine climate in the northern belt (4,000 masl), a cool temperate central belt (2000-4000 masl) and a hot and humid southern belt (150-2000 masl).

Figure 1.1: Geographic location of Bhutan



Source: Google Maps

Since the establishment of Monarchy in 1907, the country has been ruled by hereditary Kings who have built a strong and sovereign nation state. Bhutan's Monarchs continue to be the source of wisdom and guidance for all Bhutanese. The birth of His Royal Highness The *Gyalsey* Jigme Namgyel Wangchuck on 5th February, 2016 was celebrated nationwide. The outpouring of happiness generated by this auspicious event signifies the unparalleled faith reposed by the Bhutanese people in the institution of Monarchy. Our Kings initiated the process of devolution of power to the people through decentralisation and increasing peoples' participation in governance and decision-making. Under the leadership of His Majesty The Fourth *Druk Gyalpo* Jigme Singye Wangchuck, Bhutan adopted the Constitution in 2006 following which Bhutan became a Democratic Constitutional Monarchy in 2008.

The third parliamentary elections were conducted in October 2018. Out of the four political parties³ contesting the election, Druk Nyamrup Tshogpa (DNT) was elected to form the Government and Druk Phuensum Tshogpa (DPT) as the Opposition Party.

1.2 People

The Population and Housing Census of Bhutan 2017 reported a total resident population of 727,145⁴, of which 380,453

1. NSB, *Statistical Year Book of Bhutan* (2016).

2. *ibid.*

3. Other two being: People's Democratic Party and Bhutan Kuen-Nyam Party

4. The total population of Bhutan was 735,553 including 8,408 non-Bhutanese/tourists.

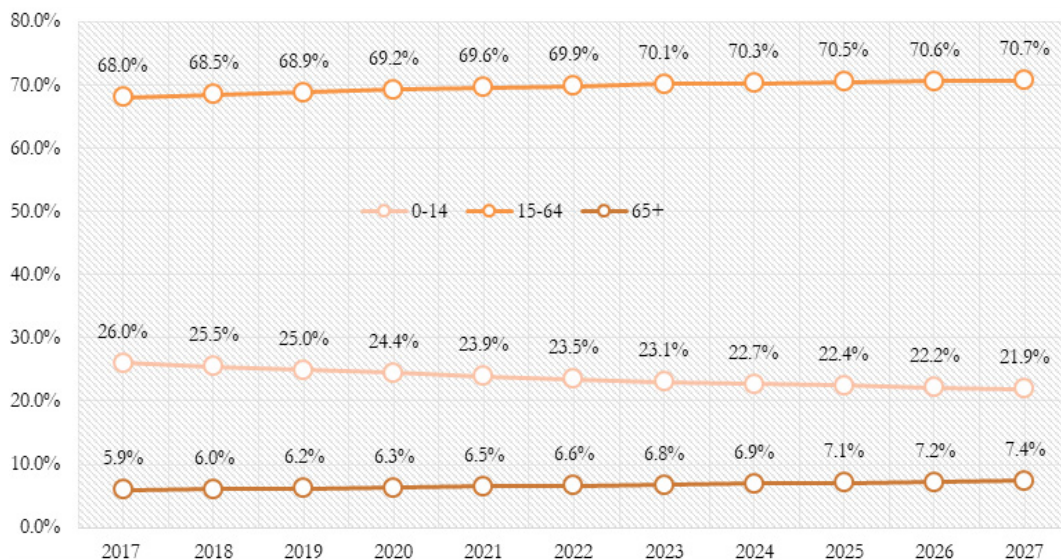
were male and 346,692 female. The population grew at a rate of 1.3 percent per annum between 2005 and 2017⁵. The total fertility rate (TFR) declined from 2.6 children per woman in 2005 to 1.7 children in 2017. Urban population increased from 30.9 percent to 37.8 percent (274,967 persons) between 2005 and 2017. This growth is largely attributed to migration. In terms of geographical distribution of population, Thimphu has the largest population with 19.1 percent (138,736 persons) of the total population and Gasa least populated with 0.5 percent (3,952 persons).

The median age has increased from 22.3 years in 2005 to 26.9 years in 2017 and ageing index from 14.2 to 22.7 for the same period, indicating an ageing population. The proportion of population by selected age groups: less than 15 years (child population), 15-64 years (productive age), and 65

years and above (elderly population) have changed significantly between 2005 and 2017. The proportion of child population has decreased from 33.1 percent to 26 percent, productive age population has increased from 62.3 percent to 68 percent and elderly population has increased from 4.7 percent to 5.9 percent. Bhutan's total population is projected to reach 797,263 by 2027.

These trends imply that Bhutan will continue to experience slower population growth which if prolonged will lead to an increasing ageing population and decreasing working age population. This will strain the government health budget for provision of healthcare for disability related and degenerative diseases. It will also impact the economy at large due to increasing dependency ratio and reduction in labour force.

Figure 1.2: Projected population composition by age group



Source: CBS & GNHR's illustration from Dzongkhag Population Projection 2017-2027, NSB (2019).

5. NSB, *Population and Housing Census of Bhutan* (2017).

The growth in urban population will continue to exert pressure on existing urban services, pose developmental and environmental problems such as increasing noise and air pollution, shortage of safe drinking water and electricity, inadequate sewerage facilities, and shortage of housing. On the other hand, the increasing size of the young working age population presents an opportunity for Bhutan to leverage this demographic dividend. However, this window will only last for the next two to three decades.

As per the Gross National Happiness (GNH) Survey 2015, across population groups, men were happier than women; people living in urban areas were happier than rural residents; educated people were happier, and farmers were less happy than other occupational groups. Among the 20 dzongkhags, GNH index was highest in Gasa, Bumthang, Thimphu and Paro and lowest in Dagana, Mongar, Trashiyangtse and Trongsa.

1.3 Economy

The first attempt to estimate Bhutan's Gross Domestic Product (GDP) was carried out in 1984 by the erstwhile Planning Commission of Bhutan and projected backwards to 1981. Since then Bhutan's GDP has grown significantly from Nu. 1,673 million in 1980-81 to Nu.164 billion⁶ or approximately USD 2.4 billion in 2017. The economy recorded an average growth of approximately 7.5 percent for over last three decades. GDP per capita increased from USD 2,464 in 2013 to USD 3,438 in 2017. The sustained level of economic growth has translated into significant progress. Bhutan's human development index stood at 0.612 in 2017

compared to 0.510 in 2005. Poverty reduced from 31.7 percent in 2003 to 8.2 percent in 2017.

Electricity sector has been the main growth driver through direct export earnings and its spill-over effects on construction sector and power intensive industries. Along with strong growth, the Bhutanese economy has undergone significant structural transformation. During initial phases of development, growth was primarily driven by agriculture sector with a GDP share of about 41 percent followed by services and industrial sectors at 18 percent. As of 2017, share of agriculture declined to 17.4 percent, whereas share of industrial sector to GDP increased to 40.6 percent. Services sector share which includes tourism, the highest foreign exchange earner, has remained steady. This structural change however has not had a commensurate impact on redistribution of labour, employment creation and private sector development. Agriculture sector continues to be the primary employer with approximately 57 percent of labour force followed by the public sector. Additionally, growth continues to be driven by government expenditure and investment, with major players in the industrial sector still being state owned. The manufacturing sub-sector accounts for minor share of the industrial sector and is narrowly concentrated in cottage industries. The economy remains relatively undiversified with electricity constituting a significant share of GDP at approximately 13.2 percent⁷. Further, nearly 85 percent of trade is still with India. There exists opportunity to diversify the export basket with the large Indian market and beyond.

6. NSB, *National Accounts Statistics (2018)*.

7. *ibid*

1.4 Health

All Bhutanese are provided free access to basic public health care as mandated by the Constitution. Within a short span of time, the country has developed an extensive public health care system that delivers services through both traditional and modern medicines. Today approximately 95 percent of the population live within three hours walking distance from the nearest health facility. Bhutan achieved the Millennium Development Goals of reducing child mortality, improving maternal health, halting and reversing spread of TB and malaria. Average life expectancy has increased from 66.1 years in 2000 to 70.2 years in 2017⁸. Despite the achievements, the health sector is confronted with challenges. The changing disease patterns, onset of a triple burden of diseases and escalating cost of delivering health care amidst rising expectations are some of the key emerging challenges.

The GNH Survey 2015 observed that sustained investment in health has improved both physical and mental health at the national level. It was found that healthy days in a month in general has increased by about two days, from 26.2 days in 2010 to 28.4 days in 2015. More people in urban areas reported their health to be in excellent or very good condition compared to their rural counterparts. In terms of gender, 90.8 percent of males rated their health in better condition than females at 88.8 percent.

1.5 Education

Education has always been a key priority in every plan period with efforts predating the

first Five Year Plan (FYP). Recognising the importance of education in development, the Constitution mandates the State to provide free basic education to all. Bhutan has made rapid progress and is very close to achieving Universal Primary Education. As of 2018, the Adjusted Net Primary Enrolment Rate (ANER) stood at 96.8 percent, indicating that about 97 percent of 6-12 years old children are attending primary education and other equivalent forms of structured learning. The Gross Enrolment Ratio (GER) for secondary education (Classes VII-XII) was estimated at 89.3 percent. The literacy rate increased from 59.5 percent in 2005 to 71.4 percent in 2017, an increase of 11.9 percentage points. However, numerous studies show shortcomings in both learning outcomes and skills.

The GNH Survey 2015 also reported increase in literacy status and values compared to 2010. Literacy improved in rural areas and more among women. The results can be attributed to efforts made to step up non-formal education programmes and informal learning and teaching practices in the rural areas.

1.6 Environment

Conservation of environment is one of the nine domains of GNH. Further, the Constitution requires that a minimum of 60 percent of Bhutan's total land is maintained under forest cover for all time. Geographically, Bhutan forms a part of the Eastern Himalayan biodiversity hotspot.

Forests are the dominant ecosystem in Bhutan with 71 percent of the country

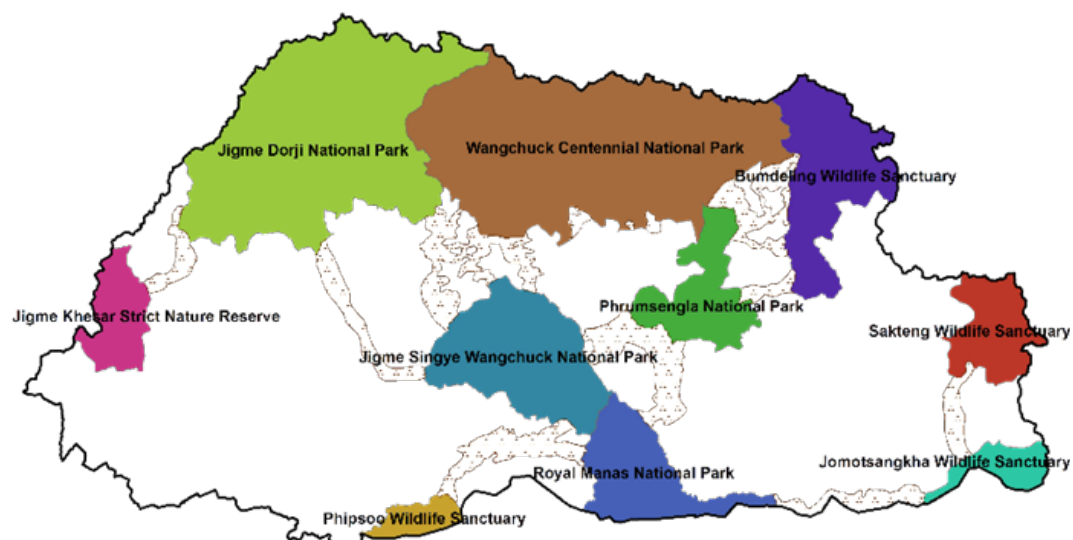
8. NSB, *Population and Housing Census of Bhutan* (2017).

under forest cover and an additional 10.43 percent under shrubs⁹. The total protected forest areas in the form of national parks, wildlife sanctuaries and biological corridors corresponds to 51.44 percent of the total land area.

Agro-ecologically, Bhutan has six zones with different altitudinal ranges and climatic conditions. The aquatic ecosystems of

Bhutan consist mainly of rivers, lakes, marshlands and hot springs. Bhutan records more than 5,600 species of vascular plants of which approximately 94 percent are native species and about 144 species are endemic to Bhutan. More than 200 species of mammals are identified of which 27 are globally threatened. Further, Bhutan has recorded 739 species of bird till date¹⁰, of which, 18 are globally threatened.

Figure 1.3: Protected areas of Bhutan



Source: DoFPS, MoAF

9. MoAF, *Bhutan Land Cover Assessment* (2010).

10. Latest count as of January 2019.

Bhutan has always maintained a balance between development and conservation of its environment. This has been acknowledged through our commitment to remain carbon neutral at the 2009 Conference of Parties in Copenhagen and further reaffirmed at the 2015 Paris Agreement.

As a country located in the ecologically fragile Eastern Himalayas, Bhutan is vulnerable to impacts of climate change. With a majority of the population dependent on agriculture, and the economy heavily reliant on hydropower and tourism, climate change has serious implications for Bhutan's socio-economic development.

The GNH Survey 2015 found a high prevalence of pro-environmental beliefs among the population. The pro-environmental beliefs did not vary by gender. However, a slight difference exists between rural and urban residents with more rural residents having strong pro-environmental beliefs as compared to urban. A large majority of the population reported that they feel *'highly responsible'* for conserving the natural environment.

CHAPTER

2

**BHUTAN'S
DEVELOPMENT JOURNEY**

2.1 GNH-Our Development Philosophy

Gross National Happiness is the overall guiding development philosophy of Bhutan. The concept was first expounded by His Majesty The Fourth *Druk Gyalpo* when His Majesty enunciated the visionary statement that “*Gross National Happiness is more important than Gross Domestic Product,*” in an interview with the Financial Times of London in 1986. Over the years, GNH has not only guided Bhutan’s socio-economic development but has also gained wider international recognition as an alternative model of socio-economic development. The Constitution of the Kingdom of Bhutan mandates the State “*to promote those conditions that will enable the pursuit of Gross National Happiness*”.

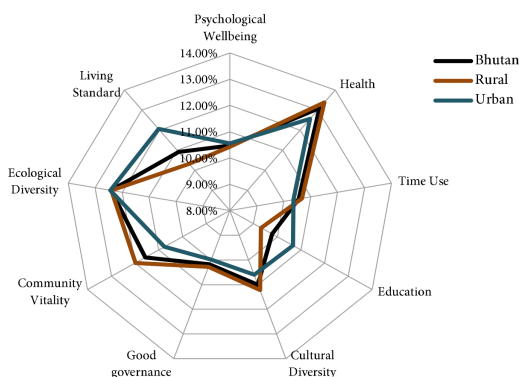
2.2 Operationalisation of GNH

The operationalisation of GNH was made through policy and legislation during the reign of His Majesty The Fourth *Druk Gyalpo*. Since 2008, indicators and tools have supported GNH implementation.

2.2.1 GNH Index

The GNH Index was introduced in 2008 to measure our progress towards maximising GNH. The Index is comprised of nine domains- psychological well-being, health, time use, education, cultural diversity and resilience, good governance, community vitality, ecological diversity and resilience, and living standard. The nine domains include both conventional aspects of development such as standard of living, health and education as well as unconventional aspects such as psychological wellbeing, community vitality, cultural diversity and time use. Three nationwide GNH surveys were carried out in 2010, 2015 including a pilot survey in 2007-2008 to develop Bhutan’s GNH Index baseline and assess progress.

Figure 2.1: Percentage contribution of sufficiency of each domain to overall GNH Index, by area



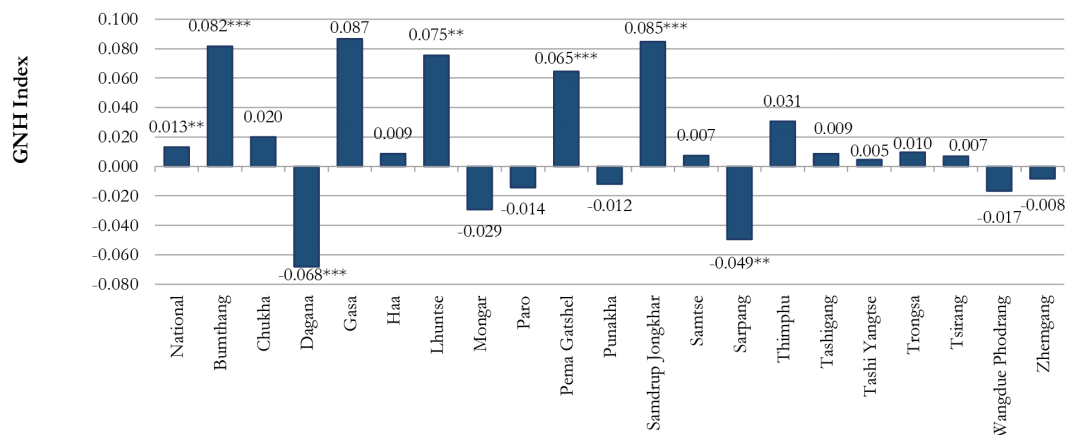
Source: GNH Survey 2015

Since the 10th FYP, GNH Index and the findings of GNH surveys have been used to guide plan formulation and monitoring. The 16 National Key Result Areas (NKRAs) of the 11th FYP were framed based on GNH. The GNH survey findings of 2010 were also used to develop some of the 11th FYP key performance indicators. Continuing the past efforts to operationalise GNH, the 17 NKRAs of the 12th FYP were formulated guided by the nine domains of GNH. The GNH Index score was also an important determining factor for allocation of resources to the Local Governments (LGs) in the 12th FYP.

2.2.2 GNH Policy Screening Tool

The GNH policy screening tool assesses the impact of introducing a new policy on GNH, specifically whether the policy is GNH favourable or not. It is a tool with 22 variables representing the nine domains of GNH on a scale of 1-4 (1 representing negative impact, 2 uncertain, 3 no negative impact, and 4 positive impact). For a policy to be GNH favourable, a minimum score of 66 is required. Till date, 26 draft policies have been screened using the tool and 15 policies were approved during the 11th FYP.

Figure 2.2: Absolute change in GNH Index between 2010 and 2015 across dzongkhags



Source: GNH Survey 2015. Note: *** statistically significant at 1%, ** statistically significant at 5%, * statistically significant at 10%.

2.2.3 GNH Index in Resource Allocation Formula

The GNH Index score has been used for the first time in the 12th FYP as one of the criteria to determine resource allocation to the LGs. A Dzongkhag, Gewog or a Thromde with a lower GNH Index score receives higher allocation of resources. The weightage for the GNH Index has been set at 10 percent for Gewogs and Thromdes and 15 percent for Dzongkhags.

2.2.4 Other Applications

Other areas under development include the GNH business certification, cost effective analysis, project impact studies and cost benefit analysis for major projects. The lead agency for formulation and implementation of these tools is the GNHCS and the Centre for Bhutan and GNH Research.

2.3 Key Development Milestones

Bhutan follows a five year planning cycle that outlines the socio-economic development priorities and programmes to be implemented over a period of five years. The inception of the Five Year Plans in 1961 marked the beginning of planned socio-economic reforms in Bhutan. The table 2.1 provides a summary of objectives, total allocation, priority areas, and major milestones achieved during the past FYPs since 1961.

Table 2.1 : Overview of the Five Year Plans

Plan	Main Goals	Outlay (Nu. Million)	Outlay Growth	Domestic Revenue as % of Outlay
1 st FYP (1961-66)	Development of basic infrastructure.	107.2	-	-
2 nd FYP (1966-71)	Build on the foundations laid in the first plan.	202.2	88.8 %	1.1%
3 rd FYP (1971-76)	Improvement of agriculture and livestock production, social services. Balanced regional development. Setting up small and medium scale industries.	475.2	135.0 %	6.9%
4 th FYP (1976-81)	Concentration on growth of agriculture, livestock, forests and small industries.	1,106.20	132.8 %	5.4%
5 th FYP (1981-86)	Economic self-reliance. Sustained rate of growth. Greater distributional equity among regions. Participatory planning.	4,711.20	325.9 %	28.2%

Priorities	Main Achievements
Roads- 66% Education- 8.8%	Construction of 1,770 kms of roads: <ul style="list-style-type: none"> • Phuentsholing to Paro and Thimphu. • Samdrup Jongkhar to Trashigang.
Roads- 40.8% Education- 17.66% Agriculture- 10 %	<ul style="list-style-type: none"> • East-West lateral highway construction from Haa to Trashigang. • 102 schools established. • Teacher Training Institute-Samtse established. • Hydrel at Thimphu, Paro & Wangduephodrang completed. • Detailed investigation for Chukha Hydropower Projected completed.
Agriculture- 22% Roads- 19.79% Education- 20% Power & Mining-12% Health-8%	<ul style="list-style-type: none"> • Food Corporation of Bhutan established. • Opened for tourism with establishment of Bhutan Tourism Corporation Ltd. • Received 287 tourists in 1974.
Agriculture – 23.5% Industry and Mines -15.8% Education- 12% Public Works-11.6% Forestry-10%	<ul style="list-style-type: none"> • Investment in major projects such as Chukha HEP, Penden Cement and Gelephu irrigation scheme. • Participatory planning initiated through the institution of DYT. • First Broadcast Station established.
Industries- 22.7% Power-22% Power Sector- 16.5% Public Works-14.2% Agriculture-13.3% Education-4.1%	<ul style="list-style-type: none"> • Chukha Hydropower commissioned in 1986. • GDP-Nu.1,673.2 million. • GDP per capita in 1986/87– Nu. 2,123. • Tax revenue increased from Nu. 65.1 million (1981/82) to Nu.173.8 million [1986/87].

Plan	Main Goals	Outlay (Nu. Million)	Outlay Growth	Domestic Revenue as % of Outlay
6 th FYP (1987-92)	Achieve economic self-reliance. Improve governance through organizational development programmes. Rural development. Consolidation of development programmes.	9,559.20	102.9 %	49.9%
7 th FYP (1992-97)	GNH based development. Economic development and self-reliance. Living standard and quality of life. Decentralisation.	15,590.70	63.1 %	60.9%
8 th FYP (1997-02)	Balanced and sustainable development. Decentralisation. Institutional strengthening.	30,151.30	93.4 %	68.8%

Priorities	Main Achievements
General Public Services-21.6% Agriculture-15.6% Transport & Communication-11.7% Education-10.9% Power-9.6% Public Works-8.9% Mining-6.6% Health-5%	<ul style="list-style-type: none"> • Domestic revenue met the current expenditure for the first time. • 2,674 kms of road completed. • 90 percent of the population provided access to health care. • Immunisation coverage 84%. • Gross primary enrolment rate 70 percent achieved. • GDP(average growth) – 4.1 %. • Infant Mortality Rate (per 1,000)- 142. • Maternal Mortality Rate (per 100,000) -770.
Health & Education-22.7% Communication – 17.3% Agriculture- 15.7 % Finance-12.7% Trade & Industry-9%	<ul style="list-style-type: none"> • GDP-Nu.12,249 million. • Life expectancy –66 years. • Infant Mortality Rate (per 1,000) – 70.71. • Maternal Mortality Rate (per 100,000) – 380.
Health & Education-17.7% Power-15.7% Finance-14% Agriculture-12% Roads-11.8% Communication-10%	<ul style="list-style-type: none"> • GDP-Nu.24,293 million. • Kurichhu & Basochhu (upper)Hydropower Project commissioned. • Infant Mortality Rate (per 1,000) - 60.12. • Maternal Mortality Rate (per 100,000) - 255. • Net Primary Enrolment Rate (NPER) – 62 %. • Poverty rate – 31.7 %. • Life Expectancy – 66 years.

Plan	Main Goals	Outlay (Nu. Million)	Outlay Growth	Domestic Revenue as % of Outlay
9 th FYP (2002-08)	<p>Improve the quality of life and income.</p> <p>Enhance good governance.</p> <p>Promote private sector growth.</p> <p>Preserve and promote culture.</p> <p>Environmental conservation.</p> <p>Accelerate economic growth.</p>	70,000.00	132.2 %	64.6%
10 th FYP (2008-13)	Poverty Reduction	145,625.00	108.0 %	60.0%

Priorities	Main Achievements
LGs- 24.5% Communications- 14.8% Trade & Industry-12.2% Agriculture-6.5% Health-6.4% Education-3.7% Finance-2.3%	<ul style="list-style-type: none"> • GDP-Nu.52,100 million. • Tala & Basochhu (lower)Hydropower Project commissioned. • First National Population & Housing Census conducted. • GDP (average growth) – 9.6 %. • GDP per capita –USD 1,414. • Life expectancy –67 years. • Infant Mortality Rate (per 1,000) - 40.13. • Maternal Mortality Rate (per 100,000) – 215. • National Literacy Rate – 59.5 %. • Net Primary Enrolment Rate (NPER)– 88 %. • Poverty Rate – 23.2 %.
Finance-20.74% LG- 18.7 % Works & Human Settlement-12.99% Education-7.1% Agriculture-5.5% Health-5.86%	<ul style="list-style-type: none"> • GDP-Nu.111,352 million. • GDP average growth) – 8 %. • GDP per capita (2009) – USD 1,851.66. • Transitioned to Democratic Constitutional Monarchy. • Druk Phuensum Tshogpa elected as Government and People's Democratic Party as Opposition Party. • Life expectancy years-68.1 years. • Infant Mortality Rate (per 1,000) - 30. • Maternal Mortality Rate (per 100,000) – 86. • Literacy Rate –63%. • NPER – 96%. • Poverty Rate reduced from 23% to 12 %. • GNH Index –0.743.

Plan	Main Goals	Outlay (Nu. Million)	Outlay Growth	Domestic Revenue as % of Outlay
11 th FYP (2013-18)	Self-reliance and inclusive green socio-economic development	223,657.00	53.6 %	63.0 %

Priorities	Main Achievements
LG- 28.82% Finance-19.35% Works & Human Settlement-11.06% Agriculture-6.4% Home & Culture-5.5% Education-3.92% Health-3.82%	<ul style="list-style-type: none"> • GDP-Nu.164,628 million • GDP (average growth)-5.59 % • GDP per capita – USD 3,438 (2017) • People’s Democratic Party elected as Government and Druk Phuensum Tshogpa as Opposition • Recommended for graduation from LDC status • Second National Population & Housing Census conducted • Life expectancy – 70.2 years • Infant Mortality Rate (per 1,000) - 15.1 • Maternal Mortality Rate (per 100,000)– 89 • Literacy Rate – 71.4% • NPER (Primary) – 94.7 % • Poverty Rate – 8.2 % • GNH Index –0.756

2.4 Five Year Plans and the Sustainable Development Goals

In September 2015, Bhutan together with the global community adopted “The 2030 Agenda for Sustainable Development Goals (SDGs)” at the United Nations (UN) headquarters in New York. Given the similarities between our development philosophy of GNH and the SDGs, alignment of SDGs with our FYPs did not pose a challenge. A rapid integrated assessment conducted by UNDP in October 2015 indicated high level of integration of the SDG targets with 11th FYP. Out of 143 relevant SDG targets, 134 were found to be included in the 11th FYP.

Bhutan is also amongst the first few countries that began early implementation of the SDGs since its adoption in 2015. While all 17 Goals are important, Bhutan prioritized three SDGs (Goal 1 – No Poverty; Goal 13 - Climate Action; and Goal 15–Life on Land) for implementation during the

11th FYP. These goals were prioritized on the basis of urgency to address issue of poverty reduction, to fulfil Bhutan’s commitment to remain carbon neutral at all times; and to champion and show-case Bhutan’s success in preserving its biodiversity.

Similarly, preliminary assessment of the 12th FYP NKRA and Key Performance Indicators (KPIs) with the SDGs reveals high degree of alignment. The 17 NKRA are closely aligned to the SDGs and their targets and indicators are integrated into the 12th FYP.

Bhutan presented its Voluntary National Review Report for the first time at the High Level Political Forum at the UN Headquarters in New York in July, 2018. Bhutan remains committed to implementing the SDGs and will continue to closely monitor progress on SDG implementation in the 12th FYP.

Table 2.2: Alignment of 17 NKRA, 17 SDGs and Nine Domains of GNH

NKRAs (2018-23)	17 SDGs (2015-30)	9 Domains of GNH (Long Term)
(1) Macroeconomic Stability	[8] Decent Work and Economic Growth	Living Standard
(2) Economic Diversification	[8] Decent Work and Economic Growth	Living Standard
	[9] Industry, Innovation and Infrastructure	
(3) Reducing Poverty and Inequality	[1] No Poverty	Living Standard Good Governance
	[10] Reduced Inequality	
(4) Preservation of Culture	[11] Sustainable Cities and Communities	Cultural diversity and resilience Community Vitality

NKRA (2018-23)	17 SDGs (2015-30)	9 Domains of GNH (Long Term)
(5) Healthy Ecosystem	[11] Sustainable Cities and Communities [15] Life on Land	Ecological Diversity and Resilience Good Governance
(6) Carbon Neutrality, Climate & Disaster Resilient	[7] Affordable and Clean Energy [9] Industry, Innovation and Infrastructure [13] Climate Action	Ecological Diversity and Resilience Good Governance
(7) Quality Education and Skills	[4] Quality Education	Education
(8) Food and Nutrition Security	[2] Zero Hunger	Living Standard
(9) Infrastructure, communication & Public Services	[9] Industry, Innovation and Infrastructure [16] Peace, Justice and Strong Institutions	Good Governance
(10) Gender Equality	[4] Quality Education [5] Gender Equality [8] Decent Work and Economic Growth	Good Governance
(11) Productive & Gainful Employment	[8] Decent Work and Economic Growth	Good Governance Living Standard Time Use
(12) Corruption Reduced	[16] Peace, Justice and Strong Institutions	Good Governance
(13) Vibrant Democracy & Decentralisation	[16] Peace, Justice and Strong Institutions	Good Governance

NKRA (2018-23)		17 SDGs (2015-30)		9 Domains of GNH (Long Term)
(14)	Healthy and Caring Society	[3]	Good Health and Well-being	Health Community Vitality
(15)	Sustainable Human Settlements	[6] [11]	Clean Water and Sanitation Sustainable Cities and Communities	Community Vitality Living Standard
(16)	Justice Services	[16]	Peace, Justice and Strong Institutions	Good Governance
(17)	Sustainable Water	[6]	Clean Water and Sanitation	Living Standard Health Ecological Diversity and Resilience

2.5 Bhutan's Graduation from the List of Least Developed Countries

Marking a key development milestone, Bhutan will graduate from the UN's list of Least Developed Countries in December, 2023. The decision on Bhutan's graduation was endorsed during the 73rd session of the United Nations General Assembly held in December, 2018¹¹. In order to be considered for graduation, a country must meet the threshold levels for any two of the three criteria or twice the income threshold in two consecutive triennial reviews of the Committee for Development Policy (CDP), the subsidiary advisory body of the United Nation's Economic and Social Council (ECOSOC). Bhutan fulfilled the threshold levels for the Gross National Income (GNI) per capita and Human Asset Index (HAI) criteria during the 2015 and

2018 triennial reviews. It did not meet the threshold for the Economic Vulnerability Index (EVI) during both the reviews.

A standard transition period of three years is granted to a graduating country once the decision to graduate is taken. During this period, a country continues to receive all benefits associated with being an LDC. Normally, Bhutan would graduate in 2021. However, Bhutan requested for a 3+2 years transition period coinciding with the implementation of the 12th FYP. The longer transition period was requested to address the last mile challenges in all sectors and ensure sustainable graduation. As the 12th FYP will be Bhutan's last FYP as an LDC, accelerated support of all development partners for the implementation of the 12th FYP will be crucial to ensure that graduation is sustainable and irreversible.

11. <http://undocs.org/en/A/73/L.40/Rev.1>

Table 2.3: Bhutan's performance on LDC graduation criteria

Criteria	1 st Triennial Review (2015)	2 nd Triennial Review (March, 2018)
GNI Per Capita	USD 2,277 (83.3% above threshold)	USD 2,401 (95.2% above threshold)
Human Asset Index	67.9 (2.9% above threshold)	72.9 (10.45% above threshold)
Economic Vulnerability Index	40.2 (25.6% below threshold)	36.3 (13.44% below threshold)

Source: Committee for Development Policy, UN DESA

CHAPTER

3

12TH FIVE YEAR PLAN

3.1 Introduction

The 12th FYP was formulated following extensive consultations with all relevant stakeholders. The Plan aspires to fulfill Druk Nyamrup Tshogpa's pledges to create a stronger, united, self-reliant country. The 12th FYP has taken into consideration the pledges made by the other three political parties.

The duration of the 12th FYP is aligned to the government's tenure. Accordingly, the 12th FYP period will begin from 1st November, 2018 and end on 31st October, 2023.

3.2 12th Five Year Plan Objective

The objective of the 12th FYP is ***“Just, Harmonious and Sustainable Society through enhanced Decentralisation.”*** The objective has been inspired by the Royal Addresses and is anchored on the provisions of the Constitution; lessons from the review of the 11th FYP; extensive stakeholder consultations including Civil Society Organizations (CSOs) and political parties, and regional and international commitments including the SDGs. The 12th FYP objective is underpinned by principles of leaving no one behind, narrowing the gap between the rich and poor, and ensuring equity and justice.

A *Just Society* is defined as ‘a society where every citizen has equitable access to resources and opportunities to pursue and realize individual and national aspirations’. Priorities to create a *Just Society* are:

- Reducing poverty and inequality,
- Creating productive and gainful employment,
- Improving access to quality health services,
- Improving quality of education and skills,
- Strengthening democracy and decentralisation,

- Reducing corruption,
- Improving justice services and institutions, and
- Promoting gender equality.

A *Harmonious Society* is defined as ‘a society where every individual lives in harmony with oneself, community, nature, culture and traditions’. Priorities to create a *Harmonious Society* are:

- Preserving and promoting culture and traditions,
- Maintaining healthy eco-system, carbon neutral and climate resilient development,
- Promoting healthy and caring society, and
- Ensuring livability, safety and sustainability of human settlements.

A *Sustainable Society* is defined as ‘a society able to sustain its social, economic and environmental development needs’. Priorities to create a *Sustainable Society* are:

- Ensuring renewable energy supply,
- Ensuring macro-economic stability,
- Enhancing economic diversity, and productive capacities,
- Ensuring water, food and nutrition security,
- Improving efficiency and effectiveness of public service delivery,
- Preserving cultural authenticity, and
- Ensuring community vitality.

Decentralisation means empowering local governments and other sub-national bodies through provision of greater financial, planning and administrative responsibility, authority and accountability.

3.3 Strategic Framework

The 12th FYP is guided by the development philosophy of GNH and its nine domains. The strategic planning framework for the 12th FYP illustrated below outlines the key deliverables of the Plan defined as the National Key Result Areas (NKRAs) at the national level, Agency Key Result Areas (AKRAs) at agency level and Local Government Key Result Areas (LGKRAs) at local government level. These results will contribute to achieving the 12th FYP objective. To measure the progress of these results, each NKRA, AKRA and LGKRA has corresponding KPIs with baseline and targets for the Plan period.

In order to achieve the results, flagship programmes, central programmes and LG programmes will be implemented. Central agencies and LGs will ensure coordination, consolidation and collaboration to ensure synergy and efficiency during all stages of planning and implementation.

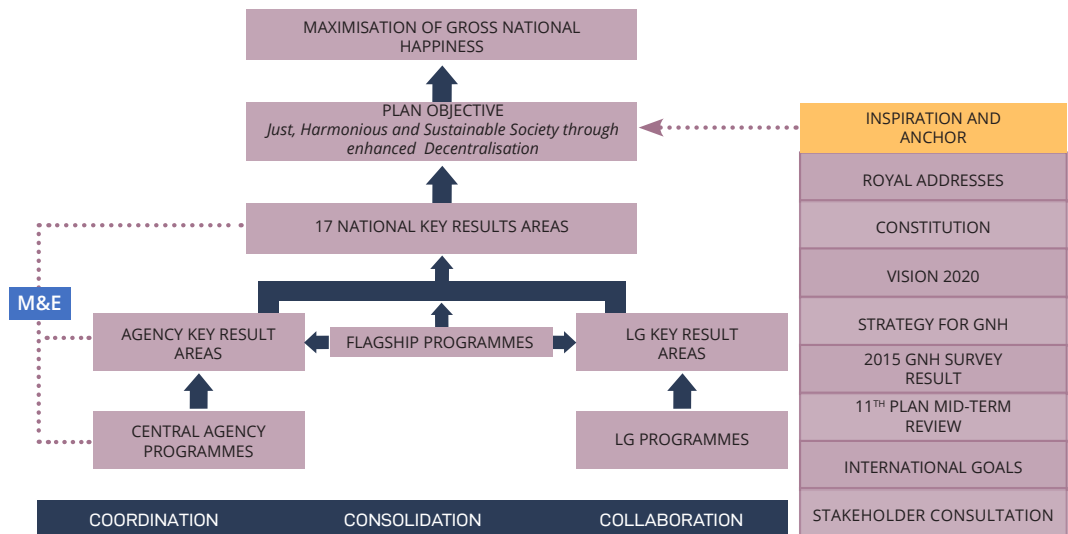
3.4 Flagship Programmes

A notable feature of the 12th FYP is the flagship programme. Flagship programmes are interventions to address high priority national issues that require multi-sectoral collaboration and coordination in a concerted manner. In addition to regular programmes, flagship programmes are designed as key means to achieve the NKRAs through implementation of high impactful activities. Flagship programmes focus on major activities which are beyond financial and technical capacity of the LGs.

Some of the high priority national issues to be addressed through the flagship programmes are economic growth and diversification, employment generation, access to reliable and safe drinking water, rural income generation, efficiency and effectiveness of public services, and waste management.

Each flagship programme will have a

Figure 3. 1: Strategic Framework



detailed blueprint with clear results, end-to-end interventions, costing, timelines and division of responsibilities among various implementing partners. A blueprint will be developed for each flagship programme by Technical Working Groups (TWG) composed of multi-sectoral stakeholders. The Government shall approve the flagship programmes and implementation will be rigorously monitored by the Prime Minister's Office.

3.5 The Division of Responsibilities Framework (DoRF)

In keeping with the provisions of the Constitution of the Kingdom of Bhutan 2008 and LG Act 2009, and Government's decentralisation efforts, greater responsibility and resources (functional and financial) have been delegated from the Centre to the LGs with clear delineation of responsibilities. The objectives of the framework are to:

- Decentralise expenditures with assigned functions to LGs based on efficiency, proximity and competency. It is to allow greater autonomy and flexibility for LGs in terms of priority setting and choices for enhanced planning, implementation and provision of efficient public goods and service delivery with enhanced accountability and professionalism.
- Strengthen coordination and implementation of policies, plans and programmes amongst different levels of government by providing clarity of roles and distinct division of responsibilities.
- Provide a basis for resource sharing between Central agencies and the LGs

for funding functions and provision of an *'investment menu'*¹² for all levels of government.

- Determine, plan and implement other aspects of decentralisation such as [i] size, levels and capacities of functional burden, and [ii] human resource and staff allocation for functions.

Above all, the delineation of responsibilities and revision is guided by the "principles of subsidiarity and responsiveness" – who should do what and who will pay for what, which suggest that [I] goods and service provision should take place at the lowest level of the government that is capable of efficiently undertaking these functions, and those national level public goods and services that benefit the entire nation are best performed by central agencies, and, [II] that LGs are best placed to understand the needs of the people as they are situated closer to them and can respond to changing needs of the people quickly and easily.

Economies of scale, negative externalities, equity, variety in demands of the people, transaction cost, levels of discretion in decision-making, and levels of technical skills required in terms of provision of goods and services by levels of government were also considered.

The assigned responsibilities and the *'investment menu'* in the framework will be monitored for compliance. Based on the DoRF, past expenditure trends, and resource availability, the capital grants for Dzongkhags, Gewogs and Thromde 'A's in the 12th FYP have been doubled to Nu. 50 billion from Nu. 25 billion in the 11th FYP. This demonstrates the Royal Government's commitment to allocate greater share of financial resources to LGs for enhanced local development and greater decentralisation.

12. The *"investment menu"* comprises of list of expenditure functions such as schools, hospitals, farm roads, gewog connectivity roads, dzongkhag roads, and short-term capacity development, which is based on who should do what and who will pay for what.

3.6 National Key Result Areas

National Key Result Area is a development outcomes at the national level that will contribute towards achieving the plan objective. All central agencies and local governments are responsible for contributing towards achievement of the NKRA through their respective Agency Key Result Areas (AKRAs) and Local Government Key Result Areas (LGKRAs). In the 12th FYP, 17 NKRA, guided by nine domains of GNH, have been identified through extensive consultation with various stakeholders ranging from the private and corporate sector to youth groups, government (central agencies, constitutional bodies and LGs), political parties, parliamentarians and CSOs to capture the needs and aspirations of the nation and its people.

Each NKRA is important in and of itself and interlinked with other NKRA. To facilitate coordination and collaboration, a lead agency and collaborating agencies have been identified for delivery of each NKRA. The progress towards achievement of NKRA is measured through KPIs. Each NKRA has at least one KPI with clear KPI description, unit of measurement, data sources and baseline and targets.

This section outlines the detailed description of each NKRA. The description highlights the current situation and challenges (where we are right now), targets (where we want to be), and key strategies, programmes, and responsible agencies (how to get there).

Figure 3. 2 : The Seventeen NKRAS

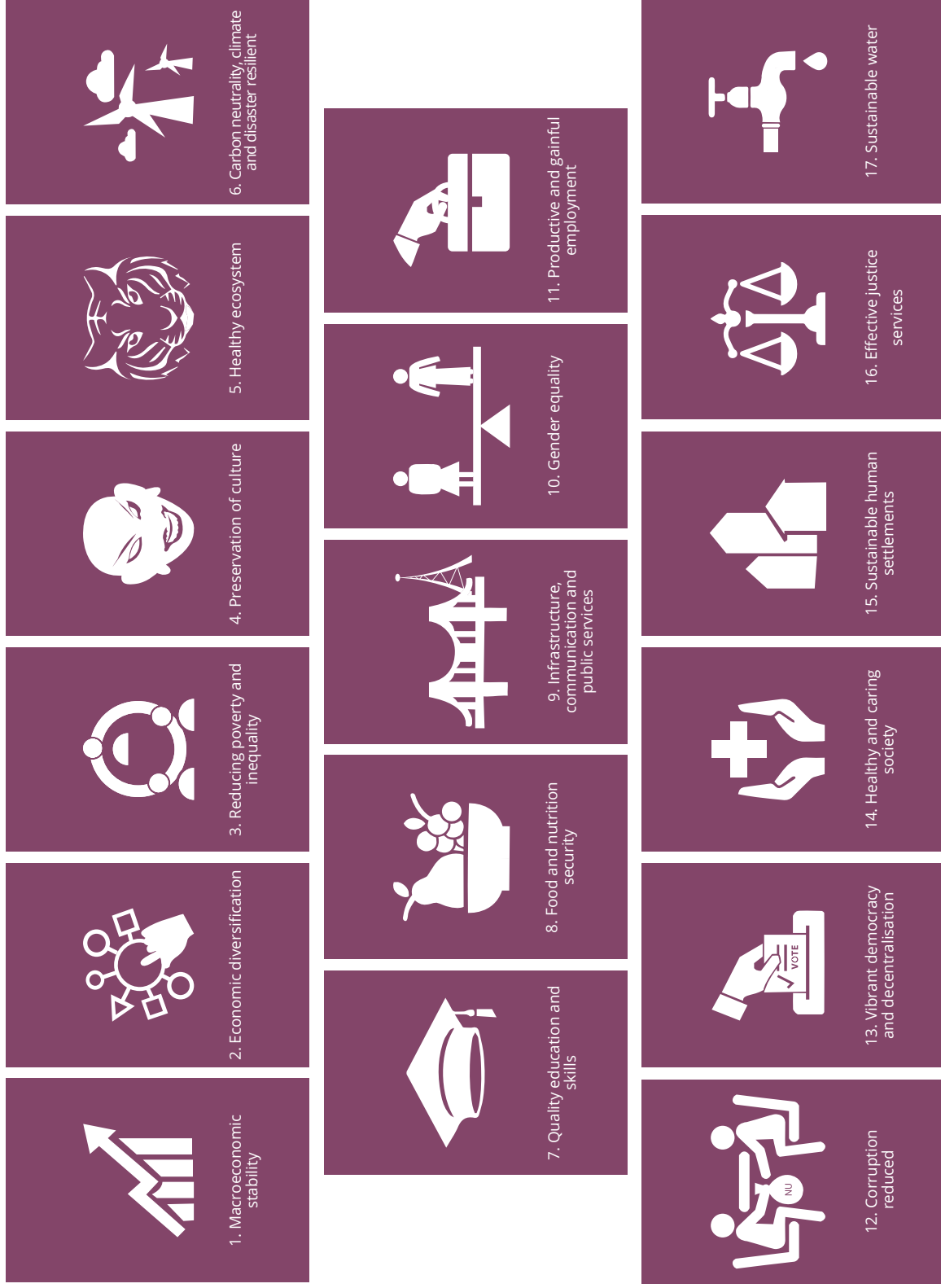


Table 3.1: The 17 NKRAs and the 9 GNH Domain matrix

GNH DOMAINS	Psychological Wellbeing	Health	Time Use	Education	Cultural Diversity	Good Governance	Community Vitality	Ecological Diversity	Living Standard
12 th FYP NKRAs									
Macroeconomic Stability									X
Economic Diversification									X
Reducing Poverty & Inequality						X			X
Preservation of Culture	X				X		X		
Healthy Ecosystem						X		X	
Carbon Neutrality, Climate & Disaster Resilient						X		X	
Quality Education & Skills				X					X
Food & Nutrition Security									X
Infrastructure, Communication & Public Services			X			X			
Gender Equality	X			X		X			
Productive & Gainful Employment			X			X			X
Corruption Reduced						X			
Vibrant Democracy & Decentralisation						X			
Healthy & Caring Society	X	X					X		
Sustainable Human Settlements					X		X		X
Effective Justice Services	X					X			
Sustainable Water		X						X	X



NKRA 1 Macroeconomic stability

This NKRA aims to create a strong macroeconomic environment by ensuring stable growth, sustainable fiscal deficit, price stability, full employment and sound financial system. A stable and predictable macroeconomic environment will lead to better resource allocation decisions, promote investment and sustainable growth. Ministry of Finance is the lead agency for this NKRA.

Current situation and key challenges

Over the last three decades, Bhutan's economy has grown at a rate of approximately 7.5 percent. In the last 10 years alone, GDP has more than tripled and per capita income increased from USD 1,815 to USD 3,438¹³. Domestic revenue has continued to grow over the successive plan periods with hydropower as the main contributor. The coverage of current expenditure by domestic revenue increased from 73 percent in the 5th FYP to 124 percent in the 11th FYP. Similarly, the coverage of total expenditure also increased from 28 percent to 63 percent.

Despite the economic progress, challenges still remain. The following are the key challenges that need to be addressed in the 12th FYP:

Containing expenditure growth

While the constitutional mandate to meet current expenditure through domestic revenue is being fulfilled, there is no binding constraints to contain current expenditure growth. Average current expenditure from the 8th to the 11th FYP grew at an average rate of 90 percent¹⁴. The growth in current expenditure during the 11th FYP is attributed to increase in maintenance and operational costs of public infrastructure and services, personnel emoluments, interest payments on public debt, and provisions for elections and central schools. Inability to contain current expenditure growth will lead to depletion of savings for future investments. Therefore, it will be crucial to rationalise current expenditure. Equally important is to rationalise government expenditure and minimise wasteful capital expenditure by ensuring cost effectiveness especially in public construction and government procurement.

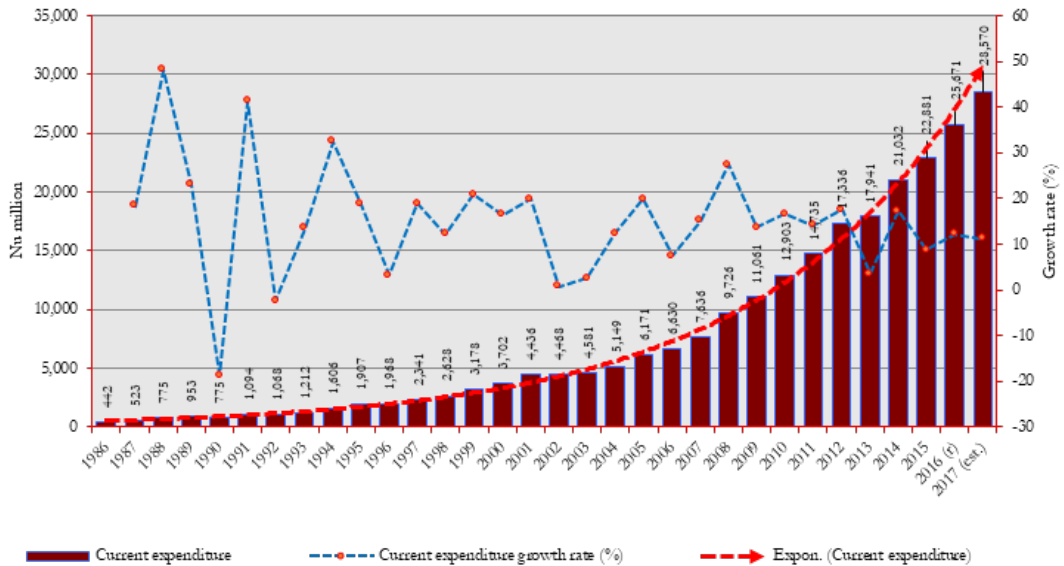
Managing public debt

Bhutan's public debt stock reached 108 percent of GDP at the end of the 11th FYP compared to 63.5 percent at end of the 9th FYP. Major share of the debt constitutes hydropower debt. Bhutan's debt level has been maintained within

13. NSB, *National Accounts Statistics* (2018).

14. MFCC (Oct 2018).

Figure 3.3: Trend in current expenditure

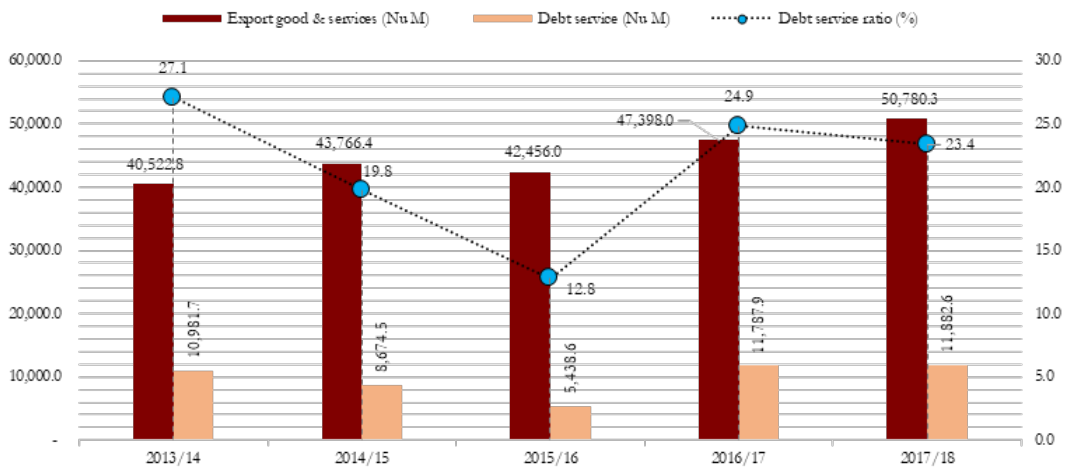


Source: CBS & GNHR's construct from Annual Financial Statements 2002-2017, Ministry of Finance.

the permissible thresholds for both hydro and non-hydropower debt in line with Public Debt Policy 2016. However, given the declining Overseas Development Assistance (ODA) and

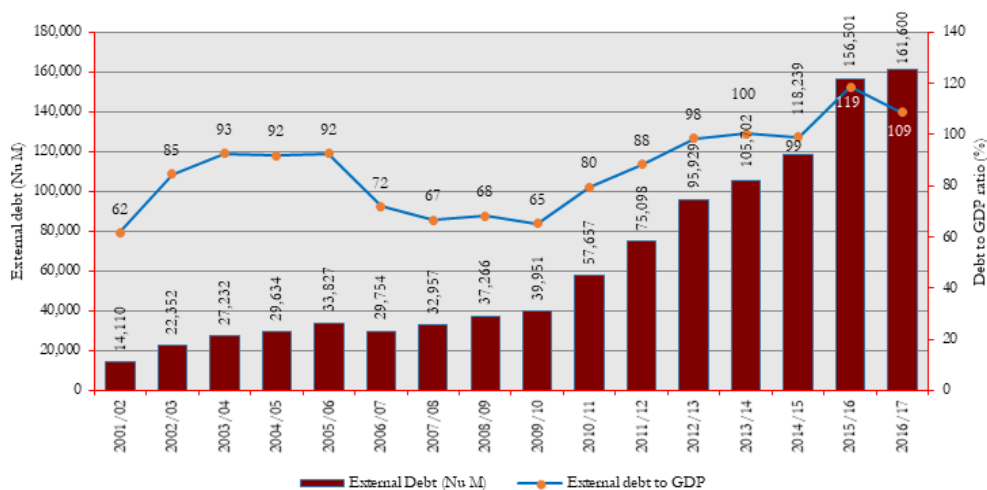
limited capacity to earn convertible currency, financing debt service may prove to be a challenge.

Figure 3.4: Debt service in the 11th FYP



Source: CBS & GNHR's illustration from Monthly Statistical Bulletin, RMA (February 2019). Note: Debt service ratio is a percentage of debt service payment in proportion to export value of goods and services in any given year

Figure 3.5: Movement in external debt stock, 2001/02-2016/17



Source. CBS & GNHR's construct from Selected Economic Indicators, RMA (2002-2017).

Limited domestic savings

Investment has been driven mainly by government through a combination of capital expenditure and construction of hydroelectric projects. Gross domestic savings is able to finance only 66 percent of investment with remaining financed through external loans and ODA. This has contributed to a consistent current account deficit and increase in public debt stock. Efforts to increase domestic savings through expanding sources of revenue and curtailing costs will need to be undertaken. There is a need to harmonize fiscal and monetary policies to encourage private savings in the economy which could become one of the major sources of investment. Measures to create an enabling environment for profitable businesses and investment opportunities to flourish, enhance access to finance, and divert capital towards productive sectors must be undertaken.

Creating productive and gainful employment

Hydropower led structural transformation has not translated into a commensurate shift in the sectoral share of employment within the economy. As a result, agriculture sector is still the largest employer with 57.2 percent employment¹⁵, while contributing only 16.5 percent to GDP¹⁶. The economy has achieved full employment, but youth unemployment remains high at 12.3 percent in 2017 with a higher rate of female youth unemployment. There is a need to diversify the economy in areas with high potential for job creation to absorb the growing number of youth entering the labour market each year.

15. NSB, *Bhutan Living Standards Survey* (2017).

16. NSB, *National Accounts Statistics* (2018).

Strategies

In order to address the challenges and achieve the NKRA, following strategies have been identified:

- Broadening revenue base and streamlining tax administration.
- Instituting expenditure control measures on public constructions and procurement.
- Exploring additional concessional financing windows.
- Boosting private investment and savings.

Programmes

The following programmes will be implemented to achieve the NKRA:

1. **Strengthening macroeconomic coordination**
This programme aims to promote a sound macroeconomic environment by developing a macroeconomic model to track and forecast key macroeconomic variables. An early economic warning system will be operationalised to ensure appropriate macroeconomic policies and decisions are taken in a timely manner. The programme will also improve governance and management of state owned enterprises. The programme will be implemented by MoF.

2. **Strengthening fiscal sustainability**
This programme aims to strengthen results based planning and budgeting process. The key features of the programme are to focus on outputs and outcomes of government spending programmes, promote understanding of fiscal issues and challenges in pursuing prudent public financial management. In addition, this programme will enhance effective allocation and utilisation of scarce public resources with greater accountability. The programme will be implemented by MoF.

3. **Strengthening public financial management**
This programme aims to ensure prudent use of public resources through judicious expenditure management, efficient fiscal transfers and treasury operations. The Government's assets, properties and inventory management will be enhanced. The programme will be implemented by MoF.

Table 3.2: Key Performance Indicators

No.	KPI	Description	Unit	Baseline Year	Baseline	Target	Source
1.1	Annual average real GDP growth	Average rate at which the GDP changes/grows over the plan period.	%	11 th FYP	5.59	6-7 percent	National Accounts Statistics, NSB
1.2	GDP per capita	Real Gross Domestic Product per capita by the end of the plan period.	USD	2017	3,438	>4,500	National Accounts Statistics, NSB
1.3	Average fiscal deficit over the plan period	Average fiscal deficit as a percentage of GDP over the plan period.	%	11 th FYP	1.38	<3	Annual Financial Statement, MoF
1.4	Current account balance	Current account balance expressed as a percentage of GDP.	%	2016-17	- 22.8	<-12	Annual Report, RMA
1.5	Annual debt service ratio	The ratio of total external debt service (principal and interest repayment) to total export earnings.	%	2016-17	24.9	≤25	Monthly Statistical Bulletin, RMA



NKRA 2 Economic diversification

This NKRA aims to develop an inclusive, sustainable and equitable economy with decent livelihood opportunities for everyone through accelerated private sector growth and investment in agriculture, tourism, cottage and small industries (CSIs), mining and allied hydropower industries. Ministry of Economic Affairs is the lead agency for this NKRA.

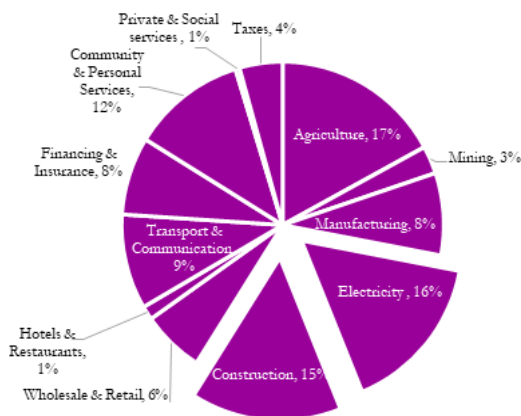
Current situation and key challenges

The share of industry sector in GDP increased from 11.5 in 1980 to 40.6 percent in 2017 and share of agriculture dropped to 17.4 in 2017 from 42.9 percent in 1980.

The growth has been driven by government expenditure and investment.

The economy remains undiversified with manufacturing sub-sector accounting for minor share in the industries sector. Electricity sector alone contributed an average of 16 percent between 2007 and 2016¹⁷. The share of hydropower sector is as high as 30 percent if hydropower construction is included. Furthermore, close to 85 percent of trade is with India consisting mainly of hydropower¹⁸. There exists untapped economic opportunity to diversify the export basket with the large Indian market and beyond.

Figure 3.6: Average sectoral share to GDP, 2007–2017



Trading sector constitutes majority of businesses in Bhutan at 72 percent with industries making up only 28 percent¹⁹. Within the industries sector, CSIs constitutes about 96 percent. However, only 11 percent of CSIs are in production & manufacturing (P&M) concentrated in producing low value added products. About 50 percent of the P&M units are engaged in production of furniture (23 percent), audio visual production (8 percent), bakery (7 percent), fabrication works (7 percent) and sawmill (6 percent). As of 2018, there are a total of 20,093 industries in the country, of which 18,032 are CSIs (90%) and 2,061 Medium & Large (10%). About 35% of these industries are located in Thimphu.

17. NSB, *National Account Statistics* (various years).

18. DRC, MoF, *Bhutan Trade Statistics* (2018).

19. DSCI, MoEA, *CSI Annual Report* (2018).

The following are some of the key economic challenges:

Limited commodities for export

Foreign trade has played a crucial role in the economy and its growth. This is reflected

through the change in its volume and composition. The total exports increased by 34 percent between 2007 and 2017 while the import volume increased significantly

Table 3.3: Share of electricity and top 10 commodities of total merchandise export (2007-2017)²⁰

Indicators	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Average
Total Export (Nu. Million)	27,859	22,591	23,993	29,324	31,486	28,420	31,853	35,585	35,229	35,258	37,297	30,809
o/w Electricity	10,034 (36%)	11,033 (49%)	10,091 (42%)	10,411 (36%)	10,441 (33%)	9,125 (32%)	11,227 (35%)	10,634 (30%)	12,124 (34%)	13,032 (37%)	11,983 (32%)	10,921 (36%)
o/w other top 10 exports	10,686 (38%)	7,384 (33%)	10,077 (42%)	14,330 (49%)	16,119 (51%)	14,291 (50%)	15,094 (47%)	17,528 (49%)	16,001 (45%)	15,394 (44%)	17,760 (48%)	14,060 (45%)

Table 3.4: Ranking of exports to India (Nu. in million)

Export commodities	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Average (2004-2016)
Electricity export	2,712	3,439	4,982	10,034	11,033	10,091	10,411	10,441	9,382	11,227	10,634	12,125	13,032	39%
Base metals and articles	1,737	2,491	4,098	6,302	5,251	7,013	9,833	10,044	10,800	10,005	10,826	9,606	8,875	31%
Mineral products	674	984	1,587	1,809	2,162	2,519	2,782	2,573	2,924	3,309	4,800	4,814	4,646	11%
Products of chemicals or allied industries	712	714	587	783	894	1,051	1,454	1,476	1,639	1,885	1,954	1,990	1,715	6%
Vegetable products	286	243	277	307	242	607	453	595	585	977	1,475	1,132	1,536	3%
Animal and vegetable fat oils	0	224	1,448	1,875	605	4	13	24	7	3	14	8	10	2%
Plastics and articles	271	293	247	276	213	308	246	309	331	462	635	678	677	2%
Prepared food stuffs	408	389	414	368	276	319	318	407	391	579	838	897	1,067	2%
Textiles	536	787	476	445	291	66	41	32	46	44	30	11	1	2%
Wood and articles of wood	280	310	254	303	300	313	311	306	350	297	365	333	304	2%
Articles of stone, cement, etc.	24	15	25	113	122	81	74	121	127	152	196	168	150	0%
Total	7,641	9,890	14,395	22,616	21,388	22,371	25,937	26,329	26,581	28,941	31,768	31,763	32,013	100%

20. DRC, MoF, Bhutan Trade Statistics (2007 & 2017).

by 208 percent. A few products have dominated Bhutan's export basket over the last decade apart from hydropower. Electricity remained the highest merchandise export over the last decade averaging 36 percent between 2007 and 2017²¹. Another 45 percent was concentrated only in 10 commodities. In 2017, total export amounted to Nu. 37,297 million of which electricity contributed 32 percent followed by base metals at 29 percent, mineral products at 10 percent, and chemical and allied products at 4 percent. Traditional exports (agriculture) contributed up to 4 percent of the total export.

Besides limited products making up majority

Table 3.5: Ease of Doing Business Ranking

Sl. No.	Indicator	Ranking		Score	
		2013	2018	2013	2018
1	Trading across borders	172	28	na	94.25
2	Paying taxes	104	15	na	89.28
3	Starting a business	86	91	na	86.38
4	Getting electricity	91	73	na	77.39
5	Registering property	86	54	na	72.99
6	Enforcing contracts	37	28	na	69.99
7	Dealing with construction permits	132	88	na	68.85
8	Getting credit	109	85	na	55.00
9	Protecting minority investors	147	125	na	46.67
10	Resolving insolvency	189	168	na	0.00
	Overall	141	81	54.67	66.08

21. DRC, MoF, *Bhutan Trade Statistics* (2007 & 2017).

22. The World Bank, *Doing Business Report* (2014 & 2018).

23. NSB, *National Accounts Statistics* (2018).

24. DRC, MoF, *National Revenue Report* (2016/17).

of the total exports basket, earnings from these products are also vulnerable to both external and internal shocks. The mineral and base metal products are currently competitive due to subsidised electricity rather than any technological advantage. Non-hydro export has stagnated over the last decade signifying major challenge in product diversification.

Further, there is also limited value addition with majority of the commodities being exported in their primary form.

Challenges related to ease of doing business

Bhutan's overall ease of doing business rank has significantly improved to 81st position out of 190 economies in 2018 from 141st in 2013²². As evident from the table 3.5, Bhutan is doing well in the indicators of paying taxes, enforcing contracts and trading across borders.

Challenges still remain in getting credit, dealing with construction permits and starting a business indicators. Further, critical challenge remains in improving protecting minority investors and resolving insolvency.

Delay in commissioning of hydropower projects

Hydropower is a major source of revenue and driver of economic growth. It contributes approximately 13 percent to GDP²³ and 10 percent to national revenue²⁴ in 2017. Consequently, delays in commissioning of projects mainly due to geological surprises has direct impact on both growth and domestic revenue.

Projected economic growth in the 12th FYP

The economy is projected to grow between 6-7 percent on average in the 12th FYP period as shown in table 3.6.

Strategies

In order to address the challenges and achieve the NKRA, following strategies have been identified:

- Attracting private and foreign investment by creating enabling business environment particularly improving indicators of ease of doing business in which Bhutan is lagging behind.
- Promotion of high value added CSIs through support to product design and branding, skills development, and facilitate marketing.

Table 3.6: Sector wise growth projections in the 12th FYP

12 th FYP Sector wise growth projections	2018/19	2019/20	2020/21	2021/22	2022/23	Average Growth
Agriculture, livestock and forestry	3.73	2.83	2.83	2.84	2.84	3.01
Agriculture proper	3.98	3.00	3.00	3.00	3.00	3.20
Livestock production	3.64	3.09	3.09	3.09	3.09	3.20
Forestry and logging	3.22	2.00	2.00	2.00	2.00	2.24
Industry	4.51	3.91	3.32	2.15	1.68	3.12
Mining and quarrying	14.00	14.00	9.74	4.97	4.00	9.34
Manufacturing	10.27	10.27	10.27	11.72	13.03	11.11
Electricity, gas and water	5.50	8.86	1.92	-4.35	-4.13	1.56
Construction	-1.61	-7.27	-2.28	0.58	-3.47	-2.81
Services	8.85	10.52	8.25	6.49	7.03	8.23
Wholesale and retail trade, hotel and restaurant	11.36	9.91	9.93	9.94	9.95	10.22
Wholesale and retail trade	12.43	10.19	10.19	10.19	10.19	10.64
Hotel and restaurant	5.94	8.42	8.49	8.55	8.60	8.00
Transport, storage and communications	9.65	9.33	9.33	9.33	9.33	9.39
Financing, insurance and real estate	7.75	7.39	8.97	9.01	9.05	8.44
Finance	8.37	8.06	10.00	10.00	10.00	9.29
Real estate	5.31	4.65	4.65	4.65	4.65	4.79
Community, social and personal services (govt)	6.24	15.88	4.59	-3.29	-2.08	4.27
Private social & recreational services	4.16	4.16	4.16	4.16	4.16	4.16
Real GDP at market prices	5.36	5.44	5.24	4.37	5.09	5.10

Source: MFCC (October 2018)

- Accelerating tourism sector development through diversification of products, services and amenities, intensifying marketing to promote Bhutan as a year round destination for high-end tourism.
- Diversifying into allied hydropower industries and securing energy security for economic growth.

Programmes

The following programmes will be implemented to achieve the NKRA:

1. Enhancing economic growth through sector diversification

This programme aims to accelerate development of priority sectors, which have potential to create wealth, employment and sustainable growth as identified in the Economic Development Policy (EDP) 2016. The programme will increase secondary sector GDP growth rate to 11 percent from 6.7 percent in 2017; establish 100 additional medium and large industries; attract 25 new FDI projects; and create jobs in CSI, hydropower, mining, medium and large industries, and trading sectors. The programme will be implemented by MoEA.

2. Promoting export

This programme aims to diversify exports and increase export volume and markets particularly of non-hydro sector. The programme will be implemented by MoEA.

3. Creating business and investment friendly environment

This programme will improve all 10 indicators of the ease of doing business index to create an enabling business environment. Specifically, the programme aims to improve starting a business and, dealing with construction permits, resolving insolvency and protecting minority investor indicators. The programme will be implemented by MoEA.

4. Enhancing hydropower generation and transmission

This programme aims to generate 2,444 MW by end of the plan period. The programme will also initiate efforts to develop hydropower related services in the region. The programme will be implemented by MoEA.

5. LG programme on poverty reduction, income generation, and job creation

This programme aims to enhance rural economy through establishment of cottage, small and medium scale industries with job creation potential. The programme will be implemented by the LGs.

Box 3.1: Startup & Cottage and Small Industries (CSI) Development Flagship Programme

This programme aims to foster job creation and enhance income generation by enabling creation of new CSIs and improving competitiveness of existing ones. It will focus on building entrepreneurship and innovation culture and promote startups. A total of 1,050 CSIs, both new and existing will be provided with targeted support to help generate additional 4,700 jobs.

Business incubation centres and FabLabs will be established in colleges and technical training institutes to encourage creativity and innovation. Furthermore, platforms will be provided to showcase and identify creative business ideas. The existing Business Startup Centre will be strengthened to provide end-to-end services ranging from business idea generation, mentoring of entrepreneurs, skills development, product design, production enhancement and marketing.

The flagship programme will provide targeted support through product standardisation, packaging, certification and branding to produce and market 20 different products that have market potential.

The programme will also streamline legal and policy frameworks; improve access and explore alternative financing mechanisms; build human capital; and improve business development services to create enabling ecosystem for Start-up and CSI growth,

An indicative outlay of Nu. 1.2 billion has been earmarked for the programme, and implementation will be led by Ministry of Economic Affairs in collaboration with Ministry

of Labour and Human Resources, Ministry of Agriculture and Forests, Royal Monetary Authority, Bhutan Standard Bureau, Bhutan Chambers for Commerce and Industries (BCCI), Local Governments and private sector.

Box 3.2: Sustainable Tourism Development Flagship Programme

This programme aims to increase contribution of tourism to national economy and rural livelihood through balanced regional development and seasonal spread of tourism while providing an enhanced visitor experience of Bhutan as exclusive destination. The programme adopts a three tiered approach to achieve its objective. It will create the necessary policy and regulatory frameworks to support an enabling environment, institutional strengthening and the adoption of safeguards and safety standards. It will identify and implement selected projects to develop diverse tourism packages and a specific component on allied waste management across the country. It will undertake focused end to end activities in five strategically placed Dzongkhags for accelerated tourism development.

The programme targets to increase tourism gross receipts from Nu.10 billion to Nu. 39 billion and direct revenue contribution from Nu.1.6 billion to Nu. 5.5 billion in the next five years. It is expected to create 15,000 additional jobs.

An indicative outlay of Nu.1.566 billion has been earmarked for the programme, and implementation will be led by Tourism Council of Bhutan in collaboration with the LGs, Ministry of Economic Affairs and Private sector.

Box 3.3: Organic Flagship Programme

This programme aims to commercialize organic production. The programme will provide access to bio-inputs and organic seeds, develop an organic value chain and market system, and develop and operationalize organic certification systems. The programme will target the organic production of 8 selected commodities for export and 4 for domestic consumption. The programme aims to produce approximately 254,000 metric tonnes of bio-inputs within five years. It will generate approximately 1,500 new jobs and engage around 33,000 farmers across the country.

An indicative outlay of Nu.1.0 billion has been earmarked for the programme, and implementation will be led by Ministry of Agriculture and Forests in collaboration with the LGs, Ministry of Economic Affairs and other relevant agencies.

Table 3.7: Key Performance Indicators

No.	KPI	Description	Unit	Baseline Year	Baseline	Target	Source
2.1	Non-hydro Revenue growth	Non-hydro revenue is defined as total revenue minus hydro revenue	%	11 th FYP average	6.9	6-7	MFCC
2.2	Distance to Frontier Score (Doing Business)	Distance to frontier in all 10 areas of ease of doing business of the World Bank	Score (0-100)	2018	66.08	>70	Doing Business Report, World Bank



NKRA 3 Reducing poverty and inequality

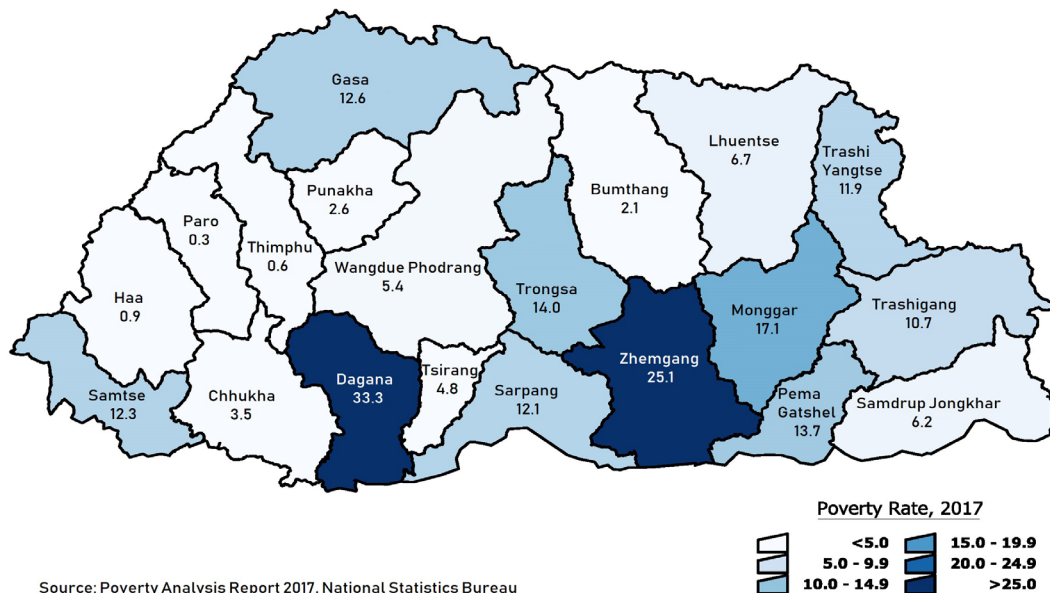
This NKRA aims to improve living conditions of the general population and narrow the gap between the rich and the poor. It aims to eradicate poverty in all its forms through improvements in health, education and living standard. It also aims to create an inclusive society by reducing various forms of inequality of income and consumption and unequal access to critical services such as health and education. Gross National Happiness Commission Secretariat is the lead agency for this NKRA.

Current situation and key challenges

Poverty

Bhutan has managed to bring down incidence of both income and multi-dimensional poverty as a result of broad-based as well as targeted poverty reduction programmes and policies implemented over successive plans. The national poverty rate has been reduced from 23.2 percent in 2007 to 8.2 percent in 2017²⁵. In the same period, rural poverty was brought down to 11.9 percent from 30.9 percent

Figure 3.7: Poverty rates by dzongkhag, 2017



25. NSB, Bhutan Poverty Analysis Report (2017).

and proportion of urban poor reduced from 2 percent to 0.7 percent. Incidence of subsistence poverty or extreme poverty stood at 1.5 percent in 2017. Multi-dimensional poverty was more than halved to 5.8 percent²⁶ in 2017 from 12.7 in 2012²⁷.

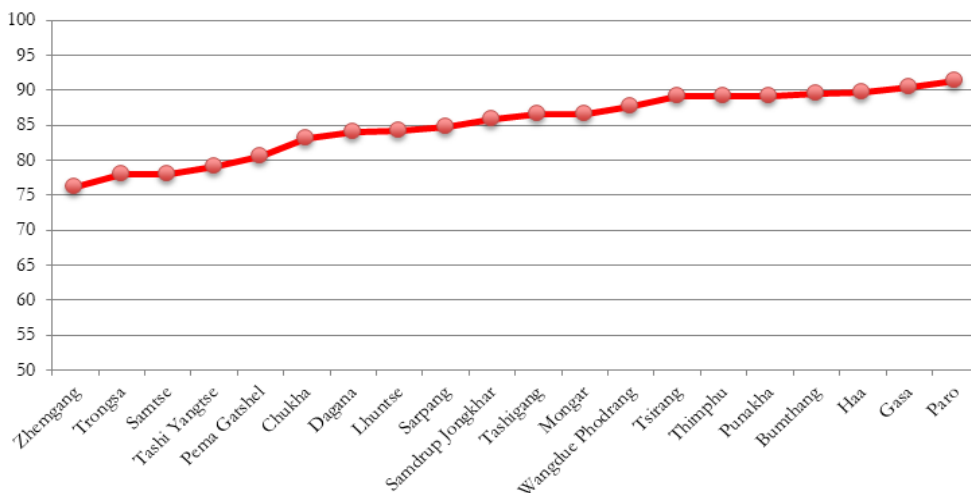
Sustained investments in health and education have improved the lives of people especially in areas of life expectancy, mortality, and literacy. 97 percent of rural households have access to electricity and almost all households (99.5 percent) have access to improved water supply²⁸. About 92 percent of households have access to improved sanitation facilities. The GNH Survey 2015 also found that improvements in standard of living through significant increases in sufficiency levels of housing, assets and income contributed to the increase in the level of GNH.

Despite the progress, Bhutan is still confronted with the last-mile challenge of eradicating

poverty in all its forms. The Bhutan Poverty Analysis Report (PAR) 2017 has found that of the estimated surveyed population of 692,895 persons in the country, 56,855 are estimated to be poor and 10,687 are subsistence poor. At the household level, of the estimated 164,011 households, 9,424 are poor and 1,677 are extremely poor. There is also disparity in poverty levels among Dzongkhags with poverty rates ranging from 0.3 percent to 33.3 percent. Poverty in rural areas at 11.9 percent is higher than urban areas at 0.8 percent. About 97 percent of the poor reside in rural areas and among the extremely poor, practically everyone resides in rural areas. It is important to note that from the 8.2 percent of monetary poor, 7.2 percent are not multi-dimensional poor and from the 5.8 percent of the multi-dimensional poor, 4.8 percent are not monetary poor²⁹.

The causes of poverty are numerous

Figure 3.8: Level of satisfaction with standard of living



26. NSB, Poverty Analysis Report (2012).
 27. NSB, Bhutan Multidimensional Poverty Index (2017).
 28. NSB, Bhutan Living Standards Survey (2017).
 29. NSB, Bhutan Multidimensional Poverty Index (2017).

going beyond lack of income, and are self-reinforcing in nature. Shortage of labour due to migration, lack of education, disabilities, and lack of infrastructure are some of the main compounding causes. The diverse characteristics and profile of the poor in Bhutan reveal the need for highly targeted and customised interventions to reduce poverty in the more deprived groups. The Bhutan Multi-dimensional Poverty Index 2017 also found that the incidence of multi-dimensional poverty is determined by a range of factors including age, gender and education level of head of household.

Inequality

Bhutan has always strived to pursue inclusive and broad-based development policies and programmes. For example, the provision of free access to basic public health services and education to all citizens, representing two important social equalisers, have been prioritised since the beginning of development planning in 1961. However, Bhutan's Gini index, which measures the level of income inequality within the country increased to 0.38 in 2017 from 0.36 in 2012. The deterioration of the score calls for assessment of existing policies and programmes to ensure that benefits of development are equitably shared and that inequality stemming from differential access to opportunities and wealth are minimised.

At the household level, inequality can lead to adverse outcomes in education and health outcomes including mental illness, social mobility and level of trust within the community.

In terms of consumption, the mean per capita

expenditure of households in the fifth (richest) per capita consumption quintile (Nu. 17,802) is more than seven times that of households in the poorest per capita consumption quintile (Nu. 2,468) and the income gap is wider between the rural and urban population³⁰. The average annual household income for urban population was 172 percent more than that of rural counterparts.

Strategies

In order to address the challenges and achieve the NKRA, following strategies have been identified:

- *Target the poor:* Groups most vulnerable will be identified and provided to need-based interventions to increase their ability to earn income and improve their overall standard of living. The focus will be on creating income-generating opportunities through skills enhancement and capacity development, ensuring food security and improving overall health and well-being.
- *Continue broad based social investments:* Broad-based social sector programmes in areas of health, education and agriculture shall be implemented by both central agencies and LGs. The focus shall be on enhancing equitable access to social services as well as pursuing improvements in overall quality of services provided.
- *Implement specific policy measures:* Specific policy measures that are pro-poor to reduce inequality shall be pursued. To ensure that Dzongkhags, Gewogs and Thromdes

30. NSB, *Bhutan Living Standards Survey* (2017).

with high incidence of poverty receive adequate resources, poverty shall be used as a criterion to determine resource allocation among LGs. The national minimum wage rate for the national workforce shall be reviewed. Allowances for women in rural areas during initial months of child birth shall also be explored. provision of free nutritious lunch for needy children in identified schools and institutes shall be launched. To provide equitable access, well-equipped permanent mobile

medical teams offering specialist services to unreached pockets and populations will be instituted. Efforts to support the informal sector will also be undertaken.

Programmes

Since poverty and inequality are cross cutting issues, interventions to achieve the NKRA have been mainstreamed into the programmes of other 16 NKRA.

Table 3.8: Key Performance Indicators

No.	KPI	Description	Unit	Baseline Year	Baseline	Target	Source
3.1	Multidimensional Poverty Line	People living below multi-dimensional (health, education and living standard) poverty line.	%	2017	5.8	<5	Bhutan Multidimensional Poverty Index, NSB
3.2	Gini Coefficient	Ratio of income distribution within the country's resident on a scale of 0-1 with 0 representing perfect equality and 1 representing perfect inequality.	Range	2017	0.38	<0.38	Poverty Analysis Report, NSB



NKRA 4 Preservation of culture

This NKRA aims to reinforce efforts in preserving and promoting culture and tradition to strengthen our identity and sovereignty. It takes cognisance of culture as an evolving dynamic force and the need to facilitate continued evolution of traditional values and institutions as a progressive society³¹. Culture and tradition encompass intangible aspects such as knowledge, skills, attitudes, beliefs, music, oral traditions, and festivals in addition to tangible culture, which includes dzongs, temples, arts, antiquities, indigenous food, and sports. Ministry of Home and Cultural Affairs is the lead agency for this NKRA.

Current situation and key challenges

The strong Bhutanese identity, which we are proud of today has been laid on the foundations of a strong Bhutanese culture that has evolved and remained vibrant through centuries. Bhutan continues to uphold its culture while embracing rapid modernisation. The following table shows changes in key variables of cultural domain as captured by the 2010 and 2015 GNH Surveys.

While the overall cultural diversity index has not deteriorated significantly over the last five years, the sector still faces challenges as follows:

Table 3.9: Comparative results of key indicators of Culture domain, 2010 and 2015³²

Sl. No.	Indicators	2010 Results	2015 Results	Change
1	Overall culture diversity and resilience index	11.05	11.01	Dropped by 0.04 points
2	Percent of population who can speak mother tongue 'very well'	95.2	94.9	Dropped by 0.03 points
3	Percent of population who participate in cultural activities	33.2	45.8	Improved by 12.6
4	Proportion of population who perceived <i>Driglam Namzha</i> as very important	93.1	92.2	Dropped by 0.09
5	Proportion of population that possesses skills in at least one of 13 different arts and crafts (<i>zorig chusum</i>)	62.0	62.58	Improved by 0.58

31. RGoB, *Constitution of Kingdom of Bhutan* (2008).

32. CBS&GNHR, *GNH Survey Results Report* (2010 & 2015).

Maintaining vibrancy of intangible culture

Languages, spiritual values, arts and festivals are key components of our rich intangible culture. Ensuring vibrant practice of these aspects of culture in the face of rapid modernisation is a challenge. Some of our local dialects, songs, dances, lozeys, festivals and rituals are on the verge of extinction as there are very few elderly people keeping these traditions alive. The younger generation is either not keen or do not have the skills to continue these traditions. For instance, the *Olekha*, a local dialect spoken in Rukha, Wangdue Phodrang is already extinct. Therefore, documenting, preserving, and promoting intangible cultural heritage has become urgent.

Preserving cultural structures

Many of the rich historical, cultural and spiritual sites which existed for centuries are under continuous threat from both natural and man-made disasters. These monuments are exposed to a range of disasters such as earthquakes, fires, windstorms, and landslides. Conservation, restoration, and making these sites disaster resilient is critical. In addition, meeting the financial resources for restoration and preservation of cultural infrastructure is a recurring challenge.

Strategies

In order to address the challenges and achieve the NKRA, following strategies have been identified:

- Preserving age-old traditional festivals.
- Supporting important historical community-managed lhakhangs.

- Promoting Dzongkha and Dzongkha computing.
- Promoting contemporary arts such as films and music.
- Promoting cultural industries as an economic enterprise.
- Including culture as a criteria for resource allocation to LGs.

Programmes

The following programmes will be implemented to achieve the NKRA:

1. Sustenance and continuity of cultural heritage

This programme aims to undertake preservation and conservation of both tangible and intangible cultural heritage. Based on requirements, new Dzongs and Lhakhangs will be constructed and existing ones maintained and restored. In order to safeguard cultural heritage, the programme will register cultural properties, conduct research, and undertake documentation. Museums and cultural library services will be enhanced. Furthermore, disaster management capacity of cultural heritage sites will be improved. The programme will be implemented by MoHCA.

2. Enhancing spiritual values

This programme aims to promote meditation, monkhood, and spiritualism. The programme will be implemented by Dratshang Lhentshug.

3. Promotion of national language and local indigenous languages

This programme aims to promote use of the national language and other local

dialects. The programme will conduct research, organise national events including awareness programmes and improvement of language contents. The programme will specifically document 18 indigenous dialects native to Bhutan for use and preservation. The programme will be implemented by Dzongkha Development Commission.

4. LG programme on preservation and promotion of culture and traditions

This programme aims to preserve and promote culture and tradition by maintaining tangible cultural heritages such as community lhakhangs and chortens in respective Dzongkhags. The programme will also focus on promotion and preservation of intangible culture such as local songs, dances, folk stories and local festivals. The programme will be implemented by the LGs.

Table 3.10: Key Performance Indicators

No.	KPI	Description	Unit	Baseline Year	Baseline	Target	Source
4.1	People enjoying sufficiency in speaking native language	Population that have met the sufficiency threshold of speaking native language as defined by GNH survey	%	2015	95	≥95	GNH Survey, CBS&GNHR
4.2	People enjoying sufficiency in cultural participation	Population that have met the sufficiency threshold of cultural participation as defined by GNH survey	%	2015	46	>50	GNH Survey, CBS&GNHR
4.3	People enjoying sufficiency in <i>Driglam Namzha</i>	Population that have met the sufficiency threshold of knowledge and practice of <i>Driglam Namzha</i> as defined by GNH survey	%	2015	43	>50	GNH Survey, CBS&GNHR



NKRA 5 Healthy ecosystem

This NKRA aims to maintain efforts to conserve our natural environment to ensure sustainable ecosystem services. Ecosystem services include land, clean water, clean air, and ambient climate that are essential for sustaining life on the planet. Ministry of Agriculture and Forests is the lead agency for this NKRA.

Current situation and key challenges

Environmental conservation is a domain of GNH and it is integrated in every policy and development plan. Adequate legal framework and regulations emphasising sustainable management and utilisation of natural resources have been adopted. Currently, about 71 percent of the total land area of Bhutan is under forest cover with over 50 percent as parks, biological corridors and strict nature reserves. A preliminary estimate of Bhutan's ecosystem services was valued at USD 15.5 billion a year in 2012, ten times more than the country's GDP at that time. The estimate also confirmed that 53 percent of the total ecosystem service benefits is accrued by people outside Bhutan³³. In our efforts to capture benefits that people derive from the natural environment, work on establishing GNH accounts, covering ecological capital, cultural capital, human capital, social and economic capital is being initiated.

Globally, ecosystems are facing degradation to meet growing needs for food, fresh water,

timber, fiber, and fuel³⁴. In Bhutan as well, there is growing evidence indicating that vital ecosystem and the services it provides has been degrading over time. Reports highlight drying of water sources, outbreak of pest and diseases, occurrence of flash floods and landslides, and increasing pressure on biodiversity through developmental activities.

Further, with rapid pace of socio-economic development, pressures on the natural environment is rising. The conversion of forests into other land uses is increasing. Between 2008 and 2014, 9,426 *ha* of state reserved forest land were lost to construction of transmission lines, 5,462 *ha* to farm roads and 5,208 *ha* to long-term land lease³⁵. Moreover, between 2011 and 2012, 153 *ha* of state land were allocated from protected areas and 2,561 *ha* of land from other state land for developmental purposes leading to habitat fragmentation.

Fuel wood accounts for 21 percent of total household energy consumption. Illegal harvesting and wildlife poaching further compound pressure on forest resources and biodiversity. Limited knowledge on population dynamics of key indicator species, geological and hydrological aspects, infrastructure development for nature-based tourism are a constraint.

The National Biodiversity Strategies and Action Plan for Bhutan, 2014 identifies land use

33. An Initial Estimate of the Value of Ecosystem Services in Bhutan, Kubiszewski et al. 2013

34. Millennium Ecosystem Assessment, *Ecosystem and Human Well-being* (2015).

35. RGoB, *Bhutan State of the Nation Report* (2016).

conversion, over exploitation of timber and fuel wood, forest offences and wildlife poaching, unsustainable agricultural practices, pollution, invasive species, human wildlife conflict, climate change, over-grazing, and waste as factors affecting the ecosystem.

Strategies

In order to address the challenges and achieve the NKRA, following strategies have been identified:

- Exploring innovative financing for sustainable management of protected areas.
- Initiating payment for ecosystem services.
- Strengthening research on biodiversity information.
- Promoting traditional knowledge and customary practices in conservation and sustainable use of biodiversity.

Programmes

The following programmes will be implemented to achieve the NKRA.

1. Sustainable natural resources management and utilisation

This programme aims to ensure a holistic, concerted and effective approach towards sustainable use and management of natural resources for economic, environmental and social well-being of the present and future generations. The programme will be implemented by MoAF.

2. Enhanced environmental service delivery

This programme aims to provide effective and efficient environmental services and promote knowledge and awareness on environment issues. The programme

will also ensure that environmental conservation is integrated in economic development process through proper implementation of environment legislations and regulations. The programme will be implemented by the NECS.

3. Strengthening air quality monitoring system

This programme aims to install additional automated air quality monitoring stations to ensure ambient air quality across the country. The programme will be implemented by the NECS.

Table 3.11: Key Performance Indicators

No	KPI	Description	Unit	Baseline Year	Baseline	Target	Source
5.1	Population status of umbrella species (Tiger)	Number of tigers living within the geographical boundaries of the country	Number	2015	103	≥103	Survey Reports, Department of Forest and Park Services, MoAF
5.2	Ambient Air Quality levels(PM ₁₀)	Particulate matter of less than 10 micrometres in diameter (PM10) in Thimphu, and Pasakha. PM10 is generally understood as “repairable dust” that is inhaled by humans.	Annual Average µg/m ³	2016	43 (Thimphu) 275 (Pasakha)	<60 (Thimphu) <120 (Pasakha)	Administrative Data, NECS



NKRA 6 Carbon neutrality, climate and disaster resilient

This NKRA aims to ensure a carbon neutral³⁶ development path and enhance capacity to respond, mitigate and adapt to climate change. It also aims to build resilience and preparedness to respond to disasters thereby reducing losses on human lives, infrastructure and livelihood. National Environment Commission Secretariat (NECS) and Ministry of Home and Cultural Affairs are the lead agencies for this NKRA.

Current situation and key challenges

During the 15th Session of Conference of Parties (COP15) of the United Nations Framework Convention on Climate Change (UNFCCC) in Copenhagen in 2009, the Royal Government of Bhutan committed to remain carbon neutral for all times. Additionally, Bhutan submitted its Intended Nationally Determined Contributions (INDC) in September 2015 towards finalisation of Paris Agreement. This was subsequently ratified by the Parliament further re-iterating Bhutan's pledge to remain carbon neutral.

According to the 2nd Green House Gas (GHG) inventory, Bhutan is a net sink with an estimated sequestration capacity of 6.3 million tons of carbon dioxide (CO₂) per year with an annual emission of 2.1 million tons. Although the highest emission is the agriculture sector, it has

remained constant, with emissions from other sectors such as industrial and transport sectors increasing over the years. Bhutan currently has 71 percent forest cover, and efforts to conserve protected areas are on-going. In 2017, Bhutan for Life (BFL), a transition fund of USD 43.1 million contributed by multilateral and private donors³⁷ has been established to secure the permanent maintenance of Bhutan's protected areas. Bhutan's mountainous terrain and variation in agro-ecological zone renders it vulnerable to impacts of climate change and disasters. There are increasing incidences of forest fires, risk of GLOF, drying up of water sources, crop diseases, windstorm and erratic and high intensity of rainfall. In addition to these climate induced disasters, Bhutan falls within active seismic zone IV and V of the Indian tectonic plate where zone V comprises the area most at risk. Experts have predicted incidence of a major earthquake in the zone.

Strategies

In order to address the challenges and achieve the NKRA, following strategies have been identified:

- Mainstreaming environment in all sectoral and local government plans.
- Managing waste as a national flagship programme.

36. The term "carbon" refers to GHGs such as Carbon dioxide (CO₂); Methane (CH₄) and Nitrous Oxide (N₂O) and is measured in unit of CO₂ equivalents (CO₂ e). The term "Carbon neutral" means quantity of GHG emission does not exceed the sequestration capacity.

37. WWF, GCF, GEF, BTFFEC, Bhutan Foundation, Bedari Foundation, Jeffrey Boal (PlowShare Group, Inc.) Carmen Busquets, Tammy and Bill Brown, DT Families foundation, Neville and Pamela Isdell, Micheal and Diane Moxness, Nicolas Oltramare, Philipp Family Foundation, Anne Reece, Roger and Victoria Sand.

- Exploring eco-friendly public transport system.
- Enhancing mitigation and adaptation to climate change.
- Strengthening preparedness and response to both natural and man-made disasters.

Programmes

The following programmes will be implemented to achieve the NKRA:

- 1. Climate smart and disaster resilient development**
This programme aims to formulate and implement climate change responsive policies in agriculture and farming. The programme will promote green climate technologies, management of pests, diseases and disaster in the agriculture sector. The programme will be implemented by MoAF.
- 2. Strengthening waste prevention and management**
This programme aims to ensure strict enforcement of the Waste Prevention and Management Act, 2009 and its regulations. The National Integrated Solid Waste Management Strategy, 2014 will be implemented to attain zero waste. The programme will be implemented by the NECS.
- 3. Strengthening water security and enhancing management**
This programme aims to enhance monitoring of environmental flow of major rivers. The programme will be implemented by the NECS.
- 4. Implementation of bilateral and multilateral environment programmes**
This programme aims to ensure that Bhutan fulfils its bilateral and multilateral environmental agreements. It will also facilitate effective implementation of low emission and climate resilient development activities. The programme will be implemented by NECS.
- 5. Enhancement of disaster risk reduction and management**
This programme aims to enhance Disaster Risk Reduction and Management through systematic and holistic approach of managing disaster. It will strengthen disaster preparedness, response and recovery capacity and also institute effective post disaster mechanisms to ensure disaster risk information and resilient development at all levels of the government and community at large. The programme will be implemented by MoHCA.
- 6. Weather and climate services for building climate resilience**
This programme focuses on development of reliable weather and seasonal climate forecasts, develop agro-met, aviation and weather warning services. The programme will be implemented by the National Centre for Hydrology and Metrology (NCHM).
- 7. Hydrology, cryosphere and water resources information and early warning services**
This programme aims to strengthen institutional capacity including infrastructure for regular monitoring, risk assessment and early warning system of natural disaster. The programme will be implemented by NCHM.

8. Promote use of alternative renewable energy

This programme aims to develop renewable energy resources to supplement the national energy needs by harnessing solar and wind energy. The programme will be implemented by MoEA.

9. Safe, reliable eco-friendly and sustainable surface transport

This programme aims to ensure low emission transport system and promote green transport. This programme will be implemented by MoIC.

10. LG programme on carbon neutral, climate and disaster resilient development

This programme aims to undertake strengthening mitigation and adaptation measures through installation of bio-gas plants, promotion of quality and resilient infrastructures, and sustainable land management and agriculture practices. The programme will be implemented by LGs.

Table 3.12: Key Performance Indicators

No.	KPI	Description	Unit t	Baseline Year	Baseline	Target	Source
6.1	National emissions against national sequestration	Tonnes of CO ² equivalent emissions / Tonnes of CO ² forest carbon sequestration	Ratio	2013	1:3	1:3	National reports to UNFCCC
6.2	Agencies with Disaster Management and Contingency Plan	Number of agencies with disaster preparedness / management/ contingency plans developed in the 12 th FYP period	Numbers	2017	2	All Agencies	Administrative Data, Dept. of Disaster Management, MoHCA



NKRA 7 Quality education and skills

This NKRA aims to achieve excellence in student learning outcomes comparable to leading international standards while also reflecting the country's rich culture and traditions. The NKRA will focus on transforming Bhutan's Technical and Vocational Education and Training (TVET) system and position it as a mainstream career choice.

Education and skills under this NKRA refers to early childhood care and development (ECCD), general education, TVET, tertiary education, and non-formal and continuing education. Ministry of Education is the lead agency for this NKRA.

Current situation and key challenges

Bhutan is very close to achieving the goal of Universal Primary Education. As of 2018³⁸, the ANER was 96.8 percent constituting 97.4 percent boys and 96.1 percent girls. The GER for basic education (Class PP-X) stands at 103 percent and GER for secondary (Class VII-XII) at 89.3 percent for the same year. The GER for tertiary education (19-23 years old) within and outside Bhutan was 24.2 percent³⁹ in 2018.

While accessibility has improved significantly, various studies have pointed out the need to urgently address issues about quality of education. In a diagnostic standardised test conducted in 2008, it was found that: (a) Student

learning outcomes were below the minimum expectations of their grade levels, unable to perform basic numeracy and literacy tasks; and, (b) Majority of students were unable to understand core concepts and apply knowledge to real-life situations across grades and subjects⁴⁰. Similarly, the findings of the Education without Compromise Report (2008) showed that children could not master the curriculum within the prescribed time, resulting in high primary school grade repetition. An education quality survey of primary schools in Bhutan (Classes II and IV) conducted by the World Bank in 2007 found that the overall rate of learning was low.

As per the Programme for International Student Assessment for Development (PISA-D) Report 2018, it was found that students in Bhutan in general have higher success rates in items requiring lower cognitive skills, however, significant gap exists in performance in more demanding tasks. Overall, it was concluded that Bhutanese students have performed at par with top PISA-D countries but significantly below Organisation for Economic Co-operation and Development (OECD) average.

Recognising the importance of ECCD programme in laying foundation of human development and lifelong learning, ECCD programmes have been intensified in the country in recent years. The GER for ECCD has increased from 7 percent in 2013 to 23.4 percent in 2018. The concept of

38. MoE, *Annual Education Statistics* (2018).

39. *ibid.*

40. REC, *The Quality of School Education in Bhutan: Realities and Opportunities* (2009).

ECCD is relatively new to Bhutan, and there is a need to further expand ECCD programme to reach out to all children to set strong foundation for improving educational outcomes.

Enrolling the un-reached group of children continues to remain a challenge. It is estimated that in 2018, about 3.2 percent or close to 2,840 primary age children (6-12 years old) were still out of school or were not enrolled in any form of structured learning. This group of children is assumed to be those in remote and hard-to-reach areas, children of nomadic communities and migrant population, children with learning disabilities whose special learning needs are currently not catered for, and those who have dropped out of schools.

While TVET is gradually gaining popularity in the country, TVET systems have not been able to effectively align with the needs of the economy. This is largely due to challenges such as poor technical and institutional capacity to deliver relevant and quality programmes, weak coordination and collaboration among the key stakeholders, and weak institutional arrangement for education progression for TVET graduates among others. There is also limited intake capacity in Technical Training Institutes (TTIs).

Over the years, remarkable progress has been made in tertiary education. Currently, there are 19 Tertiary Education Institutes (TEIs) offering various higher education programmes to 11,311 students⁴¹. However, low competency of the graduates and high unemployment among university graduates are challenges confronting tertiary education⁴². It was also noted that the TEIs do not adequately prepare graduates to become entrepreneurs nor offer relevant courses based on business needs.

Bhutan is faced with dual challenge of high youth unemployment and an increasing number of youth entering the labour market⁴³. Youth unemployment was estimated at 12.3 percent⁴⁴ and large number of university graduates were unable to find employment. It is projected that 62,743 youth will enter the labour market over the 12th FYP period. Therefore, it is vital to ensure that the Technical Training Institutes (TTIs) and TEIs have the required capacity to provide relevant and quality post-secondary education and training to address the high youth unemployment issue. Bhutan Education Blueprint (2014-2024) aims to enrol at least 20 percent of the students at higher secondary level in technical and vocational education courses by 2024. Currently, the combined annual intake capacity of the six TTIs, two institutes for *Zorig Chusum*, and one institute for tourism and hospitality in the country, is just over 800 students⁴⁵.

Only about seven percent of class X passed students take up TVET courses. In comparison, countries such as Singapore, Finland, Germany and Australia, more than 40 percent of students completing secondary education choose to enrol in TVET courses. These countries possess well developed TVET systems capable of providing skills that match their respective economies' needs. In addition, TVET system in these countries have clear pathways to progress within the vocational field as well as to transition into general education system. In contrast, in Bhutan, nearly 80 percent of TVET courses are at Certificate level with limited progression opportunities.

Non-Formal Education (NFE) and Continuing Education programme continue to serve as effective lifelong learning programmes in providing basic literacy and functional skills to youth and adult population who missed

41. MoE, *Annual Education Statistics* (2018).

42. MoE, *Tertiary Education Roadmap* (2016).

43. MoLHR, *TVET Blueprint 2016-2026* (2016).

44. MoLHR, *Labour Force Survey* (2017).

45. MoE, *Annual Education Statistics* (2018).

formal education. In 2018, there were 6,017 NFE learners attending basic literacy and post literacy courses in 560 NFE centres. The Royal Government continues to strengthen NFE programme to achieve higher adult literacy rate. The 2017 PHCB report showed increase in literacy rate from 59.5% in 2005 to 71.4% in 2017.

Today, youth comprise about 20 percent of the total population, and they are also most vulnerable to substance abuse, crime and violence, and suicide. Hence, it is critical that GNH values and principles are deeply embedded in the consciousness of the large population of youth. In 2010, the Ministry of Education implemented 'Educating for GNH' programme as a strategy to embrace and advance the vision of GNH through education. The GNH Survey 2015 has shown that 99 percent of population have met the sufficiency threshold of values. However, it was found that the percentage of the youth aged 15-24 who thought that *'lying could never be justified'* decreased to 60 percent in 2015 compared to 80 percent in 2010. The survey also observed incidence of anger and other negative emotions to be highest among younger age groups. Therefore, the survey recommended the need to advance value education in schools and educational institutes.

Strategies

In order to address the challenges and achieve the NKRA, following strategies have been identified:

- Making teaching a profession of choice .
- Strengthening ECCD and primary education.
- Shifting from examination based to holistic and formative assessment.
- Creating pathways between mainstream and vocational education.
- Transforming TVET for sustainable development.

- Strengthening GNH based value education in schools and institutes.

Programmes

The following programmes will be implemented to achieve the NKRA:

1. Improve quality and inclusive school education

This programme aims to provide inclusive education to all children ensuring that no child is left behind irrespective of circumstances such as disabilities, remoteness and economic disadvantage. It is also aimed at providing quality wholesome education by reducing dropouts and repetition. The programme will be implemented by MoE.

2. Strengthen and expand vocational education in schools

This programme aims to enrol 2,500 students in technical and vocational courses in school education system and create pathways between mainstream education and vocational & technical education. The programme will be implemented by MoE.

3. Enhance teacher development and support

This programme aims to provide 80 hours of professional development to each teacher in a year to enhance their knowledge and skills through in-service trainings and workshops at national, dzongkhag and school levels, and will also provide prestigious scholarships and fellowships outside the country. The programme will also ensure efficient deployment of teachers by subject. The programme will be implemented by MoE.

4. Enhance equity and quality of Tertiary Education

This programme aims to ensure equitable access to tertiary education to meet long-term human resources requirement of the country in priority areas. The programme will implement undergraduate scholarship programme both within and abroad, and accredit TEIs by regional and international accreditation bodies. The programme will be implemented by MoE.

5. Improve health and wellbeing of children and youth

This programme aims to implement the school feeding strategy as long-term investment in developing human capital. The programme will also cover various youth value and skill development programmes such as life skill education, counselling, scouting, sports, and establishment of youth centres. The programme will be implemented by MoE.

6. Enhance adult literacy and lifelong learning

This programme aims to provide basic literacy and functional skills to adults, particularly in rural areas who have missed the formal education. It also provides women friendly curriculum to prepare them as local leaders, bring positive impact on child care, healthy habits and natal care. The programme will also help them benefit from socio-economic growth through improved literacy. The programme will be implemented by MoE.

7. Transform technical and vocational education and training

This programme aims to ensure implementation of the priority areas of TVET Blueprint 2016 to improve access, quality and relevance to provide adequate supply of skilled workforce. The programme will be implemented by MoLHR

8. Improve quality and relevance of school curriculum and implementation

This programme aims to reform, revise and update the existing curriculum to meet emerging needs. This will include development of curriculum and assessment policies, and streamlining standards to guide reform and revision of existing curriculum and development of new curriculum. The programme will be implemented by Royal Education Council.

9. Enhance the quality/standard of Examination and Assessment Systems

This programme aims to strengthen assessment and examination system by adopting international system such as PISA. Affiliation with Cambridge for English language testing and development of National Education Assessment will also be the focus of the programme. The programme will be implemented by Bhutan Council for School Assessment and Examinations.

10. Enhance quality and relevance of programmes

This programme aims to offer postgraduate programmes especially at masters and doctoral level. Under this programme, the Royal University of Bhutan (RUB) aims to equip campuses with state of the art facilities for quality learning and comprehensive student support services. The programme will be implemented by RUB.

11. Enhance research, innovation and scholarship

This programme aims to enhance research capacity of the RUB through improvement in research infrastructure, facilities and services, and strengthen partnerships with government agencies and international

.partners. The programme will advocate for a national policy on science, technology and innovation that ensures creation of enabling environment for research. The programme will be implemented by RUB.

12. Promote innovation and entrepreneurship

This programme aims to develop entrepreneurship culture and skills among students to create job opportunities for themselves and others. The programme will be implemented by RUB.

13. Enhance management and professional development programme

This programme aims to develop and deliver high quality and need-based management development programmes for mid-level managers of public sector, local governments, corporate and business sector and civil society organisations. The programme will be implemented by Royal Institute of Management.

14. Enhance quality of medical and health education and skills

This programme aims to enhance quality of medical and health education and skills provided by the Khesar Gyalpo University of Medical Sciences of Bhutan (KGUMSB). This will be achieved through development of infrastructure, expansion of programmes, capacity development of faculty members, promotion of research, and updating existing curriculum to international standard. The programme will be implemented by KGUMSB.

15. Excellence through Sports for All

This programme aims to deliver sports and recreation to all and promote a vibrant sporting culture. The programme will focus on promoting active lifestyle (sports for all), sports participation (events and competitions) and sports excellence (world, continental and regional games). The programme will be implemented by Bhutan Olympic Committee.

16. LG programme on quality education and skills improvement

This programme aims to enhance learning outcomes by improving school infrastructure and facilities, developing skills and knowledge of teachers, and improving learning materials. The programme will be implemented by the LGs.

Table 3.13: Key Performance Indicators

No.	KPI	Description	Unit	Baseline Year	Baseline	Target	Source
7.1	Student's performance in BCSE	Students who score at least 60 percent each in Math, Science, English and Dzongkha in Bhutan Certificate for Secondary Examinations.	%	2017	14	20	BCSEA
7.2	Mean score in the core subjects in PISA participation	Mean score in Reading, Math and Science in the Programme of International Student Assessment participation.	%	2017	Reading: 45.3 Math: 38.8 Science: 45.1 (PISA-D)	Reading: >50 Math: >44 Science: >50	BCSEA
7.3	Graduates from In-country TEIs Employed within one year of graduation	Graduates from In-country Tertiary Education Institutions, who get employed within 12 months after graduation	%	2016	KGUMSB:80 RUB:70 RIM:90 JSW School of Law: NA	KGUMSB:80 RUB:75 RIM:90 JSW School of Law:100	DAHE, MoE
7.4	TVET graduates employed within 6 months to one year of graduation	TVET graduates who get employed within six to 12 months after graduation from TVET Institutes within the country	%	2015-2016	80	90	Administrative Data, Dept. of Technical Education, MoLHR



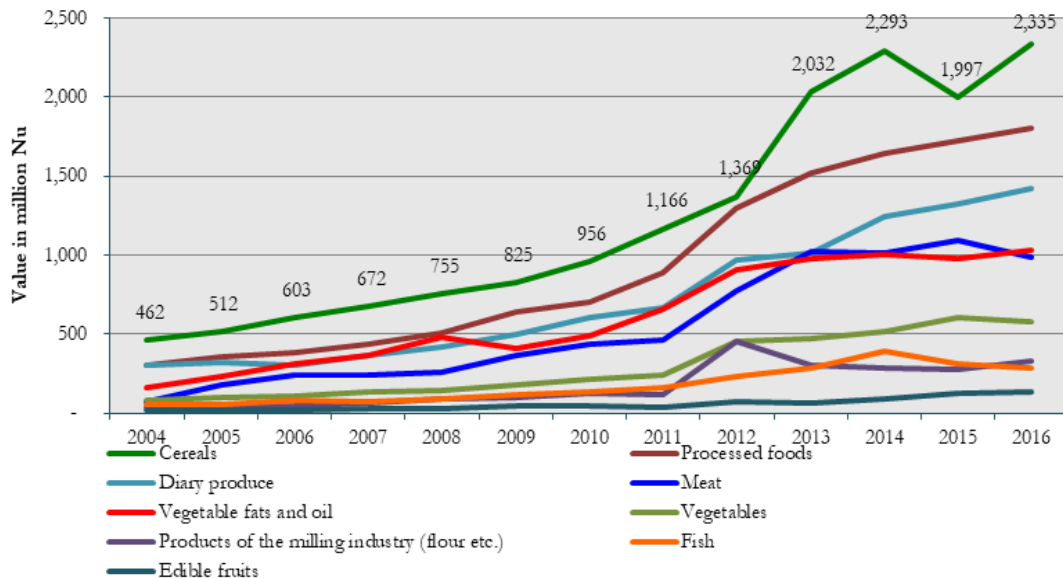
NKRA 8 Food and nutrition security

This NKRA aims to enable our farmers to enjoy returns of their labour from the growing economy. The NKRA will specifically aim to increase food production to enhance food self-sufficiency and nutrition security. Nutrition security will specifically address nutritional needs of women and children in order to reduce prevalence of malnutrition. Ministry of Agriculture and Forests is the lead agency for this NKRA.

Current situation and key challenges

Food self-sufficiency is defined as being able to meet consumption needs (particularly for staple food crops) from own production rather than by buying or importing⁴⁶. Food subsistence is defined as households (and their members) consuming (in real terms) equal to or more than the food poverty line, of Nu. 1,473.45 per person per month⁴⁷.

Figure 3.9: Trend in import of different food items



Source: Bhutan Trade Statistics 2004-2016.

46. Joint SDC-IFPRI-Bhutan Project, Food Security and Food Sufficiency in Bhutan (2010).

47. NSB, Bhutan Poverty Analysis Report (2017).

As per BLSS 2017, 2.7 percent of households experienced food insufficiency for one or more months in a year. Average domestic production of cereals was about 68 percent of the total requirement between 2014 and 2016⁴⁸. Bhutan is only 46.7 percent self-sufficient in rice, 86 percent in maize, 84 percent in vegetables, and meat self-sufficiency is 37 percent. Imports of dairy products like milk powder, cheese and butter amounted to Nu. 1,166 million in 2017. Similarly, 90,000 MT of cereals amounting to Nu. 2,110 million were imported in 2017⁴⁹. However, the country has potential to increase production.

The general nutritional status of the people has been improving consistently. The stunting rate of children aged 0-59 months reduced from 33.5 percent in 2008 to 21.2 percent in 2015 which was categorised as moderate public health significance as per WHO. The prevalence of stunting in children aged 6-59 months fell from 37 percent in 2008 to 22.3 percent in 2015. Anaemia rate for children dropped from 80.6 percent in 2003 to 43.8 percent in 2015⁵⁰. Nonetheless, Bhutan has been experiencing sporadic outbreaks of vitamin deficiencies, particularly Vitamin B1 and B12 since 1998 and occurrences have been recorded almost every year.

The following challenges hamper achieving food self-sufficiency and nutrition security.

Loss of agricultural land and declining productivity

Achieving food self-sufficiency depends on availability of cultivable and productive land.

Between 2010 and 2016 land used for agriculture decreased by 15,453 acres⁵¹. Increasing forest area and development activities will continue to exert pressure on the limited agricultural land.

Outbreak of pest and diseases

Pest and diseases continue to be a problem for the farming communities. As per the GNH Survey 2015, about one in ten people (9.94 percent) reported having left their land fallow in the past one year specifically because of wildlife threats. In 2017, 1,284 MT of paddy, 5,151 MT of maize, 78 MT of buckwheat, 221 MT of vegetables and 1,407 MT of potato were lost to wild animals and pests. On an average, each household spent 48 days and 67 nights guarding crops from wild animal in 2017⁵².

Farm labour shortage

While 57.2 percent of the total labour force are engaged in agriculture sector, 53 percent of farming households reported farm labour shortage as a constraint to farming⁵³. In addition, increasing feminisation of agriculture sector compounded by limited mechanisation is becoming one of the leading constraints. According to PHCB 2017, 59.3 percent of the total employed women work in agriculture sector compared to 34.2 percent male.

48. DoA, MOAF, *Agriculture Statistics* (various years)

49. MoAF, *RNR Statistics* (2017).

50. MoH, *National Nutrition Survey* (2015).

51. DoA, MoAF, *Agriculture Statistics* (2017).

52. *ibid.*

53. DoA, MoAF, *Agriculture Statistics* (2016).

Strategies

In order to address the challenges and achieve the NKRA, following strategies have been identified:

- Encouraging cultivation of fallow land.
- Expansion and strengthening of irrigation system.
- Enhancing farm labour supply.
- Establishing network of post-production and marketing facilities.
- Strengthening price support for agriculture produce.
- Strengthening research and extension services.
- Farm mechanisation.

Programmes

The following programmes will be implemented to achieve the NKRA:

1. Food and nutrition security

This programme aims to enhance self-sufficiency in rice, vegetable, meat, eggs, dairy products, and fruits through assured irrigation and reducing fallow land and strengthening organic agriculture production. The programme will also strengthen animal and plant biosecurity and safety and enhance food safety. The programme will be implemented by MoAF in collaboration with LGs.

2. Value chain and enterprise development

This programme aims to provide critical support measures for commercialisation of agriculture sector. Measures such as enhanced infrastructure, storage, processing and value addition facilities, and facilitating micro credit will be core elements of this programme. The programme will be implemented by MoAF.

3. Research and extension service

This programme aims to undertake adaptive and applied research in the areas of soil fertility, plant protection, post-harvest and market linkages to develop targeted RNR products and services. The programme will be implemented by MoAF.

Table 3.14: Key Performance Indicators

No.	KPI	Description	Unit	Baseline Year	Baseline	Target	Source
8.1	Food Insufficiency in the country	Households that experience food insufficiency in the country in the last 12 months (i.e. did not have enough food to feed all household members).	%	2017	6.2 (8.1-rural, 2.9 urban)	2.4	PHCB/ BLSS
8.2	Stunting	Children <5 years that do not meet the height for age growth standards.	%	2015	21.2	15.14	National Nutrition Survey



NKRA 9 Infrastructure, communication and public services

This NKRA aims to improve road network, better public transport, boost connectivity and deliver effective and efficient public services. Ministry of Works and Human Settlement, Ministry of Information and Communications and Cabinet Secretariat are the lead agencies for this NKRA.

Current situation and key challenges

Public service delivery

Currently, about 174 government-to-citizen and government-to-business services are provided online, and community centres have been established in 200 gewogs to enhance accessibility to these services. In addition, the Government Performance Management System (GPMS) was established in 2014 to ensure effective implementation of the five year plans and programmes through enhanced accountability of public institutions. Reforms have also been initiated to improve performance of the civil service through strengthening of performance management and leadership development. Despite efforts to provide many public services online, it still suffers from delays and inefficiencies. For instance, the GNH Survey 2015 found that while distance to health care centre in Thimphu was the lowest (36.5 minutes), the average waiting time (120.7 minutes) was the highest.

With a high public servant to citizen ratio of 1:13 spread across different public institutions⁵⁴, and the civil service to citizen ratio at 1:25, the bureaucracy is at risk of becoming complacent with weak accountability and coordination. As a small country with a small population, opportunities exist to do things much more efficiently through optimised use of limited resources. In the 12th FYP, the Royal Civil Service Commission will work with government agencies and undertake organisational development exercises where necessary, support greater decentralisation through strategic redeployment of human resources, and build competency framework to professionalise the civil service.

Transport

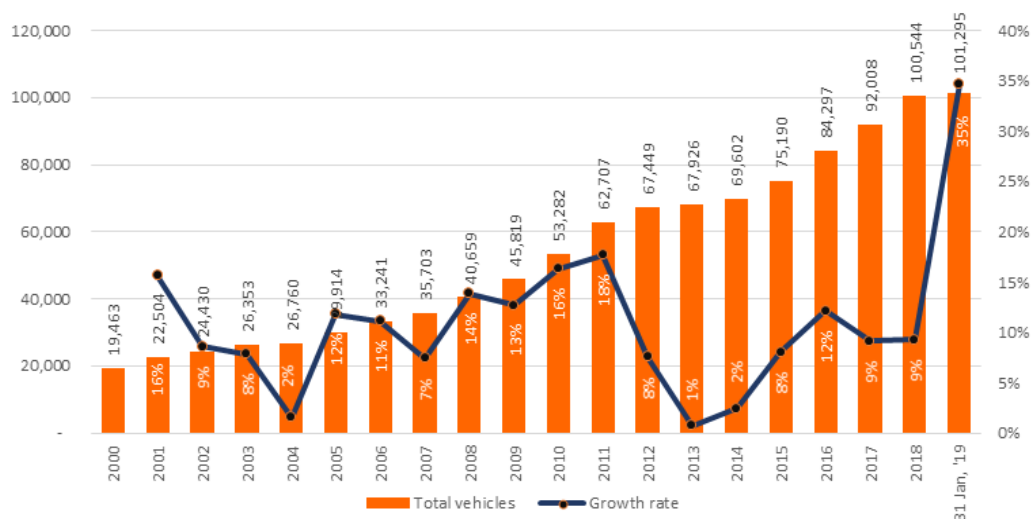
Road network remains the primary means of transportation due to the country's geographical terrain and is key to Bhutan's socio-economic progress. To improve connectivity, 18,395 km of roads have been constructed across the country. A total of 180 Gewog Centre (GC) roads⁵⁵ have been blacktopped and 29 bridges⁵⁶ have been constructed in the 11th FYP. The widening of 385 km of Northern East-West Highway will be completed in the 12th FYP. The construction of the 76 km Gyelposhing-Nganglam National Highway and 24 km Damchu-Chukha by-pass

54. The Royal Address, 111th National Day, Samtse, 2018.

55. GNHC, *Eleventh Five Year Plan Terminal Report* (2018).

56. *ibid.*

Figure 3.10: Trend in vehicle number



Source: CBS & GNHR's illustration from Annual info-comm and transport statistical bulletin, MoIC (2019).

has been completed, and has significantly reduced travel time⁵⁷. As a result of efforts thus far, as per PHCB 2017, 93 percent of households live within 30 minutes of walking distance from the nearest road head.

In addition to road, an efficient and reliable air transport is an integral part of economic growth and a primary means of connecting Bhutan to the external world. Recognising its strategic importance, Paro International Airport has been expanded and improved, and improvements were also made to the domestic airports in Bumthang, Gelephu and Yonphula. Air transport has been further strengthened with establishment of helicopter services.

While significant milestones have been achieved, challenges remain. Owing to the rugged geographical terrain, ensuring reliability

and quality of road network is a challenge. In the 11th FYP, approximately Nu.1,995 million had to be spent on road maintenance alone with an average of Nu. 399 million per year⁵⁸. Bhutan also suffers from limited regional and international connectivity.

Further, reliability of public transport is an issue due to low frequency in the rural areas, while in urban areas inadequate public transport system has led to increasing traffic congestion. The number of vehicles in the country is growing at an annual rate of 9-10 percent and the number of light vehicles on the road has tripled since 2005⁵⁹. Moreover, given that the population of urban areas is set to increase significantly, investing in a reliable public transport system is critical.

57. *ibid.*

58. MoF, *National Budget Report* (2013 to 2018).

59. GNHC, *Bhutan VNR Report* (2018).

Information and communication

Seamless, affordable and reliable information exchanges for all is the foundation for an efficient and interconnected business environment, people-to-people connectivity, efficient resource-use as well as transparent governance. Recognising the potential of information and communications technology (ICT), Bhutan has made significant strides in pursuit of digital transformation. Bhutan's focus in recent years has been on strengthening ICT infrastructure such as fibre optic connectivity, government intranet system and national data centre. Critical infrastructure such as national fibre optics backbone and Internet connectivity are already laid out in all the 20 dzongkhags. 85 percent of the population have access to Internet, more than 95 percent of households have mobile coverage⁶⁰, 0.3 million mobile phone⁶¹ subscriber and many Government to Citizen and Government to Business services are provided online. Further, ICT received a breakthrough with the launch of Bhutan's first satellite-*Bhutan1* on 29th June, 2018. Three Bhutanese engineers have been trained in Space Engineering to build and launch the satellite.

While significant progress has been made in building ICT infrastructure, opportunities exist to optimally leverage ICT to transform public service delivery through improved coordination and integration, adoption of frontier technologies and enhancing digital literacy.

Strategies

In order to address the challenges and achieve the NKRA, following strategies have been identified:

- Streamlining public services through Whole-of-Government approach.
- Strengthening G2C Office.
- Leveraging ICT as an enabler and an industry.
- Exploring alternative mode of transports such as electric vehicles, rope ways, and cycling.
- Ensuring all-weather road network including blacktopping of remaining GC roads.

Programmes

The following programmes will be implemented to achieve the NKRA:

1. Safe, reliable, eco-friendly and sustainable surface transport

This programme aims to improve accessibility, reliability and safety of transport services through strengthened road safety enforcement, inclusive transport services and eco-friendly public transport. The programme will be implemented by MoIC.

2. Management and operation of air transport services

This programme aims to improve air transport services by investing in safety, aeronautical infrastructure and human resource development. The programme will also explore expansion of air transport services by partnering with regional aviation organisations. The programme will be implemented by MoIC.

3. Digital transformation and innovation in the use of ICT and Media

This programme aims to enhance access,

60. GNHC, *Eleventh Five Year Plan Terminal Report* (2018).

61. ITU, *Measuring the Information Society Report* (2017).

reliability and security of ICT systems and infrastructure, and enhance digital and media literacy. The programme will also promote ICT as an industry to generate employment and contribute to economic growth. The programme will be implemented by MoIC.

4. Building and ensuring safe, reliable, secure and competitive aviation services

This programme aims to strengthen regulatory framework, build technical capacity of Bhutan Civil Aviation Authority (BCAA) to enhance safety and security of aviation services. The programme will be implemented by BCAA.

5. Government performance management and public service delivery enhancement programme

This programme aims to ensure effective implementation of 12th FYP programmes and activities through strengthening of GPMS. The programme will be implemented by the Cabinet Secretariat.

6. LG Programme on transparent, effective and efficient public service delivery

This programme aims to improve public service delivery through implementation of Standard of Procedures and Service Standards particularly focusing on reducing Turn-Around-Time of services provided by LGs. The programme will be implemented by the LGs.

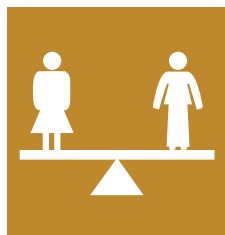
Box 3.4: Digital Drukyul Flagship Programme

This programme aims to leverage ICT for delivering health care, education, business licensing and other critical public services efficiently. An electronic patient information system to centrally manage patient records of all health centers will be developed and about 1000 schools, hospitals and offices will be provided with broadband Internet connection. Issuance of business licenses of all categories, clearances for export and import, and most commonly availed public services such as birth registration, death registration, pension services, marriage certificate, vehicle services, issuance of various permits, construction approvals and utility services, will be streamlined and eased by enabling government agencies to interact and coordinate more efficiently without burdening the citizens.

An indicative outlay of Nu. 2.5 billion has been earmarked for the programme, and implementation will be led by Ministry of Information and Communications in collaboration with Cabinet Secretariat, Ministry of Health, Ministry of Economic Affairs, Ministry of Finance and other relevant agencies including the private sector.

Table 3.15: Key Performance Indicators

No.	KPI	Description	Unit	Baseline Year	Baseline	Target	Source
91	Average satisfaction rating for public services	Satisfaction level of people on the delivery of public services by public agencies. Public services would include birth registration issuance of CID card, issuance of passport, timber permit, security clearance and school admission process.	Scale (1-5)	2017	3.8	≥4	Bhutan Living Standards Survey
92	Inclusive Digital Index	Index as defined by ICT and telecommunication (ITU IDI value);[1]. Mobile cellular telephone subscriptions per 100 inhabitants [2] International internet bandwidth per internet user (Bit/s) [3] Percentage of households with computer [4] Percentage of households with internet access [5] Percentage of individuals using the internet [6] Fixed (wired) broadband subscriptions per 100 inhabitants [7] Active mobile broadband subscriptions per 100 inhabitants.	Index (out of 10)	2016	3.74	6.5	MoIC & BICMA



NKRA 10 Gender equality

The NKRA aims to promote gender equality by creating enabling policies and adequate support and facilities for women and girls. The NKRA will also address the needs of women and girls and remove barriers that limit their opportunities and potential. National Commission for Women and Children (NCWC) is the lead agency for this NKRA.

Current situation and key challenges

Bhutan has made significant progress in closing gender gaps in education, health, labour force and decision-making. Female literacy rate improved from 55 percent⁶² in 2012 to 59 percent⁶³ in 2017, and gender parity in primary education has been achieved. Girls' enrolment at the tertiary level has also improved from 35 percent in 2005 to about 46 percent in 2018 with gender parity at 0.85. Maternal mortality rate has dropped from 255 per 100,000 in 2000 to 89 in 2017⁶⁴. Composition of women in civil service has increased from 32.4 percent in 2012 to 35.43 percent in 2017.

Legal frameworks to promote and protect the rights of women and children including Child Care and Protection Act of Bhutan, 2011; Child Adoption Act, 2012; and, Domestic Violence Prevention Act 2013 have been adopted. The

guideline on Gender Responsive Planning and Budgeting (GRP) was developed in order to incorporate gender equality perspective into budgeting process, policies, plans and programmes.

Despite the achievement of gender parity at the primary level, the gender parity in tertiary education remains a challenge as female enrolment continues to be lower with 85 girls for every 100 boys. Similarly, female enrolment in STEM subjects and vocational education is low compared to male.

While the total labour force participation rate increased from 60.4 percent in 2005 to 63.3 percent in 2017, the labour force participation rate is significantly higher among males at 73.1 percent compared to 52.2 percent for female. The female youth unemployment rate is 13.2 percent which is higher than male youth unemployment rate of 11.2 percent. Majority of the employed female are engaged in agriculture sector with 59.3 percent compared to male at 34.2 percent (PHCB, 2017).

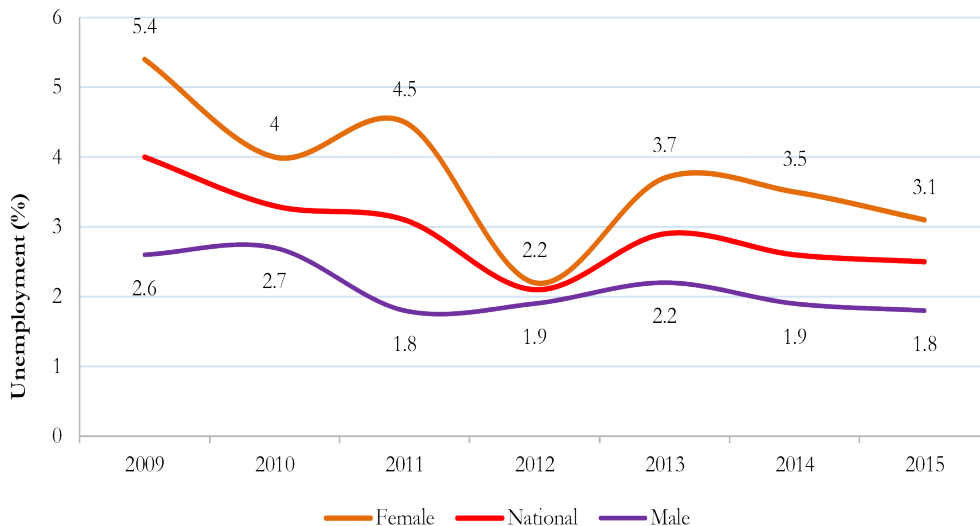
Women's representation at decision-making level is comparatively lower than male counterparts in the Parliament and LG with only 15.27 percent and 11.6 percent respectively. Similarly, there are only 11.2 percent women at

62. NSB, *Bhutan Living Standards Survey* (2012).

63. NSB, *Bhutan Living Standards Survey* (2017).

64. NSB, *Population and Housing Census of Bhutan* (2017).

Figure 3.11: Unemployment rates by gender



Source: Labour Force Survey Report, 2009-2016

executive level in the civil service.

Gender based-violence against women also remains one of the impediments to the realisation of gender equality and women's empowerment. While Bhutan has made significant achievements to eliminate violence against women, studies revealed high tolerance rate of violence against women with 53.4 percent⁶⁵.

Strategies

In order to address the challenges and achieve the NKRA, following strategies have been identified:

- *Implement specific support measures:* Specific support measures that are gender friendly shall be pursued. Establishment of new Crèches and nursing rooms in work places will be

pursued and gender friendly toilets will be constructed in work places and public areas. Allowances for women in rural areas during initial months of child birth and free sanitary napkin to all girl-students shall be explored. In order for women to enable women to own and operate business, targeted entrepreneurship supports and financial incentives will be explored. Protection system for women and children will be strengthened.

- *Mainstream gender into policies, plans and programmes:* As gender is a cross-cutting theme, it will be mainstreamed into policies, plans and programmes of all agencies and relevant interventions shall be formulated across the themes for promoting gender equality and child wellbeing in the country.

65. NCWC, *A Study on Violence against Women/Girls in Bhutan* (2017).

Programmes

The following programmes will be implemented to achieve the NKRA:

1. Enhancing gender equality and strengthen child wellbeing and protection

This programme aims to strengthen gender-friendly working environment and institute an effective and sustainable system for protection and empowerment of women and children. The programme will be implemented by the NCWC.

2. Gender equality promoted, women and girls empowered

This programme aims to promote and strengthen women's participation in leadership and decision-making processes. The programme will also aim to increase women's attendance and completion of non-formal education programmes. Advocacy and awareness on violence against women and children will be implemented, and child care crèches will be established. This programme will be implemented by the concerned agencies and LGs.

Table 3.16: Key Performance Indicators

No.	KPI	Description	Unit	Baseline Year	Baseline	Target	Source
10.1	Women's representation in the Parliament	Number of women parliamentarians in the National Assembly and National Council as percentage of total parliamentarians	%	2018	15.2	>15.2	Admin Data, ECB
10.2	Gender parity index in tertiary education	Proportion of females to males in the tertiary education institutes in Bhutan.	Ratio	2018	0.85	0.89	Annual Education Statistics
10.3	Prevalence of violence against women/girls	Physical and/or sexual intimate partner violence in the last 12 months	%	2017	6.1	<6	Study on Violence Against Women/ Girls in Bhutan



NKRA 11 Productive and gainful employment

This NKRA aims to create better opportunities for assured employment. This will be achieved by creating jobs in agriculture, tourism, mining, IT, hydropower, Cottage and Small Industries, Medium and Large Industries, construction and trading sectors. Supply side constraints shall be addressed by providing relevant skills and trainings to meet the labour market needs. Ministry of Labour and Human Resources is the lead agency for this NKRA.

Current situation and key challenges

Bhutan's labour force participation rate averaged around 63.8 percent between 2013 and 2017. The unemployment rate in 2017 stood at 3.1 percent. Youth unemployment rose from 9.6 percent in 2013 to 12.3 percent in 2017. Female youth unemployment was 13.2

percent and male 11.2 percent. Additionally, unemployment is more prevalent in urban areas at 4.9 percent than 1.9 percent in rural areas. The disaggregated data of youth also illustrate that the unemployed youth are concentrated in urban areas at 17 percent and only 8.6 percent residing in rural areas. As per PHCB 2017, of the total 8,137 unemployed, 2,550 were university graduates and 3,129 were higher secondary graduates, 1,266 were class X graduates. Only 36 unemployed were TVET graduates.

Agriculture sector continues to be the largest employer accounting for 51.3 percent of the total employment, followed by wholesale and retail trade with 8.6 percent, public administration at 8.5 percent, and manufacturing at 7.6 percent. In terms of gender, the percentage of females employed is higher in the agriculture and wholesale and retail trade sectors. Employment

Table 3.17: Labour Market Indicators, 2013-2017⁶⁶

Indicators	2013	2014	2015	2016	2017
Working Age Population	529,177	557,048	558,959	570,231	537,728
Labour Force	345,786	348,742	352,953	354,652	353,847
Total Persons Employed	335,870	339,569	344,293	347,130	342,745
Persons Unemployed	9,916	9,174	8,660	7,521	11,102
Labour Force Participation Rate	65.3	62.6	63.1	62.2	65.7
Unemployment Rate	2.9	2.6	2.5	2.1	3.1
Youth unemployment rate	9.6	9.4	10.7	13.2	12.3

⁶⁶. MoLHR, *Labour Force Survey* (various years).

in agriculture consists mainly of unpaid self-employed small-scale subsistence farming with significant prevalence of underemployment given the seasonal nature of the sector. Figure 3.12 shows employment trend in agriculture sector.

Similarly, service sector employment is mainly wholesale and retail businesses. The manufacturing sector which has potential for regular paid employment with higher wages is currently providing the least jobs owing to low economic diversification and entrepreneurship culture.

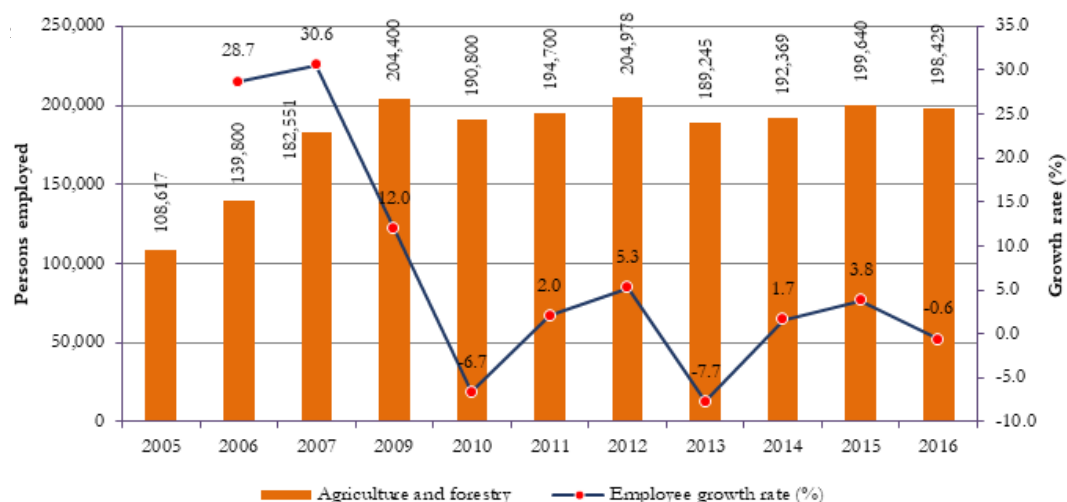
Demographically, Bhutan is a young nation with 45.8 percent of the total population estimated to be below the age of 24 years in 2017 and more than two third of the population falls within working age group. This provides Bhutan with an opportunity to reap the demographic dividend if the right policy measures are adopted. It is estimated that around 67,805 new job seekers of which 93 percent of youth will enter the labour market in the 12th FYP. 41 percent will be with Class XII qualification and 28 percent of the job seekers is projected to be university graduates.

Strategies

In order to address the challenges and achieve NKRA, following strategies have been identified:

- Creating adequate gainful jobs by accelerating tourism sector growth and production and manufacturing CSIs.
- Providing dedicated job placement services.
- *Skilling the workforce:* Provide skills development training to meet labour market needs focussed on tourism and production and manufacturing sector. It will strengthen the technical and vocational education and training system to equip TVET graduates with high quality technical and vocational skills for employability both within and beyond Bhutan.
- *Promoting entrepreneurship:* Create conducive environment to promote creativity, innovation and entrepreneurship through development of start-up ecosystem.
- *Incentivising LGs to create jobs:* To ensure that Dzongkhags with high incidence of unemployment and employment in

Figure 3.12: Employment trend in agriculture sector



agriculture receive adequate resources, unemployment rate and people employed in agriculture shall be used as

criteria to determine resource allocation among local governments.

Table 3.18: Projected job seekers in the 12th FYP

	2018-19	2019-20	2020-21	2021-22	2022-23	Total
Class XII job seekers	3,608	3,234	6,669	6,755	7,651	27,917
University Graduates	3,712	3,894	4,034	3,556	3,761	18,957
Diploma level	700	684	1,303	1,443	1,541	5,671
Certificate level	620	670	731	995	1,142	4,158
Currently Unemployed (Youth)	6,031	-	-	-	-	6,031
Currently Unemployed (Adults)	5,071	-	-	-	-	5,071
Total Jobseekers	19,742	8,482	12,737	12,749	14,095	67,805
Total Youth Jobseekers	14,671	8,482	12,737	12,749	14,095	62,743

Source: Department of Employment & HR, MOLHR. Note: The projection excludes class X passed outs, who are in the age group of 15-18, as all are absorbed into class XI following the removal of class X cut off point from 2019 academic year. Currently unemployed youth and adults (11,102) are those who were unemployed at the time of the survey.

Against the projected job seekers, about 61,811 new jobs are estimated to be created within the 12th FYP period under various sectors as presented below.

Table 3.19: Projected new jobs in the 12th FYP

Sector	New Jobs
RNR Sector	4,287
Mining Sector	250
Medium and Large Industries	975
Trading Sector	15,531
Construction	828
IT and ITES Sector	2,000
Overseas Employment	6,000
Startup and CSIs	4,700
Tourism	15,000
Public sector	12,240
Total	61,811

Programmes

The NKRA also requires linkage with NKRA 2 and NKRA 7. The following programmes will be implemented to achieve the NKRA:

1. Create productive and gainful employment

This programme aims to prepare jobseekers for employment, create enabling and conducive environment for both job seekers and employers.

The programme will be implemented by MoLHR.

2. LG programme on poverty reduction, income generation and job creation

This programme aims to enhance rural economy through establishment of cottage, small and medium scale industries with job potentials. The programme will be implemented by the LGs.

In addition, the Startup & CSI Development Flagship Programme is also expected to create about 4,700 additional jobs in

existing CSIs, Startups and new CSIs within the 12th FYP period.

Table 3.20: Key Performance Indicators

No.	KPI	Description	Unit	Baseline Year	Baseline	Target	Source
11.1	National unemployment rate	The indicator measures the national unemployment rate defined as the proportion of the total unemployed to the total labour force.	%	2017	3.1	2.5	LFS 2017
11.2	Youth unemployment rate	The indicator measures the percentage of unemployed population in the age group of 15 -24 years to the labour force in the same age group.	%	2017	12.3	<6.5	LFS 2017



NKRA 12 Corruption reduced

This NKRA aims to strengthen good governance and contribute towards building a corruption free society. This will be achieved through promotion of ethical leadership, instilling integrity at the individual level and strengthening systems and institutions through collaboration amongst all actors. Anti-Corruption Commission is the lead agency for this NKRA.

Current situation and key challenges

Bhutan has made remarkable progress in preventing and combating corruption in the country. Bhutan was ranked 26th cleanest country among 180 countries and territories with an all-time high score of 68 points out of 100 by Transparency International in 2017. Bhutan's rank improved by eight positions from 33rd in 2012. Furthermore, Bhutan's progress in mainstreaming anti-corruption measures is also evident from its 2016 National Integrity Score of 7.95 out of 10.

However, the 3rd National Integrity Assessment Report revealed that about 80 percent of the respondents perceive problem of corruption to be either *"Very Serious"* or *"Quite Serious"*. It also highlighted that corruption in the form of abuse of function and conflicts of interest are slightly more prevalent than bribery and embezzlement. Similarly, findings of National Corruption Barometer Survey 2016 conducted by Bhutan

Transparency Initiative show that about 32.5 percent of Bhutanese think that the level of corruption has *"increased somewhat."* Also, as per the GNH Survey 2015, only 45.9 percent of the population either rated *"very good/good"* on the government's performance in fighting corruption.

Strategies

In order to address the challenges and achieve the NKRA, following key strategies have been identified:

- Mandatory mainstreaming of corruption reduction measures and KPIs into agencies' and LGs' plans.
- Strengthening corruption prevention measures both at individual and system level.
- Inculcating ethical behaviour among different sections of society and occupational groups.
- Strengthening institutional capacities of key law enforcement agencies.

Programmes

The following programmes will be implemented to achieve the NKRA:

1. **Enhance efficiency, effectiveness and credibility of ACC**

This programme aims to transform ACC

and its key stakeholders into highly efficient and responsive institutions that command high degree of public trust and confidence through enhancement of professionalism, credibility, and institutional capacity. The programme will be implemented by ACC.

2. Enhance mainstreaming of integrity and anti-corruption measures in agencies

This programme aims to mainstream anti-corruption measures through promotion of transparency, accountability and integrity in all agencies including corporations and non-governmental organisations to

achieve zero tolerance to corruption. The programme will be implemented by ACC.

3. Improve public sector performance

This programme aims to ensure value for money and accountability, transparency and effective service delivery by public institutions. The programme will be implemented by RAA.

Table 3.21: Key Performance Indicators

No.	KPI	Description	Unit	Baseline Year	Baseline	Target	Source
121	Corruption Perception Index	Bhutan's score on the Transparency International's Corruption Perception Index	Score	2017	67	69	Transparency International
122	National Integrity Score	Transparency and accountability of public officials and public service delivery on a scale of 0-10 based on the national integrity assessment survey.	Score	2016	7.97	8.5	ACC



NKRA 13 Vibrant democracy and decentralisation

This NKRA aims to strengthen democracy and governance through decentralisation of decision-making, administrative and financial authority with greater accountability. These will be achieved through encouraging people's participation in electoral processes, increased allocation of financial and human resources to the LGs, and developing clear roles and responsibilities between central agencies and the LGs. Election Commission of Bhutan and Ministry of Home and Cultural Affairs are the lead agencies for this NKRA.

Current situation and key challenges

Under the leadership of Their Majesties The Kings, the Royal Government has pursued a proactive policy to devolve institutional powers to the grassroots since the 1980s. The establishment of Dzongkhag Yargay Tshogdu and Gewog Yargay Tshogchung in 1981 and 1991 respectively, and Thromde Tshogde in 2011 with elected representatives in Thimphu, Phuentsholing, Gelephu and Samdrup Jongkhar Thromdes are some of the major decentralisation milestones. The bottom-up planning approaches were introduced in the 9th FYP with the initiation of bottom-up chiwog and gewog based planning. The decentralisation efforts culminated in the adoption of the Constitution of the Kingdom of Bhutan in 2008 and introduction of Democratic Constitutional Monarchy thereafter. Article

22 (Clause 1) of the Constitution of the Kingdom of Bhutan enshrines the ideals of democratic and decentralised governance.

"Power and authority shall be decentralized and devolved to elected Local Governments to facilitate the direct participation of the people in the development and management of their own social, economic and environmental well-being."

Additionally, the LG Act 2009 and LG Amendment Act 2014 translate the constitutional principles of decentralised governance into law and mandates for LGs. The LGs are also empowered through enhanced fiscal decentralisation. All Dzongkhags, Gewogs and Thromdes receive five year resource based on a formulae and are empowered to spend funds based on their priorities as per the LG Act 2009. Further, the Constitution of the Kingdom of Bhutan 2008 states that:

"Local Governments shall be entitled to levy, collect, and appropriate taxes, duties, tolls, and fees in accordance with such procedure and subject to limitations as may be provided by law" - Clause 18 (b).

"Local Governments shall be entitled to adequate financial resources from the Government in the form of annual grants"- Clause 18 (c).

In addition, during the 11th FYP, every Gewog was allocated Nu. 2 million as Gewog

Development Grant (GDG) and similarly, every Dzongkhag was provided Nu.7 million each year as Dzongkhag Development Grant (DDG). Implementation capacity of the LGs needs to be strengthened in view of increased financial resources in the 12th FYP. In order to provide clear guidance on decentralisation, a decentralisation policy is being formulated.

With regard to democracy, sustaining participation in electoral process will continue to be a challenge. The National Council election 2018 witnessed voter turnout of 54.3 percent compared to LG and National Assembly elections at 55.8 and 71.4 percent respectively. Further, GNH Survey 2015 revealed that only 48 percent of people enjoyed sufficiency level in fundamental rights and 51 percent in political participation.

Strategies

In order to address the challenges and achieve the NKRA, following strategies have been identified:

- Sustaining voter turnout.
- Promoting political discourse on pledges.
- Implementing division of responsibilities framework.
- Implementing full-fledged annual grants at gewog level.

Programmes

The following programmes will be implemented to achieve the NKRA:

1. Free and fair elections and electoral management

This programme aims to ensure free and fair elections and electoral management through voter education and awareness programmes for all citizens. Advocacy programmes to encourage women's participation, review and simplification of electoral processes and research on electoral participation shall also be carried out. The programme will be implemented by ECB.

2. Strengthen Election Commission of Bhutan

This programme aims to strengthen Election Commission of Bhutan to ensure free and fair elections. The programme will be implemented by ECB.

3. Enhance decentralisation at Local Governments

This programme aims to formulate and implement decentralisation policy to guide the LGs and provide clarity of roles and responsibilities, thus enhancing their capacity in the delivery of effective and efficient public services. The programme will be implemented by MoHCA.

4. LG programme on democracy and decentralisation enhancement

This programme aims to increase citizen participation in improving service delivery and decision-making process through implementation of citizen report card, and grievance-redressal mechanism and effective conduct of public meetings (*zomdus*). Creation of more user groups, self-help groups and committees, and trainings of the members will be encouraged. The programme will be implemented by the LGs.

Table 3.22: Key Performance Indicators

No	KPI	Description	Unit	Baseline Year	Baseline	Target	Source
131	Voter turnout for the National Parliamentary election	Eligible voters who cast their votes for the General Round of National Assembly election	%	2018	NA 71.46 NC 54.3	NA \geq 71 NC \geq 54	ECB
132	Voter turnout for LG election	Eligible voters who cast their votes for LG elections at <i>Gewog</i> level	%	2016	55.8	>55.8	ECB
133	New public services delegated from Central Agencies to LGs	New public services that are delegated by Central agencies to the Local Governments.	Number	2016	na	15	Administrative data,G2C Office

Box 3.5: Structure of Local Governments

A Dzongkhag has a Dzongkhag Tshogdu (DT). It is the highest decision-making body in the Dzongkhag with a Chairperson and a Deputy Chairperson elected from among its members, and is supported by the Dzongkhag Administration which is headed by the Dzongdag. DT is composed of:

- Gup and Mangmi as two elected representatives from each Gewog;
- One elected representative from the Dzongkhag Thromde;
- One elected representative each from Dzongkhag Yenlag Thromdes; and
- The Dzongdag and all sector heads in the Dzongkhag Administration as observers.

A Gewog has a Gewog Tshogde (GT). It is the highest decision-making body in the Gewog with Gup as the Chairperson and Mangmi as deputy Chairperson, and is supported by Gewog Administration. Gup is also the head of Gewog Administration. GT comprises of:

- Gup and Mangmi; and
- Not less than five and not more than eight elected Tshogpas.

A Thromde 'A' has a Thromde Tshogde (TT). It is the highest decision-making body of the Thromde with the Thrompon as Chairperson and an elected Deputy Chairperson from among its members, and is supported by the Thromde Administration. TT comprises of:

- Not less than seven and not more than ten elected functionaries, including the Thrompon.



NKRA 14 Healthy and caring society

This NKRA aims to create a healthier nation by taking free, equitable and quality healthcare to every Bhutanese. Quality healthcare services include preventive, curative and rehabilitative services to ensure every person, child or adult gets the resources needed to live a long and healthy life. It also includes care needs of vulnerable groups such as senior citizens, child monks and nuns, persons with disabilities and youth in conflict with law to provide targeted care services. Ministry of Health is the lead agency for this NKRA.

Current situation and key challenges

Bhutan has made remarkable progress in key health outcomes over the past several decades achieving most of the Millennium Development Goals as shown in table 3.23.

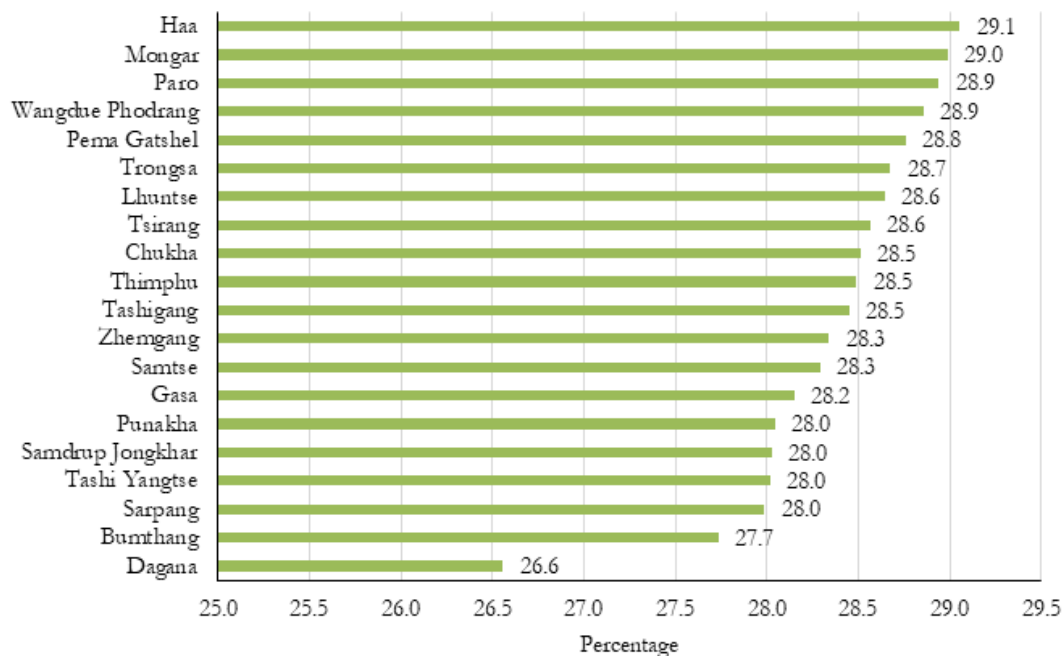
Significant investments have been made in establishing health infrastructure and services. With an average of three health facilities for every 10,000 persons, about 96 percent of the population have access to a health facility within two hours of walking distance. As per GNH Survey 2015, on average, 18 Dzongkhags reported 28 healthy days in a month except for Dagana & Bumthang as shown in figure 3.13.

Table 3.23: Trends in key health indicators

Indicators	1984*	1994*	2000*	2005**	2010***	2012*	2017**
Life expectancy at birth (years)	-	-	66.1	66.3	67.4	68.9	70.2
Crude birth rate	39.1	39.9	34.1	20	19.7	17.9	15.5
Crude death rate	13.4	9	8.6	-	-	6.2	6.7
Total fertility rate	-	5.6	4.7	3.6	2.6	2.3	1.7
Maternal mortality ratio (per 100,000 live births)	777	380	255	-	-	86	89
Infant mortality rate (per 1,000 live births)	102.8	70.7	60.5	40.1	47	30	15
U5 mortality rate (per 1,000 live births)	162.4	96.9	84	61.5	69	37.3	34

Source: *National Health Survey, 1984, 1994, 2000, 2012, **PHCB 2005 & 2017, ***BMS 2010

Figure 3.13: Mean healthy days by dzongkhag



Source: GNH Survey 2015

Table 3.24: Summary of health service coverage

No.	Indicators	Year				
		2012	2013	2014	2015	2016
1	No. of doctors & density (10,000 population)	194 (2.7)	203 (2.8)	244 (3.3)	251 (3.3)	299 (3.9)
2	No. of nurses & density (10,000 population)	736 (10.2)	799 (10.9)	957 (12.8)	1070 (14.1)	1185 (15.4)
3	No. of pharmacists & density (10,000 population)	11 (0.2)	9 (0.1)	14 (0.2)	15 (0.2)	23 (0.3)
4	No. of HAs & density (10,000 population)	578 (8.0)	608 (8.3)	632 (8.5)	643 (8.5)	658 (8.6)
5	No. of Dingtshos (indigenous doctors) & density (10,000 population)	35 (1.0)	35 (0.5)	46 (0.6)	47 (0.6)	54 (0.7)
6	No. of Menpas (indigenous health assistants) & density (10,000 population)	63 (1.0)	82 (1.1)	90 (1.2)	100 (1.3)	105 (1.4)
7	No. and distribution of health facilities (10,000 population)	222 (3.1)	236 (3.2)	262 (3.5)	266 (3.5)	271 (3.5)
8	Ratio of beds per nurses	1.7	1.6	1.3	1.2	1.1
9	Ratio of nurses per doctors	3.8	3.9	3.9	4.3	4.3

Source: Human Resource Division, MoH, Health Information System, MoH.

The Constitution of the Kingdom of Bhutan mandates free access to basic public health to all Bhutanese. Bhutan's total health expenditure is 3.8 percent of GDP, which is predominantly government financed (approximately 75 percent). The government health sector expenditure over the 11th FYP has averaged Nu. 4,024 million per annum with an average expenditure growth of 75 percent. Household out-of-pocket expenditure is relatively low (estimated 25 percent of the total health expenditure).

Despite progress made, challenges remain. The following are the key challenges that need to be addressed in the 12th FYP.

Non Communicable Diseases

One of the most critical causes of concern is the recent emergence of non-communicable diseases (NCD). Incidence of cardiovascular diseases, cancer, respiratory diseases and diabetes has risen considerably, causing 53 percent of the deaths in 2016. The major risk factors are consumption of alcohol, unhealthy diets and physical inactivity.

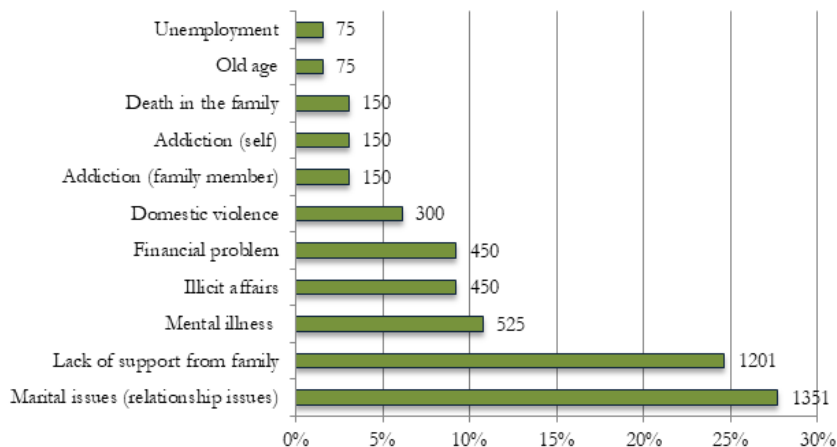
Besides the profound implication on the quality of life of individuals, families and society, cost of treating patients with NCDs is exorbitant. Likewise, trend in mental health problems is on the rise. The incidence of suicide is becoming a public health concern. According to National Suicide Registry of Ministry of Health, a total of 191 individuals completed suicide while 132 attempted suicide in 2017-18. Figure 3.14 presents the reasons provided by respondents who attempted to commit suicide.

Minimal resources have been allocated for promotive and preventive measures with major portion of resources being spent on curative care. Curative services on average account for about 70 percent of the health expenditure while only 7 percent of the spending is for preventive services .

Communicable Diseases

HIV/AIDS cases have increased from 2 in 1993 to 626 in 2017. TB case detection and treatment are progressing well with treatment success rate of 90 percent with

Figure 3.14: Reasons for attempting suicides



Source: GNH Survey 2015

death rate reduced to 14 per 100,000 from 73 in 2000. However, Multi Drug Resistant (MDR) TB, and HIV-TB co-infection are increasing and have become concerns. While Bhutan was declared malaria free in 2016, cross-border transmission is still an issue.

Malnutrition

The stunting rate of children aged 0-59 months has reduced from 33.5 percent in 2008 to 21.2 percent in 2015 which is categorised as *“moderate public health significance”* as per WHO. The prevalence of stunting in children aged 6-59 months has fallen from 37 percent in 2008 to 22.3 percent in 2015. Similarly, anaemia rate for children dropped from 80.6 percent in 2003 to 43.8 percent in 2015. Nonetheless, Bhutan has been experiencing sporadic outbreaks of vitamin deficiencies, particularly Vitamin B1 and B12 and occurrences have been recorded almost every year.

Healthcare Financing

Sustaining healthcare financing in the coming years, with gradual phasing out of external support, will remain a challenge. A review of the health expenditure trends over the last 10 years shows that the current health expenditure has been increasing at an average rate of 16 percent and 10 percent in the 10th and 11th FYP periods respectively⁶⁷. Similarly, current health expenditure grew by almost 75 percent in the 11th FYP period whereas domestic revenue only by 38 percent.

Finding ways to deliver more with less is the only long-term viable solution to

ensure financial sustainability of healthcare system in Bhutan. Streamlining systems and processes, use of technology enabled solutions, strategic deployment of human resources, and investment in preventive healthcare must be prioritised.

Human Resource

The health system suffers from shortage of human resources particularly in specialised fields. Long gestation period for training doctors, difficulty in admissions due to limited slots and high academic requirement make it difficult to train competent and adequate doctors. Bhutan’s three doctors and 14 nurses per 10,000 people in 2016 is comparatively lower than the regional and international standards.

Retaining good doctors and medical specialist has become a challenge. In addition, deployment of adequate female health staff to health facilities remains a challenge.

Health System Efficiency

Although access and coverage at the national level is high, there exist disparity at the disaggregated level. There is inequity in quality of services available at facilities among the same tier. There is disparity between regions in terms of out-of-pocket (OOP) expenditures. The average annual OOP expenditure ranges from Nu. 50 in southern Samdrup Jongkhar to Nu. 5000 in highland Gasa.

The three-tiered referral system needs to be streamlined as lower health tiers are being bypassed, resulting in overburdening of the

67. MoF, Annual Financial Statements (various years).

national and regional referral hospitals, and underutilisation of district hospitals and basic health units. The three-tiered system which was instituted to improve access to health services lacks mechanism to discourage self-referral, particularly to JDWNRH.

Strategies

In order to address the challenges and achieve the NKRA, following key strategies have been identified:

- Curbing non-communicable diseases.
- Upgrading skills of health workers and ensuring adequate need-based deployment.
- Strengthening tertiary healthcare services including referral system.
- Strengthening healthcare services and facilities at dzongkhag and gewog level.
- Automating and digitising patient information for efficient management, tracking and follow-up.

Programmes

The following programmes will be implemented to achieve the NKRA:

1. Governance, health workforce and financing

This programme aims to develop healthcare workforce both in numbers and skills and improve management efficiency. The programme will be implemented by MoH.

2. Health promotion and disease prevention

This programme aims to improve health

status of all Bhutanese through proactive implementation of comprehensive public healthcare services and healthy habits like food, sleep, exercise, meditation etc. The programme will be implemented by MoH.

3. Medical services

This programme aims to improve access to health facilities and strengthen quality and effectiveness of curative and rehabilitative services provided by all health facilities in the country. The programme will be implemented by MoH.

4. Medicines, healthcare technologies and infrastructure

This programme aims to ensure development of health infrastructure and reliable supply of essential inputs such as medicines and healthcare technologies. The programme will be implemented by MoH.

5. Traditional medicine services

This programme aims to enhance access and quality of traditional medicine services in the country. The programme will be implemented by MoH.

6. Improved access to quality tertiary healthcare services

This programme aims to improve quality and access to Tertiary Healthcare services through introduction of new specialised services, improving quality of existing ones, and improving overall efficiency and effectiveness of hospital services. The programme will be implemented by JDWNRH.

7. Enhance quality of medical and health education and skills

This programme aims to increase supply of quality doctors through building of in-country capacity. The programme will be implemented by KGUMSB.

8. Strengthening of medical products regulatory services

This programme aims to ensure availability of safe and quality medicinal products through capacity building of drug regulators and creation of safe use of drugs among general public. The programme will be implemented by Drug Regulatory Authority.

9. Drug demand and supply reduction

This programme aims to reduce supply of narcotic drugs by building capacity of law enforcement agencies and relevant personnel. It will also strives to reduce demand, through awareness programme at schools, training teachers on science of addiction, building capacity of addiction professionals, and educating parents and community on the ill effects of substance abuse. The programme will be implemented by Bhutan Narcotic Control Agency.

10. Strengthening patient safety and quality of health care services

This programme aims to improve quality of services provided by health facilities in the country to ensure quality healthcare outcomes and patient safety. The programme will be implemented by Bhutan Health and Medical Council.

11. Sustaining primary healthcare services in Bhutan

This programme aims to strengthen financial sustainability of healthcare services through effective management of the Bhutan Health Trust Fund. The programme will be implemented by Bhutan Health Trust Fund.

12. LG programme on community health enhancement and water security

This programme will focus on construction, maintenance and improvement of health infrastructure such as Dzongkhag hospitals, satellite clinics, and BHUs. It will also aim to reduce incidences of mother and child mortality, and death due to suicides, NCDs and alcohol. The programme will improve amenities such as 24x7 safe drinking water and construction of pour flush toilets for the poorest households, and improve provision of health services for special needs. The programme will be implemented by the LGs.

Table 3.25: Key Performance Indicators

No.	KPI	Description	Unit	Baseline Year	Baseline	Target	Source
141	Suicide rate	Deaths due to suicide which is defined as an act of killing oneself or death caused by self-directed injurious behaviour with any intent to die as a result of the behaviour.	per 100,000 population	2016	12	<12	Suicide Prevention Action Plan, MoH
142	Premature mortality rate due to NCDs	Total deaths from four NCDs (cancer, diabetes, cardiovascular diseases and chronic respiratory diseases) against the total deaths	%	2017	34	<25	National STEPS



NKRA 15 Sustainable human settlements

This NKRA aims to improve livability, safety and sustainability of human settlements through access to adequate affordable housing, efficient and effective municipal services, and clean and green public spaces for social engagement. Ministry of Works and Human Settlement is the lead agency for this NKRA.

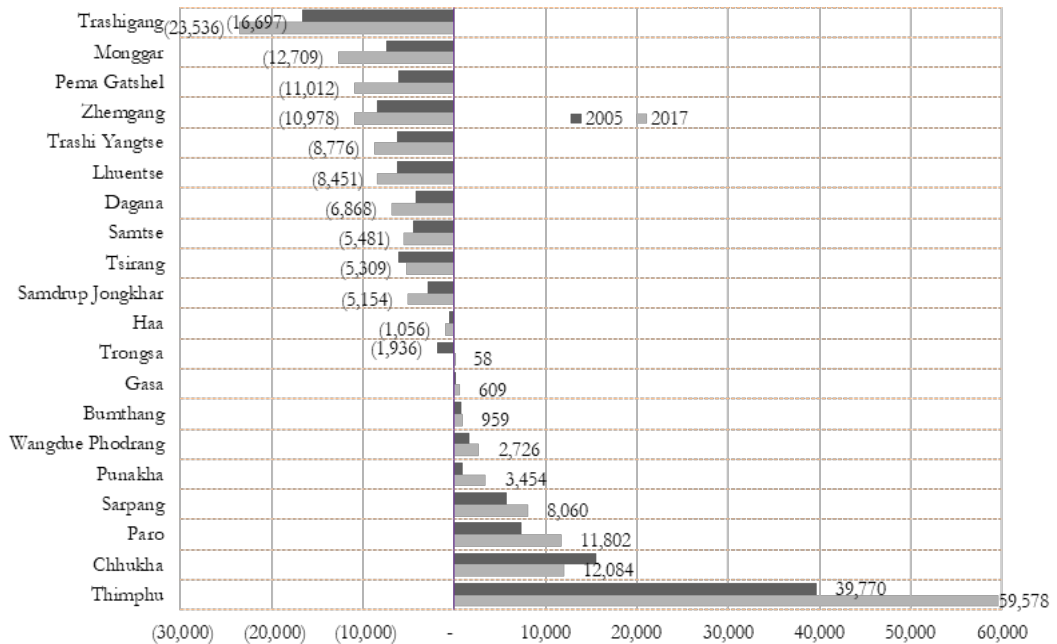
of villages developed around administrative and monastic centres. Patterns and forms of settlements were mostly shaped by availability and topography of land, water and livelihood opportunities. However, with the start of modern development, new forms of settlements based on trade and commerce developed leading to rapid urbanisation and increasing trends of rural-urban migration as shown below.

Current situation and key challenges

Traditionally, settlements in Bhutan consisted

Affordable housing is an integral component of human settlement. Traditionally, housing

Figure 3.15: Cumulative net migrants by dzongkhag



Source: CBS & GNHR's illustration from PHCB 2005 & PHCB 2017.

shortage was not an issue due to the safety net provided by the joint family system. However, with development and increasing rural-urban migration, providing adequate affordable housing has become a critical issue especially in urban centres owing to increasing nuclearisation of families. PHCB 2017 reported that owner-occupied housing units decreased to 50.7 percent in 2017 from 59.1 percent in 2005, while those who rented housing units increased to 34.9 percent, with 62 percent of households in urban areas renting their dwellings. Affordable housing deficit has become a critical issue in urban areas especially for middle and lower income groups.

The 1,134 government constructed housing units and the surge in private investment in housing sector in the recent years have helped narrow the gap between supply and demand for housing. However, housing sector continues to be plagued with high import of materials, machineries and labour leading to an increasing outflow of foreign currency. Moreover, the existing houses which are not disaster resilient

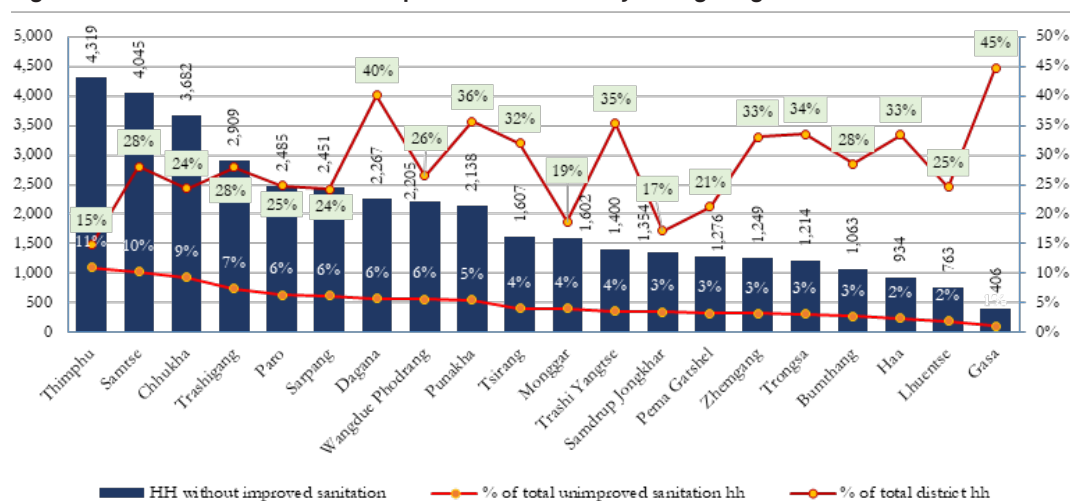
need to be upgraded to ensure safety and provide access to modern amenities where required.

In terms of sanitation facilities, 74.8 percent of households in the country have improved sanitation facilities⁶⁸ as of 2017. The figure 3.16 illustrates the percentage of households without improved sanitation by dzongkhag.

In addition, recreational and learning facilities such as parks and public library have been developed over the past plan period. To enhance safety of urban communities, CCTVs were installed at various locations in Thromdes to curb crime and traffic offenses.

Although efforts to ensure livability, safety and sustainability of human settlement are being pursued, multiple challenges remain. An estimated 10 percent⁶⁹ of Thimphu city's population lives in informal settlements. About a quarter of households (41,039)⁷⁰ lack access to improved sanitation facilities. Waste management is a concern. Solid waste is

Figure 3.16: Households without improved sanitation by dzongkhag



Source: CBS & GNHR's illustration from PHCB 2017

68. NSB, *Population and Housing Census of Bhutan* (2017).

69. GNHC, *Bhutan Vulnerability Baseline Assessment* (2016).

70. NSB, *Population and Housing Census of Bhutan* (2017).

collected and disposed at landfill sites but lacks scientific treatment⁷¹.

In addition, there is need to improve livability through development of clean and green spaces for social engagement, recreation and sports including footpaths. Safety has become an emerging issue with the increase in proportion of people who reported being victims of crime in both rural and urban areas. As per the GNH Survey 2015, the proportion of people who reported being victims of crimes in rural areas increased from 3.3 percent in 2010 to 6.5 percent in 2015, and in urban areas from 4.2 percent to 10.6 percent.

Strategies

In order to address the challenges and achieve the NKRA, following strategies have been identified:

- Promoting green and energy efficient

buildings.

- Mainstreaming measures to reduce vulnerability to disasters.
- Enhancing access to safe, inclusive and green public spaces.
- Promoting affordable housing and homeownership schemes.
- Improving efficiency and effectiveness of Thromde and municipality services.
- Implementing Comprehensive National Development Plan 2030.

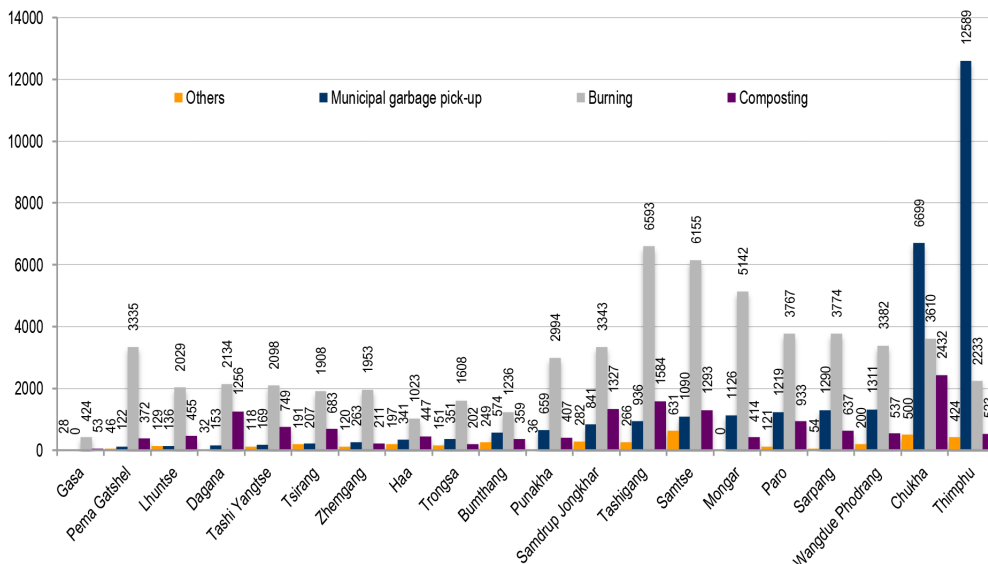
Programmes

The following programmes will be implemented to achieve the NKRA:

1. Enhance sustainability of human settlement

This programme aims to ensure an integrated and regionally-balanced

Figure 3.17: Households practising various modes of waste disposal



Source: GNH Survey 2015. Note: 'Others' mode of waste disposal includes: dumping on open land, dumping in forest, dumping in rivers/forests, and others

71. MoWHS, Bhutan National Human Settlement Strategy (2017).

development. The programme will focus on improving livability through planning, provision of infrastructure, improvement of services and promotion of affordable housing. The programme will be implemented by MoWHS.

2. Pursue green growth in construction sector

This programme aims to improve quality infrastructure and promote green and disaster-resilient construction technologies by professionalising construction sector. The programme will be implemented by MoWHS.

3. Strengthen safe and secure society

This programme aims to maintain law and

order, prevent crimes and protect lives and property to ensure safety and security in human settlements. The programme will be implemented by RBP.

4. LG programme on livability and human settlement development

This programme aims to enhance livability, safety and sustainability of human settlements by improving urban amenities and infrastructures such as roads, footpaths, drainage, drinking water and public transport. The programme will also aim to develop proper settlement plans and improve waste and pollution management systems. The programme will be implemented by the LGs.

Table 3.26: Key Performance Indicators

No.	KPI	Description	Unit	Baseline Year	Baseline	Target	Source
15.1	Households with improved sanitation facilities	Percentage of households that have access to improved sanitation (sewerage network, septic tank with soak pit, on-site treatment facility).	%	2017	74.8	100	BLSS/ PHCB
15.2	Proportion of population that feels safe while walking in the neighbourhood	Proportion of population that feels safe while walking in and around their neighbourhood as defined by GNH Survey.	%	2015	62.72	>63	GNH Survey
15.3	Timeline by which a policy for affordable housing/ home ownership is developed	Timeline by which a policy for affordable housing and home ownership is developed.	Date	NA	NA	2020	GNHC



NKRA 16 Effective justice services

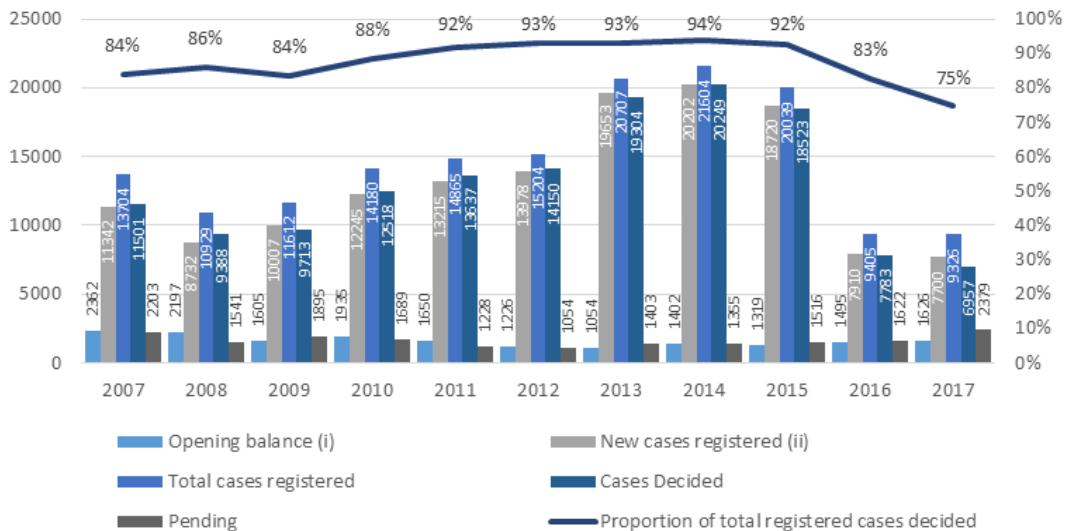
This NKRA aims to strengthen justice services and institutions through harmonisation of conflicting laws, enhanced coordination among justice sector agencies, improving efficiency of judicial services, and ensuring citizens’ awareness on laws and procedures. The NKRA shall also focus on enhancing corrective and rehabilitative measures for reintegration of inmates into the society. Royal Court of Justice is the lead agency for this NKRA.

Current situation and key challenges

Bhutan has maintained an independent judiciary that provides all Bhutanese unimpeded access to law and legal process. To ensure equitable access to justice, an indigent accused is guaranteed with legal aid from the State.

While number of cases registered has decreased since 2014, the number of

Figure 3.18: Summary of case statistics from 2007-2017



Source: Annual Report of Judiciary (2007-2017).

pending cases has been increasing over the years resulting in decrease in the proportion of cases decided as shown in Figure 3.18.

Towards enhancing access to judicial services for all by 2023, efforts have already been made to provide legal services such as marriage certificate, attestation of documents, child adoption, and organ transplant online. Inadequate qualified legal personnel continues to remain a challenge for the Judiciary sector in providing specialised legal services. To address this shortage, two legal institutions have been established in the country. Bhutan National Legal Institute creates awareness on legal knowledge for general public and provides legal education and training for in-service legal personnel. Jigme Singye Wangchuck (JSW) School of Law has been established and offers law degrees with curriculum on international and national laws.

In addition, to resolve disputes amicably and expeditiously, Alternative Dispute Resolution (ADR) system has been promoted. In 2017, about 42.3 percent of the cases were settled through ADR. A Bar Council has been established in order to professionalise legal counsel services.

The country has witnessed an increase in crime rates and crime-related complexities that are becoming resistant to traditional policing methods. The crime rate for 2017 stood at six percent and as per the 2015 GNH Survey Report, 29.6 percent of the respondents reported feeling either '*completely unsafe*' or '*unsafe*' when walking alone at night.

Efforts to institute formalised reformatory and rehabilitative programmes in prisons to

reintegrate inmates and reduce recidivism are being initiated.

Overall, as per BLSS 2017, it was reported that about 75.7 percent of respondents expressed satisfaction with justice services, which includes judicial services, crime services, traffic services, security clearances, fire services and rescue and emergency services.

Strategies

In order to address the challenges and achieve the NKRA, following strategies have been identified:

- Enhancing human resource capacity and redeployment based on case load.
- Improving coordination among judiciary sector agencies to provide end-to-end integrated justice services.
- Harmonising conflicting or inconsistent laws.
- Promoting ADR and mediation within communities.
- Strengthening rehabilitative and reformatory programmes for inmates.

Programmes

The following programmes will be implemented to achieve the NKRA:

1. Strengthen effective delivery of legal services

This programme aims to strengthen delivery of prosecution and legal services of the state by strengthening institutional capacity of Office of

the Attorney General (OAG). The programme will also strengthen coordination and partnership within the justice sector. The programme will be implemented by OAG.

2. Enhance judicial accessibility through improved services and management systems

This programme aims to improve accessibility of justice by strengthening the institution and capacity of judicial service providers, and also promote accessibility to equal justice for all including vulnerable groups. The programme will focus on infrastructure development, strengthening e-judicial services, establishment of specialised courts for environment, family, women and children, and capacity development of legal professionals and support staff. The programme will be implemented by the Royal Court of Justice.

3. Strengthen administration of justice services

This programme aims to improve accessibility to justice by strengthening

capacity of relevant institutions and their services. The programme will conduct trainings on relevant and updated law and legislations, and ADR. Basic legal awareness programmes for general public will be provided. The programme will be implemented by Bhutan National Legal Institute (BNLI).

4. Strengthen capacity of Jigme Singye Wangchuck School of Law

This programme aims to establish JSW School of Law as the country's premier tertiary legal educational institution. The programme will be implemented by JSW School of Law.

5. Strengthen safe and secure society

This programme aims to ensure rehabilitative programmes in prisons for meaningful social reintegration of inmates and reduce recidivism. The programme will be implemented by RBP.

Table 3.27: Key Performance Indicators

No.	KPI	Description	Unit	Baseline Year	Baseline	Target	Source
16.1	Public satisfaction in Justice services	Public satisfaction in Justice services. Justice services includes judicial services, crime services, traffic services, security clearances, fire services and rescue and emergency services.	%	2017	67.77	>76.25	BLSS
16.2	Recidivism	Reduction of recidivists in the prisons.	%	2017	4.7	4.5	RBP



NKRA 17 Sustainable water

This NKRA aims to ensure availability of adequate water for drinking and irrigation. National Environment Commission is the lead agency for this NKRA.

Current situation and key challenges

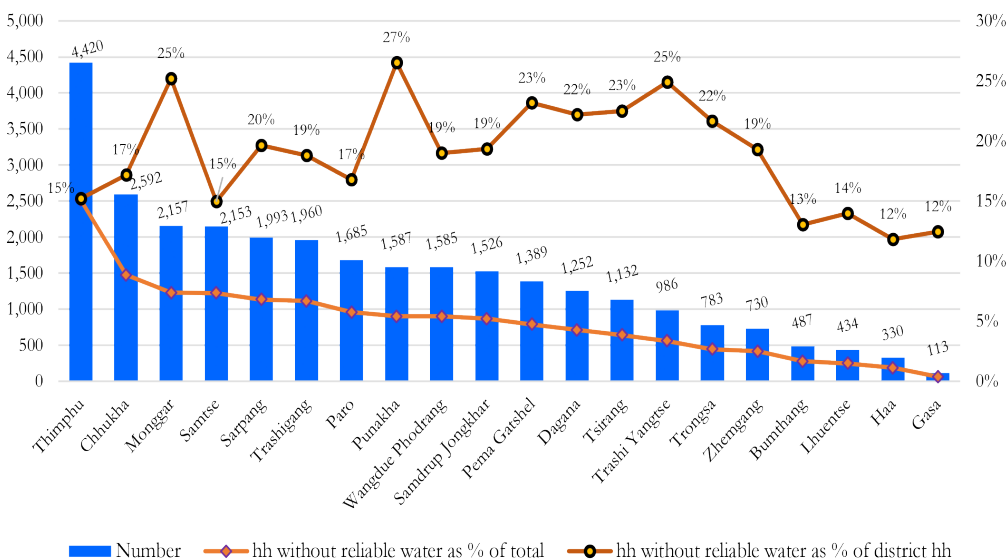
Bhutan has one of the highest per capita water resource availability with 94,500 m³/capita/annum. There are four major river basins, viz. Amochhu (Toorsa), Wangchhu (Raidak), Punatsangchhu (Sunkosh) and Drangmechhu (Manas). The three smaller river basins include

Nyeramachhu, Jomotshangkachhu and Sherichhu⁷².

Although access to safe drinking water has improved over the years, drinking as well as irrigation water shortage is a growing challenge. According to the National Irrigation Master Plan 2016, of the total 105,682.43 acres of cultivated land, 64,248 acres still depends on rain-fed traditional irrigation system.

According to PHCB 2017, only about 81 percent of housing units have reliable water supply during the critical hours of the day (5am-8am, 11am-12pm and 5pm-9pm), and about 1.6

Figure 3.19: Households without reliable water supply by dzongkhag



Source: PHCB 2017

72. NECS, *Integrated Water Resource Management Plan (2016)*.

percent of households still need to travel for at least 30 minutes to the nearest water sources.

As per the assessment carried by MoH, 69 communities comprising of 946 households in the country are reported to have no water source and another 48 communities comprising of 888 households have inadequate water source. Dried-up sources have been reported in 19 communities comprising 336 households. Furthermore, about 43 percent of the total urban population is supplied with 24 hours, 46 percent with eight to 12 hours and 11 percent with less than eight hours⁷³ of drinking water.

The primary reasons identified for intermittent supply of water are poor demand management, inadequate infrastructure, poor distribution network, ineffective enforcement of regulations, and unreliable source.

A major challenge for ensuring continuous water supply is drying up of water sources. Integrated Watershed Management Plan is being implemented in order to enhance sustainability of water resources. Efforts to ensure water safety thus far have been limited to schools and hospitals. While requirement of water safety plans to ensure safety and efficient management of drinking water has been encouraged, effective implementation is a challenge.

Effective implementation of water legislation is necessary to ensure that assigned roles and responsibilities of nodal agencies are implemented. Currently a host of agencies such as MoWHS, MoH, MoAF, NECS, Thromdes, and Dzongkhags are involved in the management of water resources in the country leading to duplication of efforts, weak coordination and dispersed accountability.

Strategies

In order to address the challenges and achieve the NKRA, following key strategies have been identified:

- Building and rehabilitating adequate and climate resilient water infrastructure.
- Improving drinking water quality and safety.
- Providing adequate irrigation water.
- Implementing water legislation and governance.
- Exploring creation of a dedicated water agency.

Programmes

The following programmes will be implemented to achieve the NKRA:

1. Sustainable natural resource management and utilisation

This programme aims to undertake effective management of wetlands and watersheds geared towards ensuring reliable drinking and irrigation water. The programme will be implemented MoAF.

2. Climate smart and disaster resilient development

This programme aims to explore alternative water sources to contribute to ensuring continuous drinking and irrigation water. The programme will be implemented by MoAF.

3. Water, Sanitation and Hygiene (WASH)

This programme aims to develop, monitor and evaluate water safety plans in both rural and urban areas. The programme will be implemented by MoWHS.

73. Urban Water Supply Plan and Update 2014.

4. Enhance sustainability of human settlement

This programme aims to assess and ensure efficiency, effectiveness and sustainability of water services. The programme will be implemented by MoWHS.

5. Weather and climate services for building climate resilience

This programme aims to assess national water resources for ensuring continuity

of water services. The programme will be implemented by NCHM.

6. LG programme on community health enhancement and water security

This programme aims to enhance community health and provide reliable drinking water at LG level. The programme will be implemented by the LGs.

Box 3.6: Water flagship programme

This programme aims to provide access to 24x7 safe drinking water to both rural and urban households. The programme will undertake construction of new water supply schemes, rehabilitation of existing water supply schemes, water source protection and water quality testing and surveillance. The programme will also ensure adequate irrigation water. In order to ensure efficiency and reliability of water supply, creation of an agency for water supply services shall be explored.

An indicative outlay of Nu. 3 billion has been earmarked for the programme. The programme implementation will be led by the National Environment Commission Secretariat (NECS) and Ministry of Works and Human Settlement in collaboration with LGs, Ministry of Health, Ministry of Agriculture and Forest, and Ministry of Finance.

Table 3.28: Key Performance Indicators

No.	KPI	Description	Unit	Baseline Year	Baseline	Target	Source
17.1	Households with access to 24 hours supply of safe drinking water	Both urban and rural households that have access to 24 hours supply of safe/piped drinking water in the dwelling	%	2017	63	100	BLSS
17.2	Chhuzhing area under assured irrigation	Total area of Chhuzhing under assured irrigation with perennial water source (reliable water source, intake and stable irrigation channels and an irrigable command area).	Acre	2015	39,578	48,350	MoAF

3.7 Local Government Key Result Areas

The LG plans are formulated based on the LG Act, the 12th FYP Preparation Guideline, the Local Development Planning Manual, the Assignment and Division of Responsibilities Framework between LGs and Central agencies, Structural Plans and Local Area plans, and the 12th FYP Grants allocation to Dzongkhags, Gewogs and Thromde 'A's along the principles espoused in the strategic framework for "Enhancement of Gross National Happiness".

The LGKRAs are socio-economic development results and targets formulated to achieve one or more relevant AKRAs or NKRAAs. In order to enhance and achieve implementation efficiency and gains, Coordination, Consolidation and Collaboration (Triple C) has been promoted and applied as the fundamental principle and device underpinning all goals, strategies and programmes.

The plan preparation process for the LGs involved participatory approaches, consultations and building consensus with the citizens at the community level. Following the 12th FYP preparatory guideline sensitisations by GNHC, the local administrations led by Dzongdags, Gups and Thrompons respectively formed local level 12th FYP Planning Committees with members comprising elected functionaries and civil servants. These Committees undertook further consultations with citizens and communities at the Chiwog level to discuss developmental issues and priorities and assess needs and aspirations of the people. Furthermore, dialogues were held between

LGs and Central agencies to align their 12th FYP plans and programmes. This was followed by formulation of KPIs, targets, baselines and outputs under the relevant LGKRAs. These were further deliberated at respective Gewog and Thromde Tshogdes and Dzongkhag Tshogdus for finalisation and approval.

There are 10 LGKRAs for 10 dzongkhags and four thromdes (Category-A) and 11 LGKRAs for 10 dzongkhags with additional LGKRA, "Improved and sustained livelihood of highlanders." The LGKRAs are as follows:

LGKRA 1: Gainful employment created and local economy enhanced

LGKRA 2: Food and nutrition security enhanced

LGKRA 3: Community health enhanced and water security ensured

LGKRA 4: Quality of education and skills improved

LGKRA 5: Culture and traditions preserved and promoted

LGKRA 6: Livability, safety and sustainability of human settlements improved

LGKRA 7: Transparent, effective and efficient public service delivery enhanced

LGKRA 8: Democracy and decentralisation strengthened

LGKRA 9: Carbon neutral, climate and disaster resilient development enhanced

LGKRA 10: Gender equality promoted, women and girls empowered

LGKRA 11: Improved and sustained livelihood of highlanders

The LG programmes, strategies and detailed activities can be found in 12th FYP Volume III.

3.8 Fiscal Outlook and Resource Allocation Framework

3.8.1 Fiscal outlook for the 12th FYP

The fiscal policy objective in the plan period will be to ensure sustained economic growth with stability through fiscal consolidation by broadening tax base, rationalising capital and recurrent expenditures. Further, the linkage between annual budget and annual performance targets will be strengthened to improve efficiency and effectiveness of resource utilisation.

Based on the medium-term economic outlook, efforts shall be made to achieve the following targets:

- Maintain average fiscal deficit below 3 percent of GDP.
- Cover at least 80 percent of total expenditure by domestic revenue.
- Maintain tax to GDP ratio at 12 percent.
- Maintain budget variance below 3 percent.
- Maintain non-hydro debt below 35 percent of GDP.

The resource envelope for the 12th FYP has been determined as shown in table 3.26.

Resources

The total financial resource for the 12th FYP is estimated at Nu. 280,773 million of which domestic revenue is Nu. 217,728 million and the grant Nu. 63,044 million. Of the domestic revenue, tax revenue is Nu. 150,017 million and non-tax revenue is Nu. 67,711 million. The estimated revenue is expected to fully cover the current expenditure and finance at least 21 percent of capital expenditure.

On average, the domestic revenue is projected to grow at 10 percent mainly driven by growth in the non-tax revenue followed by tax revenue on account of commissioning of new hydropower projects and new tax measures. The growth of indirect tax will be adversely affected by the GST regime implemented in India. Excise duty refund from India, which contributed about 34 percent of indirect tax will no longer be available.

In order to strengthen domestic revenue mobilisation, a medium-term revenue strategy will be adopted, which will outline the measures to broaden tax base to maintain tax to GDP ratio above 12 percent. Replacing the sales tax regime with modern GST will be critical to achieve the fiscal targets besides introducing new taxes and revising existing tax rates. Preparatory works to introduce GST were initiated towards the end of 11th FYP. In addition, the existing fiscal incentives and tax exemptions will be reviewed and rationalised.

The total grant for the plan period is estimated at Nu. 63,044 million of which external grant is Nu. 61,651 million and internal grant from trust funds is Nu. 1,393 million. Grant constitutes 22.4 percent of the total resources and will finance at least 54 percent of the capital expenditure. Sources of external grant includes the GoI which forms major portion of the external grant. Other sources are the EU, Japan and UN agencies.

Table 3.29: Fiscal Framework for 12th FYP

No.	Particulars	2018/19	2019/20	2020/21	2021/22	2022/23	Total
A	Total Resources	38,299	60,398	61,305	61,120	59,651	280,773
1	Domestic Revenue	33,944	45,750	43,209	46,118	48,706	217,728
i	Tax	25,037	26,315	30,244	33,042	35,379	150,017
ii	Non-tax	8,907	19,436	12,965	13,077	13,327	67,711
	o/w interest receipts	1,426	3,580	3,539	3,532	3,492	15,570
2	Grants	4,355	14,648	18,096	15,001	10,945	63,044
i	External Grants	4,151	14,419	17,681	14,656	10,744	61,651
	o/w Gol	1,718	11,684	12,730	10,530	8,338	45,000
	o/w Others	2,434	2,735	4,951	4,126	2,405	16,651
ii	Internal Grants (Trust Funds)	204	229	414	345	201	1,393
B	Total Expenditure/Outlay	39,620	66,207	68,944	67,961	67,283	310,016
1	Current	28,848	39,496	41,068	41,233	43,250	193,895
i	Primary Current	27,510	35,727	37,121	37,101	38,852	176,311
ii	Interest payments	1,338	3,770	3,947	4,132	4,398	17,584
2	Capital	10,772	26,711	27,876	26,728	24,033	116,121
C	Fiscal Balance	(1,321)	(5,809)	(7,639)	(6,842)	(7,632)	(29,243)
	In percent of GDP	(0.7)	(2.7)	(3.2)	(2.6)	(2.6)	(2.4)
	Primary Balance	17	(2,040)	(3,693)	(2,710)	(3,234)	(11,659)
	In percent of GDP	0.01	(0.95)	(1.56)	(1.04)	(1.12)	(0.9)

Expenditure

The total expenditure for the 12th FYP is estimated at Nu. 310,016 million, an increase of 38 percent over 11th FYP. Of the total, current expenditure is estimated at Nu. 193,895 million and capital expenditure at Nu. 116,121 million. Current expenditure accounts for 62.5 percent of total outlay.

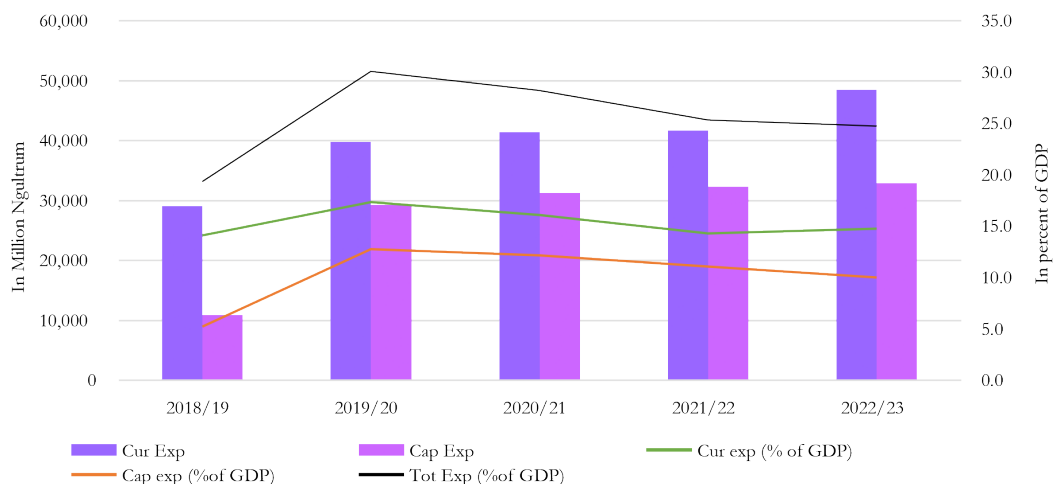
The growth in current expenditure of 69 percent over the plan period is mainly on account of increase in general provisions and interest payments for hydropower loans. Of the total current expenditure, 91 percent is for primary current expenditure and 9 percent is to meet interest payment on outstanding debts.

54 percent of the total capital expenditure will be met through grants and 21 percent through domestic revenue surplus resulting in a gap of 25 percent.

Financing

The fiscal deficit is estimated to be Nu. 29,243 million, which is 2.4 percent of GDP. The fiscal deficit shall be financed through external borrowing mainly from ADB and the World Bank on highly concessional terms. The estimated net external borrowing during the 12th FYP is Nu. 4,074 million. In order to maintain flexibility in the use of the loan proceeds for priority programmes and activities, preference will be to use increasing policy based borrowing instrument such as Development Policy Credit. The remaining deficit will be financed from the domestic market through issuance of government bond and treasury bills. However, to relieve pressure on the domestic credit market, efforts to access new external grant financing windows such as trust funds and green climate fund besides implementing public infrastructure works under Public Private Partnership model will continue.

Figure 3.20: Expenditure projection in the 12th FYP



Public Debt

The total public debt by end of 12th FYP is projected to touch Nu. 249,232 million, which is about 87.6 percent of estimated GDP. Of the total debt, external debt is projected at Nu. 215,867 million which is about 75.9 percent of GDP. Hydropower debt will constitute about 68.4 percent of the total public debt and 80 percent of external debt. With the commissioning of Mangdechhu, Puna I, Puna II & Nikachhu Hydropower Projects in the 12th FYP the external debt stock is projected to decline. The external debt to GDP ratio is expected to improve from 103.4 percent in FY 17/18 to 75.9 percent in FY 22/23. External debt service ratio is expected to remain below the threshold level of 22 percent. Non-hydro external debt by the end of the plan is estimated at Nu. 45,333 million accounting for 15.9 percent of estimated GDP.

3.9 Resource Allocation Framework

The indicative capital outlay in the 12th FYP is

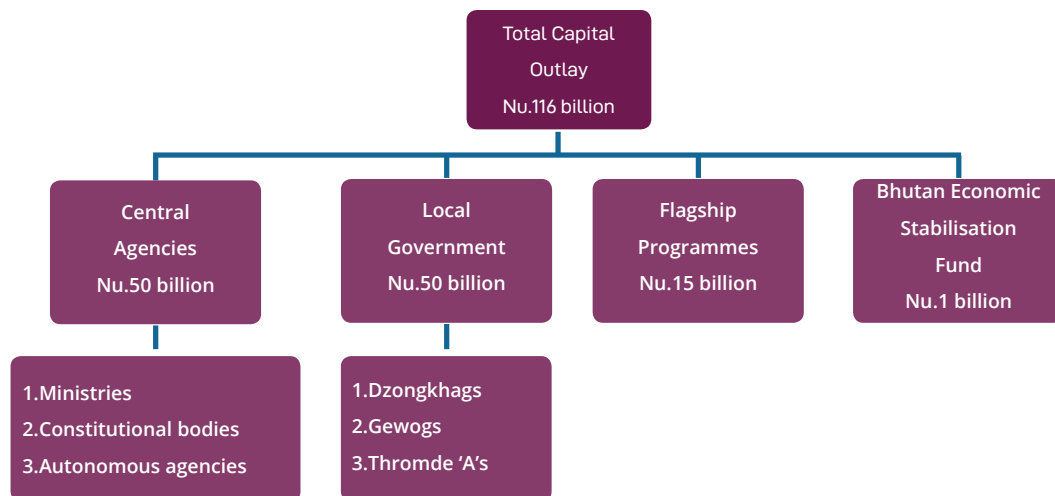
projected at Nu. 116 billion, of which about Nu. 1 billion is to be transferred to BESF. Therefore, the allocation of capital outlay of Nu.115 billion shall be on the following order of priority

- Completion of 11th FYP spill over projects,
- Flagship Programmes,
- Annual capital grants to local governments, and
- Programmes and projects that contribute to NKRAs/AKRAs.

As illustrated below, the indicative capital outlay of Nu. 116 billion would be allocated as follows:

- Nu. 15 billion for flagship Programmes,
- Nu. 50 billion for central agencies,
- Nu. 50 billion for LGs, and,
- Nu. 1 billion for Bhutan Economic Stabilisation Fund.

Figure 3.21: Resource Allocation Framework



3.9.1 Capital Outlay Allocation for Central Agencies

The capital outlay of Nu. 50 billion is allocated to central ministries and autonomous agencies based on the 11th FYP allocation and DoRF between central agencies and LGs. For some of the ministries/agencies, the 12th FYP indicative outlay may be lower than the 11th FYP outlay as activities which were budgeted with the central agencies in the 11th FYP has now been shifted to the LGs in the 12th FYP such as schools, hospitals, farm roads, gewog connectivity roads, dzongkhag roads, and short-term capacity development.

Table 3.30: Indicative outlay for central agencies

Sl. No.	Agencies	Capital
1	Ministries	36,746.59
2	Constitutional Bodies	1,610.00
3	Autonomous Agencies	9,375.00
4	Others	6,470.00
	Total*	54,201.59*

**Over budgeting of Nu 3,201.59 million against the total outlay for central agencies of Nu 50,000 million.
^Others include HRD, Special Priority Activities, CPE and SoE subsidy, and BESF of Nu 1000 million.*

For capital outlay allocation by agencies, refer *Annexure-I*.

3.9.2 Capital Grants Allocation for Local Governments

The capital grants allocation for the LGs in

the 12th FYP has increased by 100 percent to Nu. 50 billion from Nu. 25 billion in the 11th FYP to meet the increasing demand of public services from the LGs.

Capital grants to LGs is allocated based on Resource Allocation Formula (RAF) and Common Minimum Infrastructure (CMI) needs.

Resource Allocation Formula

The RAF is a formula for allocating capital resources among LGs (Dzongkhags, Gewogs, and Thromde 'A's) based on a set of key criteria that are representative of important developmental issues and needs of the LGs. The RAF ensures equitable distribution of resources among LGs.

RAF was introduced in the 10th FYP and continued in the 11th FYP. The RAF for budget allocation to Dzongkhags and Gewogs was based on four criteria (i) population; (ii) geographical area; (iii) poverty; and (iv) transport cost index (from 11th FYP). Budget allocation to four thromdes were need based.

However, based on priority of the Government, the RAF for 12th FYP has been revised. In addition, 12th FYP resources to Thromde 'A's is also being allocated using RAF. The revised formula takes into consideration specific needs/priorities of different levels of LGs – Gewog, Dzongkhag and Thromde as follows:

Gewog – the priority is given to agriculture and livestock (important means of livelihood), access to health and education, water and hygiene and household income. Accordingly, allocation of funds to Gewogs are based on

the criteria as outlined in *Annexure-V*.

Dzongkhag – focus is on developing local economy and job creation, quality of health and education, waste and culture. Accordingly, the criteria used are as outlined in *Annexure-VI*.

Thromde 'A's- focus on urban facilities, safety, water, sanitation, pollution, quality of education and congestion. Accordingly, criteria used are as outlined in *Annexure-VII*.

Common Minimum Infrastructure and Outlay

The concept of CMI is used to reduce disparities in distribution of common public infrastructure and facilities among Dzongkhags, Gewogs, and Thromde 'A's. The required CMI with indicative costing have been determined in close consultation with LGs and Central agencies. For the list of CMIs and outlay for Dzongkhags, Dzongkhag throms, Yenlag throms, Gewogs, and Thromde 'A's, refer *Annexure-VIII*.

The Capital grants of Nu. 50,000 million is allocated to Dzongkhags, Gewogs and Thromde 'A's as follows:

- Nu. 20,019 million is allocated to 20 Dzongkhags. Of which, Nu. 17,000 million is allocated to 20 Dzongkhags based on RAF and Nu. 3,019 million is allocated for CMI of Dzongkhags including Dzongkhag Throms and Yenlag Throms.
- Nu. 19, 855 million is allocated for 205 Gewogs. Of which, Nu. 12,000 million is allocated by RAF to Gewogs and Nu. 7,855 million is allocated for Gewog CMI.
- Nu. 10,126 million is allocated to four Thromde 'A's. Of which, Nu. 10,000 million is allocated by RAF to four Thromde 'A's and Nu. 126 million is allocated for Thromde 'A's CMI.

For capital outlay by Dzongkhags, thromde, and gewogs, refer *Annexure-III*.

Table 3.31: Capital grants allocation to LGs

LGs	Resources to be allocated based on RAF (Nu. in M)	Resources to be allocated for CMI (Nu. in M)	Total (Nu. in M)
Dzongkhags	17,000	3,019	20,019
Gewogs	12,000	7,855	19,855
Thromde 'A's	10,000	126	10,126
Total	39,000	11,000	50,000

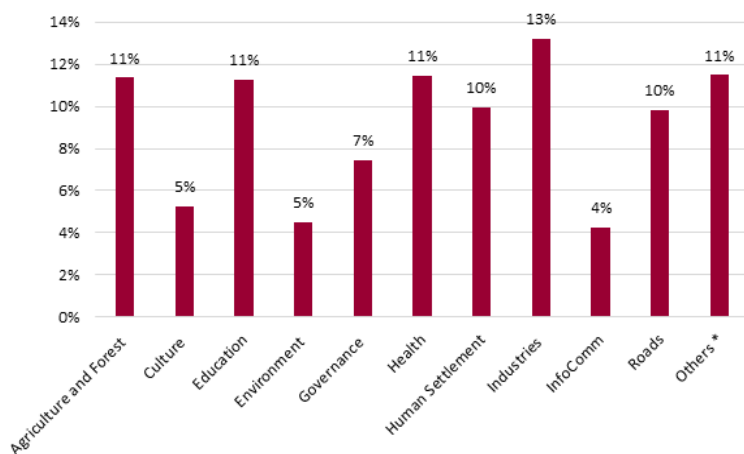
Table 3.32: Capital grants allocation by criteria for LGs

No.	RAF Criterria	Dzongkhag (Nu. in M)	Gewog (Nu. in M)	Thromde 'A's (Nu. in M)	CMI	Total (Nu. in M)
1	Economy	6,800				6,800
2	GNH index	2,550	1,200	1,000		4,750
3	Health	1,700	2,400	3,000	477.14	7,577
4	Education	1,700	600	1,500	200	4,000
5	Culture	1,700		500		2,200
6	Environment	2,550		1,500	126	4,176
7	Resident population		1,800	1,500	454.55	3,755
8	Farming		1,800		5,050	6,850
9	Poverty		1,800			1,800
10	Transportation Cost		2,400		2,589.16	4,989
11	Safety			1,000	2,103.15	3,103
	Total	17,000	12,000	10,000	11,000	50,000

3.10 Capital outlay by sector

The share of the total capital outlay of Nu. 115 billion for sectors (central agencies and local governments) is presented below. For details, refer *Annexure –IV*.

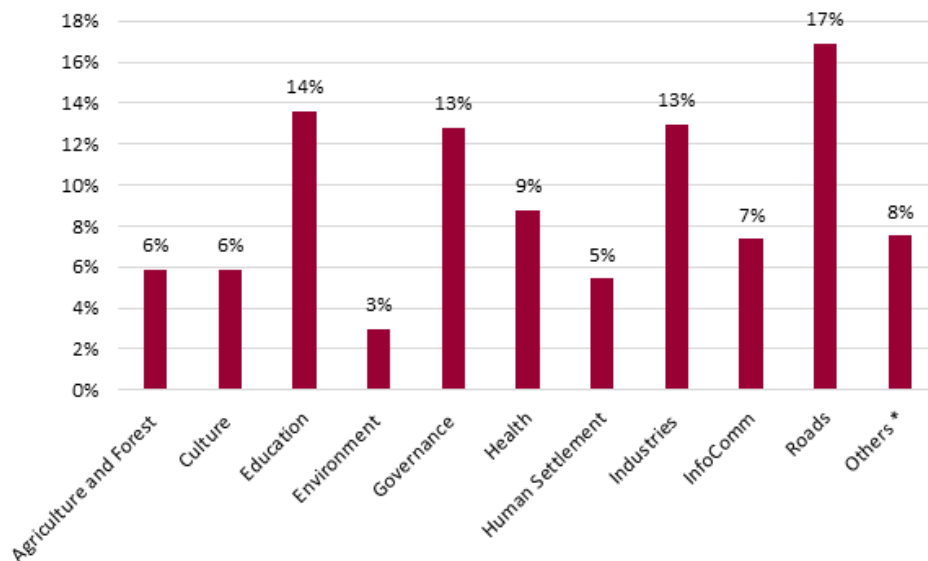
Figure 3.22: Sectoral capital allocation (central, flagships and LGs)



Notes:

*Others include HRD, Special priority activities, CPE and SoE subsidy, Stabilisation fund, and LGs RAF allocation for population and income sub criteria (poverty).

Figure 3.23: Central agencies' capital outlay by sector[^]

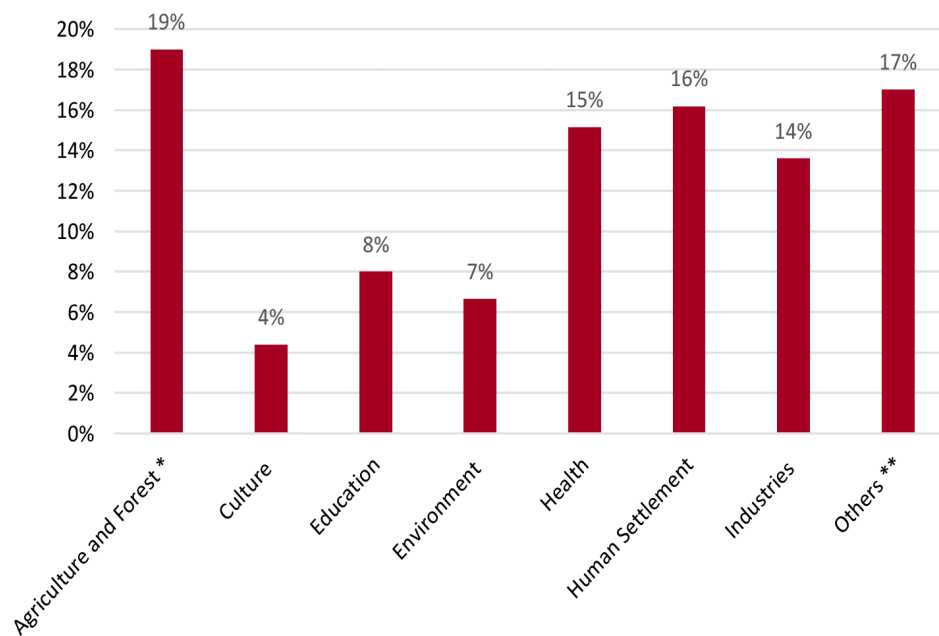


Notes:

[^]Includes flagship outlay of Nu.15 billion.

*Others include HRD, Special Priority Activities, CPE and SoE subsidy, Stabilisation fund.

Figure 3.24: Local Governments' capital outlay by sector[^]



Notes:

[^]Capital outlay based on RAF sub-criteria, and does not include flagship program outlay.

*Forests functions not with LGs.

** Others include RAF allocations for GNH Index and population.

3.11 Plan Implementation, Monitoring and Evaluation

3.11.1 Plan Implementation

The 12th FYP period is from 1st November, 2018 to 31st October, 2023. All Plans and Programmes will be implemented through different budgetary agencies (central agencies and local government). In addition, other agencies including state owned enterprises, corporations, private sector and CSOs are expected to collaborate and contribute in the implementation of the plan based on their competitive advantages. To ensure effective and efficient delivery of results, Coordination, Consolidation and Collaboration (Triple C) shall be the fundamental principle underpinning implementation of the Plan at all levels.

3.11.2 The Division of Responsibilities Framework

In order to ensure better coordination of efforts between Central Agencies and LGs, the Division of Responsibilities Framework will guide annual implementation of 12th FYP programmes, projects and activities. The assigned responsibilities and investment menu in the framework will be monitored for compliance in the 12th FYP. Infrastructure development spilling over to the 12th FYP, will continue as per the 11th FYP project modality till completion.

3.11.3 Annual Performance Planning and Budgeting

AKRAs, LGKRAs, KPIs, central programmes, LG programmes and flagship programmes will be translated into annual performance targets as per requirements of the

Government Performance Management System (GPMS). Annual Budget proposals shall be made to achieve the annual performance targets. Upon approval of annual budget by the Parliament, annual performance targets shall be aligned to the approved budget and finalised for implementation.

3.11.4 Monitoring and Evaluation

The monitoring and evaluation of the 12th FYP shall be as per the National Monitoring and Evaluation System framework. The GNH Commission through the GNHC Secretariat shall carry out overall monitoring and evaluation of 12th FYP as well as make strategic and timely intervention to provide guidance and direction to the sectors. On an annual basis, the Government Performance Management Division (GPMD) under the Office of the Prime Minister, shall monitor the implementation of the plan through the annual performance agreement.

The monitoring of the 12th FYP implementation will be carried out as follows:

- Routine annual performance monitoring by GPMD and GNHC through GPMS.
- Monitoring of NKRAs, AKRAs, LGKRAs and KPIs by GNHC.
- Mid-year review of annual performance targets led by GPMD.
- Annual performance evaluation led by GPMD.
- Mid-term review of Plan by GNHC.

The lead agency for each NKRA is responsible to monitor and report progress of the NKRA, KPIs and the corresponding AKRAs

and AKRA KPIs. The LGs are responsible to monitor and report progress of the LGKRAs and corresponding KPIs.

Policy and Planning Divisions or equivalent divisions/units within respective agencies are responsible for monitoring sector programmes including liaising with the LGs and other central agencies and provide periodic status update on the plan implementation and KPIs to the GNHC.

LGs are responsible to undertake overall monitoring of activities within respective Dzongkhags/Thromdes/Gewogs and report to GNHC.

The 12th FYP shall actively promote social accountability and therefore encourage citizen participation in monitoring development plans happening within their community to ensure greater accountability and results of development programmes.

GNHC shall evaluate the achievement of the 12th FYP NKRA and KPIs including flagship programmes at the end of plan. Agencies, LGs and GNHC may evaluate specific programmes and projects guided by the National Evaluation Policy.

3.11.5 Round Table Meeting

The Round Table Meeting (RTM) is an important forum for interaction with the development partners on socio-economic development priorities and progress. During the Plan period, two RTMs will be held, one towards the beginning of the 12th FYP and another towards the middle of the Plan. Besides the RTM, bilateral consultations, programme and project specific reviews, and monitoring and evaluation meetings will be held between the Royal Government and development partners as per mutually agreed timings.

The 14th RTM for the 12th FYP was held from 13th to 14th March, 2019 themed “enhancing happiness and sustainable development through partnerships,” focusing on strengthening and broadening partnerships for development. More than 50 development partners, bilateral and multilateral, attended the RTM.

ANNEXURE I: Capital Outlay for Central Agencies (Nu. in million)

Sl. No.	Agencies	Indicative Outlay		
		Capital	Current	Total
MINISTRIES				
1	Ministry of Agriculture and Forest	3,050.35	10,896.82	13,947.17
2	Ministry of Economic Affairs	3,400.00	1,383.03	4,783.03
3	Ministry of Education	4,000.00	2,863.42	6,863.42
4	Ministry of Foreign Affairs	750.00	3,773.19	4,523.19
5	Ministry of Finance	700.00	22,038.88	22,738.88
6	Ministry of Health	3,580.00	5,785.78	9,365.78
7	Ministry of Home and Cultural Affairs	3,240.00	10,194.27	13,434.27
8	Ministry of Information and Communications	3,490.00	1,795.58	5,285.58
9	Ministry of Labor and Human Resources	2,800.00	1,352.34	4,152.34
10	Ministry of Works and Human Settlement	11,736.24	3,654.41	15,390.65
	Sub-total	36,746.59	63,737.70	100,484.29
CONSTITUTIONAL BODIES				
1	Election Commission of Bhutan	250.00	708.77	958.77
2	Royal Civil Service Commission	200.00	365.17	565.17
3	Anti-Corruption Commission	210.00	446.39	656.39
4	Royal Audit Authority	200.00	993.40	1,193.40
5	Royal Court of Justice	750.00	1,543.13	2,293.13
	Sub-total	1,610.00	4,056.86	5,666.86
AUTONOMOUS AGENCIES				
1	Bhutan National Legal Institute	50.00	79.74	129.74
2	Jigme Singye Wangchuck School of Law	1,000.00	265.20	1,265.20

Sl. No.	Agencies	Indicative Outlay		
		Capital	Current	Total
3	Royal University of Bhutan	1,200.00	3,766.82	4,966.82
4	Royal Institute of Management	200.00	251.53	451.53
5	National Environment Commission Secretariat	450.00	179.21	629.21
6	National Statistics Bureau	300.00	187.63	487.63
7	Bhutan Olympic Committee	405.00	524.58	929.58
8	National Assembly Secretariat	50.00	630.55	680.55
9	National Council Secretariat	50.00	425.84	475.84
10	Cabinet Secretariat	50.00	211.62	261.62
11	Dzongkhag Development Commission	75.00	103.56	178.56
12	Bhutan Narcotic Control Authority	50.00	144.42	194.42
13	Drug Regulatory Authority	50.00	94.72	144.72
14	Office of Attorney General	50.00	181.61	231.61
15	National Commission for Women and Children	70.00	85.14	155.14
16	Bhutan Standards Bureau	50.00	134.89	184.89
17	Bhutan InfoComm and Media Authority	75.00	89.85	164.85
18	Dratshang Lhentshog	750.00	3,423.03	4,173.03
19	Bhutan Council for School Examinations and Assessment	160.00	656.00	816.00
20	Royal Education Council	300.00	180.03	480.03
21	National Land Commission Secretariat	300.00	861.44	1,161.44
22	Gross National Happiness Commission Secretariat	100.00	202.36	302.36
23	Khesar Gyalpo University of Medical Science of Bhutan	445.00	593.59	1,038.59
24	JDWNR Hospital	900.00	5,601.78	6,501.78
25	National Centre for Hydrology and Meteorology	300.00	473.77	773.77

Sl. No.	Agencies	Indicative Outlay		
		Capital	Current	Total
26	Construction Development Board	55.00	78.11	133.11
27	Bhutan Medical Health Council	15.00	48.79	63.79
28	Royal Bhutan Police*	1,500.00	-	1,500.00
29	Centre for Bhutan Studies and GNH Research	200.00	193.39	393.39
30	Agency for Promotion of Indigenous Crafts**	170.00	-	170.00
31	Civil Society Organisation Authority	5.00	17.19	22.19
32	Tourism Council of Bhutan***	-	348.43	348.43
	Sub-total	9,375.00	20,034.83	29,409.83
OTHERS				
1	Human Resource Development	1,200.00	-	1,200.00
2	Common Public Expenditure	2,000.00	4,364.58	6,364.58
3	Provision for Office Constructions	2,270.00	-	2,270.00
4	Royal Privy Council	-	88.95	88.95
5	General Provisions	-	24,066.59	24,066.59
6	Subsidies, Transfers and Equities	-	13,709.61	13,709.61
7	Debt Servicing	-	13,645.56	13,645.56
8	Bhutan Health Trust Fund	-	35.39	35.39
9	Bhutan Economic Stabilisation Fund	1000	-	1000.00
	Sub-total	6,470.00	55,910.67	62,380.67
	****Grand total	54,201.59	143,740.07	197,941.66

*RBP current budget included under MoHCA.

**APIC current budget included under DCSI, MoEA.

*** TCB capital budget included under Tourism flagship.

****Excluding flagship programme outlay. Over capital budgeting of Nu 3,201.59 million for central agencies.

ANNEXURE II: Flagship Programme Outlay (Nu in million)

Sl. No	Flagship Programme	Lead Agency	Capital Outlay
1	Water	NEC	2,743.00
2	Digital Drukyl	MoIC	2,557.00
3	Startup & CSI	MoEA	1,200.00
4	Tourism	TCB	1,500.00
5	Organic	MoAF	1,000.00
6	Health	MoH	1,000.00
7	Rural Economy	-	2,000.00
8	Education	MoE	1,000.00
9	Waste	PMO	1,000.00
10	Provisions for other flagships	-	1,000.00
	Total		15,000.00

ANNEXURE III: Capital grants allocation by criteria for LGs

(a) Capital Grants Allocation to Dzongkhags (Nu. in Million)

Sl. No	Dzongkhag	RAF	CMI	Total Outlay		
				Capital (RAF+CMI)	Current	Total
1	Bumthang	574.98	161.40	736.38	1,515.19	2,251.57
2	Chhukha	1,042.88	0.00	1,042.88	3,195.36	4,238.24
3	Dagana	912.59	267.26	1,179.85	2,213.45	3,393.30
4	Gasa	544.97	120.40	665.37	670.20	1,335.56
5	Haa	599.43	115.40	714.83	1,188.25	1,903.08
6	Lhuentse	701.16	221.26	922.42	1,533.45	2,455.87
7	Mongar	906.32	105.40	1,011.72	3,068.12	4,079.83
8	Paro	914.00	161.40	1,075.40	2,800.04	3,875.44
9	Pema Gatshel	717.22	267.26	984.47	2,305.41	3,289.88
10	Punakha	870.63	115.40	986.03	2,464.85	3,450.87
11	Samdrup Jongkhar	795.18	0.00	795.18	2,351.40	3,146.58
12	Samtse	1,233.45	115.40	1,348.85	3,831.28	5,180.13
13	Sarpang	951.53	0.00	951.53	2,424.76	3,376.29
14	Trashi Yangtse	625.07	115.40	740.47	1,858.66	2,599.13
15	Trashigang	1,017.03	105.40	1,122.43	4,309.91	5,432.33
16	Thimphu	1,139.44	0.00	1,139.44	1,596.50	2,735.94

Sl. No	Dzongkhag	RAF	CMI	Total Outlay		
				Capital (RAF+CMI)	Current	Total
17	Trongsa	879.75	115.40	995.15	1,515.25	2,510.40
18	Tsirang	786.11	115.40	901.51	2,113.37	3,014.88
19	Wangdue Phodrang	1,040.96	216.26	1,257.21	2,636.81	3,894.02
20	Zhemgang	747.33	262.26	1,009.59	2,115.97	3,125.56
	Others		438.30	438.30		438.30
	Total	17,000.00	3,019.00	20,019.01	45,708.23	65,727.24

(b) Capital Grants Allocation to Thromde 'A's (Nu. in Million)

Sl. No	Thromde	RAF	CMI	Capital (RAF+CMI)	Current	Total
1	Thimphu	4,636.45	30	4,666.45	2,919.63	7,586.08
2	Phuentsholing	2,338.40	32	2,370.40	623.02	2,993.42
3	Samdrup Jongkhar	1,543.91	32	1,575.91	438.43	2,014.34
4	Gelephu	1,481.24	32	1,513.24	570.62	2,083.86
	Total	10,000.00	126	10,126.00	4,551.70	14,677.70

(c) Capital Grants Allocation to Gewogs (Nu. in Million)

Sl.No	Dzongkhag	Gewog	RAF	CMI	Total
1	Bumthang	Chhoekhor	87.367	19.800	107.167
2	Bumthang	Chhumig	52.799	19.800	72.599
3	Bumthang	Tang	49.646	19.800	69.446
4	Bumthang	Ura	37.436	19.800	57.236
5	Chhukha	Bjagchhog	53.624	19.800	73.424
6	Chhukha	Bongo	99.806	61.800	161.606
7	Chhukha	Chapchha	47.394	19.800	67.194
8	Chhukha	Darla	162.578	19.800	182.378
9	Chhukha	Doongna	42.861	19.800	62.661
10	Chhukha	Geling	49.787	39.810	89.597
11	Chhukha	Getana	41.834	398.146	439.980
12	Chhukha	Loggchina	66.428	124.200	190.628
13	Chhukha	Maedtabkha	26.364	19.800	46.164
14	Chhukha	Phuentshogling	119.218	19.800	139.018
15	Chhukha	Samphelling	86.950	19.800	106.750
16	Dagana	Dorona	40.760	82.800	123.560
17	Dagana	Drukjeygang	74.255	19.800	94.055
18	Dagana	Gesarling	36.306	19.800	56.106
19	Dagana	Gozhi	53.833	19.800	73.633
20	Dagana	Karmaling	36.514	40.800	77.314
21	Dagana	Karna	69.114	19.800	88.914
22	Dagana	Khebisa	66.656	74.320	140.976
23	Dagana	Largyab	32.432	82.005	114.437
24	Dagana	Lhamoi Dzingkha	56.692	19.800	76.492
25	Dagana	Nichula	41.214	40.800	82.014
26	Dagana	Tashiding	59.639	40.800	100.439
27	Dagana	Tsangkha	45.350	19.800	65.150
28	Dagana	Tsenda-Gang	54.168	40.800	94.968
29	Dagana	Tseza	39.127	21.000	60.127

Sl.No	Dzongkhag	Gewog	RAF	CMI	Total
30	Gasa	Khamaed	21.024	19.800	40.824
31	Gasa	Khatoed	17.544	19.800	37.344
32	Gasa	Laya	68.443	92.300	160.743
33	Gasa	Lunana	56.962	21.000	77.962
34	Haa	Bji	42.978	19.800	62.778
35	Haa	Gakiling	52.147	61.800	113.947
36	Haa	Kar-tshog	36.276	19.800	56.076
37	Haa	Samar	34.434	19.800	54.234
38	Haa	Sangbay	53.335	40.800	94.135
39	Haa	Uesu	32.119	19.800	51.919
40	Lhuentse	Gangzur	74.707	19.800	94.507
41	Lhuentse	Jarey	43.150	19.800	62.950
42	Lhuentse	Khoma	62.382	19.800	82.182
43	Lhuentse	Kurtoed	31.853	19.800	51.653
44	Lhuentse	Maedtsho	39.909	19.800	59.709
45	Lhuentse	Maenbi	60.361	21.000	81.361
46	Lhuentse	Minjey	43.656	19.800	63.456
47	Lhuentse	Tsaenkhar	71.932	19.800	91.732
48	Mongar	Balam	32.873	19.800	52.673
49	Mongar	Chagsakhar	48.578	19.800	68.378
50	Mongar	Chhaling	60.380	19.800	80.180
51	Mongar	Dramedtse	67.365	19.800	87.165
52	Mongar	Drepoong	45.449	19.800	65.249
53	Mongar	Gongdue	58.573	108.660	167.233
54	Mongar	Jurmed	59.742	19.800	79.542
55	Mongar	Kengkhar	61.295	19.800	81.095
56	Mongar	Monggar	94.250	19.800	114.050
57	Mongar	Narang	49.312	73.450	122.762
58	Mongar	Ngatshang	46.623	19.800	66.423
59	Mongar	Saling	59.974	19.800	79.774

Sl.No	Dzongkhag	Gewog	RAF	CMI	Total
60	Mongar	Shermuhoong	67.376	19.800	87.176
61	Mongar	Silambi	53.783	208.300	262.083
62	Mongar	Thang-rong	56.046	19.800	75.846
63	Mongar	Tsakaling	59.798	19.800	79.598
64	Mongar	Tsamang	44.812	19.800	64.612
65	Paro	Dokar	50.417	19.800	70.217
66	Paro	Dopshar-ri	48.462	19.800	68.262
67	Paro	Doteng	28.132	19.800	47.932
68	Paro	Hoongrel	11.918	19.800	31.718
69	Paro	Lamgong	69.057	19.800	88.857
70	Paro	Loong-nyi	50.620	19.800	70.420
71	Paro	Nagya	76.475	19.800	96.275
72	Paro	Sharpa	77.342	19.800	97.142
73	Paro	Tsento	74.857	19.800	94.657
74	Paro	Wangchang	67.317	19.800	87.117
75	Pema Gatshel	Chhimoong	38.994	158.420	197.414
76	Pema Gatshel	Chhoekhorling	33.635	70.670	104.305
77	Pema Gatshel	Chongshing	43.358	19.800	63.158
78	Pema Gatshel	Dechhenling	80.603	19.800	100.403
79	Pema Gatshel	Dungmaed	46.918	40.800	87.718
80	Pema Gatshel	Khar	46.924	19.800	66.724
81	Pema Gatshel	Nanong	60.852	19.800	80.652
82	Pema Gatshel	Norboogang	64.147	19.800	83.947
83	Pema Gatshel	Shumar	67.569	21.000	88.569
84	Pema Gatshel	Yurung	41.436	121.300	162.736
85	Pema Gatshel	Zobel	51.331	19.800	71.131
86	Punakha	Barp	67.086	19.800	86.886
87	Punakha	Chhubu	53.432	40.800	94.232
88	Punakha	Dzomi	44.552	19.800	64.352
89	Punakha	Goenshari	35.998	19.800	55.798

Sl.No	Dzongkhag	Gewog	RAF	CMI	Total
90	Punakha	Guma	70.078	21.000	91.078
91	Punakha	Kabisa	50.571	19.800	70.371
92	Punakha	Lingmukha	29.343	19.800	49.143
93	Punakha	Shelnga-Bjemi	40.641	19.800	60.441
94	Punakha	Talog	39.295	19.800	59.095
95	Punakha	Toedpaisa	50.821	19.800	70.621
96	Punakha	Toedwang	36.819	19.800	56.619
97	Samdrup Jongkhar	Dewathang	55.229	19.800	75.029
98	Samdrup Jongkhar	Gomdar	88.027	19.800	107.827
99	Samdrup Jongkhar	Langchenphu	34.528	19.800	54.328
100	Samdrup Jongkhar	Lauri	110.134	188.070	298.204
101	Samdrup Jongkhar	Martshala	72.658	61.800	134.458
102	Samdrup Jongkhar	Orong	67.598	40.800	108.398
103	Samdrup Jongkhar	Pemathang	42.155	19.800	61.955
104	Samdrup Jongkhar	Phuentshogthang	72.484	19.800	92.284
105	Samdrup Jongkhar	Samrang	19.059	19.800	38.859
106	Samdrup Jongkhar	Serthig	62.582	19.800	82.382
107	Samdrup Jongkhar	Wangphu	72.975	40.800	113.775
108	Samtse	Denchukha	79.287	179.300	258.587
109	Samtse	Dophuchen	117.777	19.800	137.577
110	Samtse	Dungtoed	48.118	165.380	213.498
111	Samtse	Namgyalchhoeling	94.473	19.800	114.273
112	Samtse	Norbugang	79.687	19.800	99.487
113	Samtse	Norgaygang	131.631	40.800	172.431
114	Samtse	Pemaling	83.294	19.800	103.094
115	Samtse	Phuntshopelri	112.821	106.800	219.621
116	Samtse	Samtse	97.939	21.000	118.939
117	Samtse	Sangacholing	81.708	19.800	101.508
118	Samtse	Tading	139.644	19.800	159.444
119	Samtse	Tashichoeling	75.482	19.800	95.282

Sl.No	Dzongkhag	Gewog	RAF	CMI	Total
120	Samtse	Tendruk	117.468	19.800	137.268
121	Samtse	Ugyentse	36.969	19.800	56.769
122	Samtse	Yoeseltse	81.127	19.800	100.927
123	Sarpang	Chudzom	81.997	296.000	377.997
124	Sarpang	Chuzanggang	60.043	19.800	79.843
125	Sarpang	Dekiling	93.504	19.800	113.304
126	Sarpang	Gakiling	77.538	40.800	118.338
127	Sarpang	Gelegphu	73.768	19.800	93.568
128	Sarpang	Jigme Chhoeling	100.956	40.800	141.756
129	Sarpang	Samtenling	54.597	19.800	74.397
130	Sarpang	Senggey	43.874	40.800	84.674
131	Sarpang	Serzhong	40.926	19.800	60.726
132	Sarpang	Shompangkha	29.623	19.800	49.423
133	Sarpang	Tareythang	18.173	19.800	37.973
134	Sarpang	Umling	39.058	19.800	58.858
135	Thimphu	Chang	69.912	19.800	89.712
136	Thimphu	Darkarla	36.276	19.800	56.076
137	Thimphu	Ge-nyen	24.982	19.800	44.782
138	Thimphu	Kawang	80.579	19.800	100.379
139	Thimphu	Lingzhi	26.543	22.200	48.743
140	Thimphu	Maedwang	80.034	19.800	99.834
141	Thimphu	Naro	18.270	88.530	106.800
142	Thimphu	Soe	16.567	22.200	38.767
143	Trashi Yangtse	Bumdeling	85.546	19.800	105.346
144	Trashi Yangtse	Jamkhar	35.990	19.800	55.790
145	Trashi Yangtse	Khamdang	91.250	19.800	111.050
146	Trashi Yangtse	Ramjar	47.282	19.800	67.082
147	Trashi Yangtse	Toedtsho	63.419	19.800	83.219
148	Trashi Yangtse	Tongmajangsa	47.792	19.800	67.592
149	Trashi Yangtse	Yalang	66.069	19.800	85.869

Sl.No	Dzongkhag	Gewog	RAF	CMI	Total
150	Trashigang	Yangtse	68.082	21.000	89.082
151	Trashigang	Bartsham	49.308	19.800	69.108
152	Trashigang	Bidung	41.186	19.800	60.986
153	Trashigang	Kanglung	88.858	19.800	108.658
154	Trashigang	Kangpar	67.893	19.800	87.693
155	Trashigang	Khaling	65.508	19.800	85.308
156	Trashigang	Lumang	97.278	19.800	117.078
157	Trashigang	Merag	66.064	168.900	234.964
158	Trashigang	Phongmed	67.671	19.800	87.471
159	Trashigang	Radhi	67.153	19.800	86.953
160	Trashigang	Sagteng	116.097	129.170	245.267
161	Trashigang	Samkhar	68.885	19.800	88.685
162	Trashigang	Shongphu	61.634	19.800	81.434
163	Trashigang	Thrimshing	53.365	19.800	73.165
164	Trashigang	Udzorong	69.485	19.800	89.285
165	Trashigang	Yangnyer	65.182	19.800	84.982
166	Trongsa	Draagteng	76.941	19.800	96.741
167	Trongsa	Korphu	35.850	19.800	55.650
168	Trongsa	Langthil	81.486	19.800	101.286
169	Trongsa	Nubi	79.635	21.000	100.635
170	Trongsa	Tangsibji	43.714	19.800	63.514
171	Tsirang	Barshong	43.566	61.800	105.366
172	Tsirang	Dunglagang	49.059	19.800	68.859
173	Tsirang	Gosarling	45.793	19.800	65.593
174	Tsirang	Kilkhorthang	57.603	42.000	99.603
175	Tsirang	Mendrelgang	43.408	51.700	95.108
176	Tsirang	Patshaling	39.492	19.800	59.292
177	Tsirang	Pungtenchhu	45.543	19.800	65.343
178	Tsirang	Rangthangling	51.218	40.800	92.018
179	Tsirang	Semjong	38.967	19.800	58.767

Sl.No	Dzongkhag	Gewog	RAF	CMI	Total
180	Tsirang	Sergithang	48.336	19.800	68.136
181	Tsirang	Tsholingkhar	53.588	19.800	73.388
182	Tsirang	Tsirang Toed	48.700	61.800	110.500
183	Wangdue Phodrang	Athang	45.243	40.800	86.043
184	Wangdue Phodrang	Bjenag	50.719	19.800	70.519
185	Wangdue Phodrang	Dangchhu	39.593	19.800	59.393
186	Wangdue Phodrang	Darkar	61.108	19.800	80.908
187	Wangdue Phodrang	Gangteng	47.722	19.800	67.522
188	Wangdue Phodrang	Gase Tshogongm	59.206	19.800	79.006
189	Wangdue Phodrang	Gase Tshowogm	21.596	19.800	41.396
190	Wangdue Phodrang	Kazhi	48.407	19.800	68.207
191	Wangdue Phodrang	Nahi	29.527	19.800	49.327
192	Wangdue Phodrang	Nyishog	50.257	19.800	70.057
193	Wangdue Phodrang	Phangyuel	31.007	19.800	50.807
194	Wangdue Phodrang	Phobji	47.326	21.000	68.326
195	Wangdue Phodrang	Ruebisa	46.808	19.800	66.608
196	Wangdue Phodrang	Saephu	43.747	19.800	63.547
197	Wangdue Phodrang	Theedtsho	85.195	19.800	104.995
198	Zhemgang	Bardo	82.830	229.830	312.660
199	Zhemgang	Bjoka	52.982	156.170	209.152
200	Zhemgang	Goshing	63.460	19.800	83.260
201	Zhemgang	Nangkor	73.393	40.800	114.193
202	Zhemgang	Ngangla	68.077	19.800	87.877
203	Zhemgang	Phangkhar	54.615	42.000	96.615
204	Zhemgang	Shingkhar	64.299	74.324	138.623
205	Zhemgang	Trong	68.323	19.800	88.123
	Others	-	-	216.45	216.45
	Total		12,000.000	7,855.005	19,885.008

ANNEXURE IV: Capital outlay by sector (Nu. in million)

Sl.No	Sub-Sector	Central	LG	Flagship	Total	Remarks
1	Agriculture and Forest	3,050.35	9,500	1,000.00	13,550.35	Central outlay: MoAF Local Government Allocation: RAF allocation for farming sub criteria for Dzongkhag and Farm Roads maintenance. Flagships Organic Bhutan
2	Culture	4,065.00	2,200	-	6,265.00	Central outlay: MoHCA , Dratshang Lhentshog, DDC Local Government Allocation: RAF allocation for GNH Index and Culture
3	Education	8,409.00	4,000.00	1,000.00	13,409.00	Central outlay: MoE, RUB, RIM, BCSEA, REC, UMBS, MoLHR (Programme 1) Local Government Allocation: RAF allocation for education sub criteria Flagship: Education
4	Environment	1,050.00	3,326.00	1,000.00	5,376.00	Central outlay: NEC, NLCS Local Government Allocation: RAF allocation for air pollution, waste disposal and litter Flagship: Waste
5	Governance	8,865.00	-	-	8,865.00	Central outlay: MFA, BNLI, JSWL,RCoJ,MoF, ECB,RCSC, ACC, RAA, NSB, CBS, NA, NC,Cabinet, CSO, OAG, BSB, BICMA, GNHC, CDB, RBP, office construction
6	Health	5,070.00	7,577.14	1,000.00	13,647.14	Central outlay: MoH, BNCA, DRA, JDWNRH, BMHC Local Government Allocation: RAF allocation for U5 Mortality, water supply, sanitation and Crude Death Rate Flagship: Health

Sl.No	Sub-Sector	Central	LG	Flagship	Total	Remarks
7	Human Settlement	1,005.10	8,092.31	2,743.00	11,840.41	Central outlay: MoWHS Local Government Allocation: RAF allocation for transportation and safety Flagship: Water
8	Industries	4,266.00	6,800.00	4,700.00	15,766.00	Central outlay: MoEA, MoLHR (Programme 2). Local Government Allocation: RAF allocation for CSI sub-criteria Flagships: Tourism Development -1.5b, CSIs & Startups- 1.2b, Rural Economy -2b.
9	Infocom	2,531.00	-	2,557.00	5,088.00	Central outlay: MOIC Flagship: Digital Drukyul
10	Roads	11,690.14	-	-	11,690.14	MoWHS (Roads), MoIC (RSTA)
11	Others	4,200.00	8,504.55	1,000.00	13,704.55	Central outlay: HRD, Special Priority Activities, CPE and SoE subsidy, Stabilisation fund, Provision for other other flagships. Local Government Allocation: RAF allocation for population and GNH Index
	Total	54,201.59	50,000.00	15,000.00	119,201.59	Over budgeting of Nu 3,471.59 million for Central Agencies

ANNEXURE V: Resource Allocation Formula for Gewog

SL. No.	Criteria & Weight	Sub-Criteria & Weight	Description	Rationale
1	Population (15%)	Resident Population (15%)	Number of resident population of the Gewog (PHCB, 2017).	Higher the resident population, higher the share of resources.
2	GNH Index (10%)	GNH index (10%) Inverse	Level of happiness & general well-being of the population in the Gewog. (GNH Survey Report, 2015).	Lower the level of happiness, higher the share of resources.
3	Farming (15%)	Kamzhing (5%)	Area of Kamzhing (dry land) in acres owned by people in the Gewog (PHCB 2017).	To promote farming and enhance production, higher share of resource will be allocated for higher area under cultivation and livestock rearing.
		Chuzhing (5%)	Area of Chuzhing (wetland) in acres owned by people in the Gewog (PHCB 2017).	
		Livestock (5%)	Number of livestock (<i>Nor</i>) owned by people in the Gewog. (PHCB 2017).	
4	Health (20%)	U5MR (5%)	Rate of U5 deaths in percentage in the last 12 months to total births in the last 12 months in the Gewog (PHCB 2017).	To improve general health of people, more resources is allocated to higher incidence of U5 mortality, unreliable water supply and poor sanitation.
		Unreliable water supply (10%)	Number of households without access to reliable water (unavailability of water at least during the critical time 5AM-8AM, 11AM-2PM and 5PM-9PM & not adequate for washing/cooking) in the Gewog (PHCB 2017).	
		Unhygienic sanitation (5%)	Number of households without access to improved sanitation facilities (households without pour flush, ventilated improved pit, pit latrine with slab & composting toilet) in the Gewog (PHCB 2017).	
5	Education (5%)	School aged children unschooled (6-14 years) (5%)	Number of school-age children (6-14) out of school in the Gewog (PHCB 2017).	To reduce out of school children and ensure completion of primary education, higher share of resources is allocated to higher number of out of school children (aged 6-14 years).

SL. No.	Criteria & Weight	Sub-Criteria & Weight	Description	Rationale
6	Poverty (15%)	Income Poverty (5%)	Number of people below poverty line (< Nu 2195.95 per person per month) in the Gewog (BLSS 2012).	To uplift people from poverty and increase income, more resource share is allocated to higher incidence of income poverty.
		Average HHS Income (10%) Inverse	Mean per-capita household income (in Nu.) in the Gewog (BLSS, 2012).	To improve household income, more resource share is allocated to incidence of lower household income.
7	Transportation/ Distance (20%)	Distance to road head (15%)	Number of households within walking distance of more than 30 minutes from the nearest road head in the Gewog (PHCB 2017).	To cover additional transportation cost , higher resource is allocated to gewogs with higher number of households residing within walking distance of more than 30 minutes from the nearest road head and Dzongkhag headquarters which are further away from Phuentsholing.
		Transportation cost (5%)	Per unit cost per metric ton per kilometre (distance) of Dzongkhag headquarter from Phuentsholing (Administrative Data, RSTA).	

ANNEXURE VI: Resource Allocation Formula for Dzongkhag

Sl. No.	Criteria & Weight	Sub-Criteria & Weight	Description	Rationale
1	Economy (40%)	CSI (20%) Inverse	Number of production & manufacturing Cottage & Small Industries (CSI) to resident population in the Dzongkhag (CSI Report, 2018).	To enhance local economy and job creation, more resources is allocated to Dzongkhags with lesser CSIs, more unemployed people and more people employed in agriculture.
		People unemployed (10%)	Number of people unemployed (persons above 15 years & above who during the reference period are without work, currently available for work & seeking work) in the Dzongkhag (PHCB, 2017.)	
		Employed in agriculture (10%)	Number of people (aged 15-64 years)employed in agriculture in the Dzongkhag (PHCB, 2017).	
2	GNH Index (15%)	GNH index (15%) Inverse	Level of happiness & general well-being of the population in the Dzongkhag (GNH Survey Report, 2015).	Lower the level of happiness, higher the share of resources.
3	Health (10%)	Crude Death Rate (10%)	Number of deaths in a year per 1000 population the Dzongkhag (PHCB 2017).	To improve health status and life expectancy, more resource is allocated to higher incidences of death.
4	Education (10%)	Students' performance (10%) Inverse	Pass percentage (40%) of students in class X in BCSE in the Dzongkhag (Pupil Performance Report, 2018, BCSEA).	To improve quality of education, higher resource is allocated to Dzongkhags with lower students' performance in BCSE.
5	Culture (10%)	Cultural participation (10%) Inverse	Average number of days of participation by people in socio-cultural activities in the Dzongkhag (GNH Survey Report, 2015).	To preserve and promote culture particularly intangible, higher resource is allocated to lower level of participation in socio-cultural events.
6	Environment (15%)	Waste disposal and litter (10%)	Number of people affected by inadequate waste disposal sites & littering in the Dzongkhag (PHCB, 2017).	To address environmental issues and mitigate loss of crops and livestock to wildlife, higher resource is allocated to Dzongkhags with more number of people without waste disposal facilities and affected by wildlife.
		Wildlife damages (5%)	Number of people affected by wildlife in the Dzongkhag (PHCB, 2017).	

ANNEXURE VII: Resource Allocation Formula for Thromde 'A's

Sl. No.	Criteria & Weight	Sub-Criteria & Weight	Description	Rationale
1	Population (15%)	Resident Population (10%)	Number of resident population of the Thromde (PHCB, 2017)	More resource is allocated to Thromde 'A's with higher number of resident population and lower population density.
		Population density (5%) Inverse	Number of resident population per area (sq.km) of Thromde (PHCB, 2017 & Thromde Administrations)	
2	GNH Index (10%)	GNH Index (10%) Inverse	Level of happiness & general well-being of the population in the Thromde (GNH Survey Report, 2015)	Lower the level of happiness and well-being, higher the share of resources.
3	Environment (15%)	Air pollution (5%)	Number of people discontented with air pollution in the Thromde (PHCB, 2017)	To address environmental issues, higher resource is allocated to Thromde 'A's with more number of people without waste disposal facilities and discontented with air quality.
		Waste disposal and litter (10%)	Number of people affected by inadequate waste disposal sites & littering in the Thromde (PHCB, 2017)	
4	Health (30%)	Unreliable water supply (20%)	Number of households without access to reliable water (unavailability of water at least during the critical time 5AM-8AM, 11AM-2PM and 5PM-9PM & not adequate for washing/ cooking) in the Thromde (PHCB 2017)	To improve general health of the people, more resources is allocated to Thromde 'A's with higher households with unreliable water supply and poor sanitation.
		Unhygienic sanitation (10%)	Number of households without access to improved sanitation facilities (households without pour flush, ventilated improved pit, pit latrine with slab & composting toilet) in the Thromde (PHCB 2017)	
5	Education (15%)	Students' performance (15%) Inverse	Pass percentage (40%) of students in class X in BCSE in the Thromde (Pupil Performance Report, 2018, BCSEA)	To improve quality of education, higher resource is allocated to Thromde 'A's with lower students' performance in BCSE.

Sl. No.	Criteria & Weight	Sub-Criteria & Weight	Description	Rationale
6	Safety (10%)	Crime and violence (5%)	Number of people discontented with crime and violence in the Thromde (PHCB, 2017)	To improve safety and livability in Thromdes, more resource is allocated for higher incidence of crime, violence and higher congestion.
		Congestion (5%)	Number of cars per population leading to traffic congestion in the Thromde (PHCB, 2017 & RSTA Administrative Data)	
7	Culture (5%)	Cultural participation (5%) Inverse	Average number of days of participation in socio-cultural activities in past 30 days in the Thromde (GNH Survey Report, 2015)	To preserve and promote culture particularly intangible, higher resource is allocated to lower level of participation in socio-cultural events.

ANNEXURE VIII: List of CMI and outlay

(a) Dzongkhags' CMI and outlay

Sl. No.	Activity	Unit cost (Nu in M)	Requirements	Cost	Remarks
1	Bus Terminal/Shed	10.00	14	140.00	Excluding: Chhukha, Thimphu, Trashigang, Mongar, Samdrup Jongkhar, Sarpang
2	Children's park	5.00	4	20.00	For Gasa, Pema Gatshel, Lhuentse and Dagana
Total				160.00	

(b) Gewogs' CMI and outlay

Sl. No.	Activity	Unit cost (Nu in M)	Requirement	Amount (Nu. In M)	Remarks
1	Blacktopping of GC Road	2.9	886.95 km	2,572	24 new GC roads and GC roads spill over (55.25 km)
2	Construction of farm road to Chiwogs without any road	21.0	50	1,050	47 Chiwogs+3 Gewogs without GC Road
3	Maintenance of farm road/laying Base course (soling)	19.8	202 gewogs	4,000	2002 km of GC road and 11,196.24 km. of farm roads
4	Construction of Helipad	1.2	14	17	List provided by RBHSL
5	Construction of Tshogpa offices and supply of projectors	-	-	200	Need-based
Total				7,839	

(c) Yenlag Throms' CMI and outlay

Sl. No	Activity	Unit cost (Nu in M)	Length/Volume	Total Cost (Nu in M)
1	Internal road	15	2 km	150
2	Storm water drainage	16.13	1 km	80.65
3	Street light	0.03	10 Poles	1.5
4	Footpath	0.05	100 m	25
5	Water supply	9.43	5	47.15
6	Sewer	40	1 km	200
Total				504.3

(d) Dzongkhag Throms CMI and outlay

Sl. No	Activity	Unit cost (Nu in M)	Length/Volume	Total Cost (Nu in M)	Remarks
1	Internal urban road	15	2 KM	480	16 Dzongkhag Throms
2	Storm water drainage	24.2	1 KM	387.2	16 Dzongkhag Throms
3	Street light	0.03	40 Poles	19.2	16 Dzongkhag Throms
4	Footpath	0.05	1000 m	800	16 Dzongkhag Throms
5	Sewer	46	1	230	Bumthang, Dagana, Pema Gatshel, Paro, Zhemgang
Total				1916.4	

(e) Thromde 'A's CMI and outlay

Sl. No	Activity	Unit cost (Nu in M)	Length/Volume	Total Cost (Nu in M)
1	Common services duct	6	5 km	120
2	EV quick charging station	2	3 Thromdes	6
Total				126

