

ཀྲུལ་གཞུང་ཕྱི་ས་ཞིབ་དབང་འཛིན།



Royal Audit Authority

**PERFORMANCE AND COMPLIANCE
AUDIT TOPICS**

2021-2025

[STRATEGIC PLAN]

DECEMBER 2021

REPORTING ON ECONOMY, EFFICIENCY & EFFECTIVENESS IN THE USE OF PUBLIC RESOURCE

PERFORMANCE AND COMPLIANCE AUDIT TOPICS 2020-2025

© 2021 Royal Audit Authority

Royal Audit Authority

P.O. Box 191

Peling Lam

Kawajangsa

Thimphu – 11001

BHUTAN

Tel: +975-2-322111

www.bhutanaudit.gov.bt



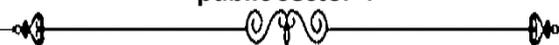
Vision

“A credible Supreme Audit Institution that promotes value for money and good governance in public operations and contributes towards achieving the societal aspirations of Gross National Happiness”.



Mission

“RAA is an independent constitutional body which contributes to accountability, transparency, and effective service delivery. In the service of Tsa-Wa-Sum (the King, Country and People), we audit without fear, favour, or prejudice and provide timely, reliable, and quality audit services to assist effective decision making in the public sector”.



FOREWORD

The Royal Audit Authority (RAA), as a constitutional body enshrined under the Constitution of the Kingdom of Bhutan, is bestowed with a mandate to audit and report on the economy, efficiency and effectiveness in the use of public resources. The RAA, in its effort to effectively fulfil this constitutional responsibility, has developed the Strategic Plan 2020-2025 and in line with the strategic plan, this document identifies 39 potential performance and compliance audit topics to be focused during the plan period.

The audit topics were selected following topic selection process prescribed in the Performance Audit Guideline 2019. The audit topics were solicited from both the external and internal stakeholders and developed from development priorities based on 12th FYP. The prospective audit topics were screened and prioritised based on established criteria to ensure high audit impact and adequate sectoral coverage.

This document reflects the priorities and strategic direction of the RAA in areas of performance and compliance audits. It has been prepared in accordance with the requirements of International Standards of Supreme Audit Institutions (ISSAIs).

This document is a living document and the audit topics identified in this document would undergo periodic review and updates to incorporate changing needs and priorities of the stakeholders. Through assurance engagement on these audit topics, the RAA expects to contribute towards improvement of public sector performance.

The RAA will strive to meet the expectations of the society and remain relevant as an oversight institution driving beneficial change through high quality audit results.



(Tashi)

Auditor General of Bhutan

Table of Contents

Background	1
1. Mandates	1
Potential Audit topics.....	2
1. Identification of audit topics.....	2
2. Screening.....	2
3. Prioritisation of audit topics	3
Audit topics selected for the five years (2020-2025).....	3
A. Economic Sector.....	3
i. Cottage and Small Industries (CSIs)	4
ii. Foreign Direct Investments (FDIs).....	4
iii. Tourism development.....	5
iv. Hydropower development in Bhutan	6
v. Technical and Vocational Education and Training (TVET).....	6
vi. Employment generation	7
B. Environment and Natural Resource Sector	8
i. Compliance to Multilateral Environment Agreements (MEAs)	8
ii. Watershed management	9
iii. Mining Operations	10
iv. Provision of drinking water in Thromdes.....	10
v. Disaster Management.....	11
vi. Climate Change Projects	12
vii. Waste Management	13
viii. Operations of Natural Resources Development Corporation Limited (NRDCL)	14
C. Education Sector	15
i. Quality education.....	16
ii. Special Educational Needs (SEN) program.....	16
D. Agriculture Sector	17
i. Food Security (Production, access to markets, nutrition)	17
ii. Operations of RNR centres (marketing, organic farming, farm mechanisation)	18

iii.	Irrigation systems development	20
E.	Infrastructure Sector	21
i.	Sustainable and Safe Road Transport	21
ii.	Farm-roads management and development	22
iii.	Urban Planning in Thromdes	22
iv.	Stray dog management	23
F.	Public Administration Sector	24
i.	Performance management in the Public Sector	24
ii.	Corporate governance in State Owned Enterprises (SOEs)	25
iii.	Preparedness of Local Governments	25
iv.	Thromde and municipality services	26
v.	Land administration services	27
vi.	Tax administration	27
vii.	Fiscal Incentives	28
viii.	Debt management	29
G.	Social and Health Sector	29
i.	Role and effectiveness of CSOs	29
ii.	Strong and resilient health systems	30
H.	Information Communication and Technology Sector	31
i.	Preparedness for cyber security attacks	31
ii.	Bhutan Telecom Billing System	32
iii.	Digital identity	33
iv.	E-Patient Information System	33
v.	Bhutan Integrated Tax System	34
vi.	Electronic Public Expenditure Management System	35
I.	List of audit topics	36

Background

This document, consisting of audit topics covering the period 2021 to 2026, is prepared in accordance with the requirements of International Standards of Supreme Audit Institutions (ISSAIs) and to achieve overall strategic intent of improving performance and accountability in the public sector. The audit topics were selected following due process of selection as prescribed in the RAA's Performance Audit Guidelines 2019 considering stakeholders' expectation in ensuring relevance and importance for adding value to the stakeholders and creating audit impacts. The audit topics were solicited from both the external and internal stakeholders through online survey and also developed from development priorities based on 12th FYP. The potential audit topics were identified focusing on themes or sectors and screened & prioritised based on ten (10) established criteria to ensure high audit impact and adequate sectoral coverage.

The identified audit topics would undergo annual review and would be updated periodically to reflect emerging needs and priorities of the stakeholders. The following were the sectors/themes identified for the audit topics:

- a. Economic;
- b. Environment and Natural Resource;
- c. Education;
- d. Agriculture;
- e. Infrastructure;
- f. Public Administration;
- g. Social and Health; and
- h. Information Communication & Technology.

From the Strategic Plan 2020-2025, cyclic planning will be undertaken so as to ensure that at the end of plan period at least one topic from each sector is covered.

1. Mandates

The RAA draws its mandates from the Constitution of the Kingdom of Bhutan and the Audit Act of Bhutan 2018.

- 1.1 Article 25.1 of the Constitution of Kingdom of Bhutan 2008 and the Audit Act of Bhutan 2018 provides that *"There shall be a Royal Audit Authority to audit and report on the economy, efficiency and effectiveness in the use of public resources"*.
- 1.2 Section 68 of the Audit Act requires the RAA to *"Audit and Report on the economy, efficiency and effectiveness in the use of public resources"*.
- 1.3 Section 69, 70, 71, 78, 79, 82 and 90 of the Audit Act 2018 provide extensive mandate to the RAA in terms of nature, jurisdiction and types of audit to be conducted. It requires the RAA to specifically conduct performance audit and any other form of audits that the Auditor General may consider significant and necessary.
- 1.4 Section 11, 12 and 13 of the Audit Act provides full organisational and functional independence to the RAA including programming, investigative and reporting.

Potential Audit topics

The audit topics were generated as per sources prescribed by Para 2.7 of the Performance Audit Guidelines. The audit topics are also sourced as per Para 2.8, which are usually urgent and important in nature and need to be addressed on a priority basis. These are immediately updated in the Annual Work Plan. As per the Guidelines of both the Performance and Compliance audits, the identification and selection of audit topics had undergone following processes.

1. Identification of audit topics.

The RAA gathered list of potential audit topics from the following sources and exercises.

- i. **External Stakeholders:** In order to address the expectations of the stakeholders, the RAA solicited potential audit topics and areas or subject matters from the stakeholders. 53 agencies responded and suggested areas or specific audit topics for performance and compliance audits. These audit topics are exhibited in Annexure 'A'.
- ii. **Previous Strategic Plan:** The RAA also considered audit topics that were identified in the previous Performance Audit topics 2018-2020 (Strategic Plan), which were deferred due to other important audit topics. Since these audit topics were previously prioritized and assessed in terms of materiality and risk, these audit topics were considered to re-assess its relevance and potentials to add value. The audit topics considered are shown in Annexure 'B'.
- iii. **Internal Stakeholders:** The audit topics were also solicited from the individual auditors from all Divisions based on their experiences in auditing the government agencies. The RAA received 25 potential audit topics/areas which were perceived to be high risk areas by the auditors as shown in Annexure 'C'.
- iv. **12th FYP:** In order to ensure adequate sectoral audit coverage, the RAA carried out a thorough screening of the Sector-wise 12th Five Year Plan document of the Royal Government and Flagship Programmes identified in the Plan. A range of audit topics were formulated based on the programmes identified under different key result areas representing different development sectors along with budget outlays as shown in Annexure 'D'.

2. Screening

The audit topics generated from the above sources are subjected to pre-study to identify areas or themes where RAA can add value in promoting economy, efficiency and effectiveness in the public sector operations. Emphasis is also placed on development priorities, relevance of issues and potential impact on general public in considering the importance of the audit topics. The assessment of audit topics based on the above conditions are discussed thoroughly involving the management and accordingly, placed in high, medium or low importance category. Those audit topics classified under "low" category were eliminated from the potential list.

3. Prioritisation of audit topics

The list of potential audit topics after screening process are subjected to assessments under multiple criteria to ensure that RAA focus on those areas or themes that have more potential to add value considering the risk and materiality of the subject matter and RAA's ability to respond to the expectations of the society. To support the prioritisation of most relevant audit topics, the RAA following ten selection criteria along with pre-assigned weights.

Criteria	Materiality	Public accountability	Possible impact	Legislative or public interest	Timeliness	Previous audit work	Complexity	Developments likely to affect assessment	Auditability	Total
Score (1,2,3)										
Weights	15	15	15	10	5	10	5	10	10	100

Score- 1: Low, 2-Medium, 3-High

The details of prioritisation and ranking of audit topics are given in Annexure 'E'. In order to ensure that adequate sectorial coverage is ensured throughout the five-year period, the rankings of audit topics were compared within the specific sector. The audit topics for 2020-25 include 39 audit topics across the whole public sector. The limitation of audit topics to 39 was made on the premise that RAA would be able to complete six performance/compliance audits annually. The Annual Audit Schedule shall be prepared based on the audit topics identified through this prioritization.

Audit topics selected for the five years (2020-2025)

After carrying out pre-screening of suggested audit topics using selected criteria, the following potential audit topics were identified under each sector for performance and compliance audits for the period 2020-2025.

A. Economic Sector

The National Key Results Areas (NKRAs) related to economic sector are:

- i) NKRA 1: Macro Economic Stability
- ii) NKRA 2: Economic Diversification
- iii) NKRA 11: Productive and Gainful Employment

The 12th FYP recognizes the challenges of containing expenditure growth, managing public debt, limited domestic savings, creating productive and gainful employment, limited commodities for export, improving ease of doing business, delays in commissioning of hydropower projects etc., under these NKRAs. The Plan specifies broad strategies and programs to be implemented to drive development in this sector.

During the period, the RAA will focus on conducting performance audits of specific plans and programs and on themes/or subject matters related to economic diversification and employment generation.

i. Cottage and Small Industries (CSIs)

Considering the fact that more than 95% of the industries in Bhutan are small and cottage scale, the Royal Government created the Department of Cottage & Small Industry (DCSI) under the Ministry of Economic Affairs (MoEA) in July 2010. The main objective of the department is to create an enabling environment to facilitate and support sustainable growth and development of Cottage & Small Industries (CSI) in the country for equitable income distribution, employment generation and balanced regional development.

Small scale industries are important because it helps in increasing employment and economic development and likewise they are expected to form the foundation for private sector dynamism, and contribute to the achievement of promoting private sector as the engine of economic growth.

The CSI sector is identified as one of the five economic jewels and “Start-up and CSI Development has been adopted as one of the development flagship programs in the 12th Five Year Plan. The total budget outlay for CSI in the 12th FYP is Nu. 1200 million. Implementation of the program is expected to build entrepreneurship and innovation culture by driving innovation and investment in CSI and start-ups, promoting growth of a vibrant and sustainable start-ups and CSI, diversifying economic base, expanding export and reducing imports and improving access to finance.

Though the department has been instrumental in the development of CSIs for more than a decade, yet the sector has been challenged by many factors such as poor culture of entrepreneurship and limited human capacity, limited access to finance, infrastructure, inadequate business development supports, poor innovation and technology, and access to market that impeded it from realizing its full potential.

Therefore, it is timely for the RAA to conduct an audit on the development progress of CSIs and contribute in meeting the key development objective to promote growth of viable and sustainable Start-ups and CSIs by providing recommendations for improvements.

ii. Foreign Direct Investments (FDIs)

The government first adopted the FDI policy in 2002. Taking into account on the changes in the economic and business environment, the policy was periodically revised. In order to make the policy more relevant and investor-friendly, the government also adopted the latest policy in 2019. The new policy is expected to further promote FDI with the aim of building a resilient, more diversified and sustainable economy.

The overall monitoring of FDI businesses rest with Ministry of Economic Affairs (MoEA) and the relevant sectors are responsible to monitor the FDI businesses within the framework of the Memorandum of Understandings (MoUs) or agreements signed and their respective legislations, policies and rules and regulations.

- The Royal Monetary Authority is responsible to monitor and maintain information on foreign exchange related issues;
- The Ministry of Labour and Human Resources is responsible to monitor and maintain FDI specific information on labour and employment issues;
- The Ministry of Home and Cultural Affairs is responsible to monitor and maintain information on visas, permits and other immigration issues; and
- The National Environment Commission Secretariat is responsible to monitor the compliance of the business to environmental legislations.

The total number of FDI stands at 92 in 2020 with two projects converting to domestic projects. 66 % of FDI projects approved are located in Thimphu, Paro and Chukha with highest number (38%) being in Thimphu. FDI are mostly in service sectors, namely, hotels and IT/ITES.

Following are the legal framework/legislations governing FDIs in the country:

- Foreign Direct Investment Policy 2019
- Foreign Direct Investment Regulations 2019 (Amended on 1st July 2020)
- Foreign Exchange Rules and Regulations (2018)

The audit will be able to conclude on the effectiveness of the FDI policies in place and its implementation compliance. Which would help identify areas necessitating improvement in terms of FDI initiatives.

iii. Tourism development

Tourism Council of Bhutan (TCB) is guided by Tourism Council (Board), which provides overall leadership and strategic direction on all matters relating to tourism in the country. The Hon'ble Minister for Foreign Affairs is the chairperson of the Tourism Council. The members are from the relevant government agencies and the tourism sector associations. Technical Advisory Committee has been established with representatives from the relevant government agencies and the tourism sector to support the Tourism Council of Bhutan in development and promotion.

The Tourism Policy of the Kingdom of Bhutan was approved by the Cabinet in January 2021 to guide and provide direction for the development and promotion of sustainable tourism guided by the policy of High value, Low volume.

Flagship programmes are identified in the 12 FYP to address issues of national priority and sustainable tourism development programme is one of the flagship programmes. 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 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 responsibility is entrusted to Tourism Council of Bhutan to be implemented in collaboration with the LGs, Ministry of Economic Affairs and Private sector.

The audit would assess the effectiveness of the implementation of the sustainable tourism development programmes in taking tourism to the top. The audit would also highlight the challenges faced by the tourism sector and come up with relevant recommendations to address the issues.

iv. Hydropower development in Bhutan

Large scale hydropower development activities commenced with the Chukha Hydro Project in the 1970s. There is no denying that the hydropower sector has contributed significantly to the overall national economy as well as social development, most times referred to as the key driver of the Bhutanese economy. Globally, projects of this magnitude generally face many hindrances and issues starting from planning the project to construction to operation and maintenance; and the same can be said of these projects in Bhutan. However, in the past these large scale projects were less in number as well as size.

Currently, after the hydropower sector was boosted with the accelerated hydropower development initiatives, we are seeing multiple large scale projects implemented with very little time gap, across the country, most of which are now facing major issues like delay in construction and cost overrun. Further, another growing concern is the socio-economic and environmental impact of these projects, given its huge foreign workforce and the sheer size of the investments, on the domestic economy, establishments and population.

In terms of review, so many years in the hydropower sector has also generated many review reports, strategy reports and audit reports by taskforces, agencies and the RAA to clearly understand what is going wrong; there is enough experience and literature on these projects.

Therefore, an audit targeted at taking stock of all these issues and recommendations gathered over the years on these project, and providing achievable recommendations to ensure some level of mitigation to issues in the current projects and necessary reforms for the benefit of projects in the pipeline, is seen necessary. However, to create greater impact of the recommendations, it would be critical to examine and report not just the issues surrounding the project planning and implementations activities but also to include review of the legal and institutional setting of the hydropower development projects. Policy and contractual documents have huge implication on the project development activities which span over 10 years.

v. Technical and Vocational Education and Training (TVET)

Department of Technical Education (DTE), Ministry of Labour and Human Resources (MoLHR) is particularly responsible for overseeing all aspects of Technical and Vocational Education and Training (TVET) and the Human Resources Development for the private and corporate sector in the country. Thus, all its activities and programs are centered on the broad objectives of developing and implementing a national TVET system which can support development of skilled, productive and professional workforce that drives the country's socio economic development.

As mandated, the DTE has been implementing TVET programmes for out of school youth through the six Technical Training institutes (TTIs) and two Institutes for Zorig Chusum (IZC) under its purview and also providing skills development opportunities through various alternative modes of trainings in its

institutes and in collaboration with private training providers. Additionally, it has been implementing skills up-gradation and fellowship programs for the in-service employees of the private and corporate sectors.

The budget allocation for TVET was Nu. 1025.2 million, which was 1.11% of overall Government budget allocation during the 11th five-year plan. The plan greatly emphasized on improving quality and relevancy of TVET by implementation of employment based skills training programmes, diversifying and innovating TVET programmes, introducing diploma level programmes and building capacity of the TVET instructors. Similarly, the 12 FYP under NKRA 7: Quality Education and Skill, focuses on transforming Bhutan's TVET system and positioning it as a mainstream career choice.

The audit could examine the effectiveness of the DTE in managing and aligning the TVET programmes with the needs of the economy. The audit could also consider examining the technical and institutional capacity to deliver relevant and quality programmes, coordination and collaboration among the key stakeholders, and institutional arrangement for education progression for TVET graduates.

vi. Employment generation

The MoLHR is responsible for “facilitating human resource development for economic development to ensure gainful employment for all Bhutanese workforce”. In Bhutan, youth unemployment continues to remain as a significant challenge. In 2020, the youth unemployment rate is projected to be 22.6 percent, almost double the rate of 11.9 percent in 2019. In terms of absolute figures, there are 6,922 unemployed youth who are actively looking for jobs in their communities. The Labour Force Survey 2020 reported that the youth unemployment rate in urban areas (33.3%) is double than that of rural areas (15.1%). Thimphu has the highest youth unemployment rate (37.1%) followed by Paro (29.6%), Pemagatshel (27.8%), Sarpang (25.3%), Dagana (24.8%), Chhukha (24.2%) and Punakha (22.7%).

Youth unemployment has been attributed to various causes ranging from economic crisis that leads to lack of growth and job creation compared with the youth cohort growth; to voluntary unemployment of higher income youth that might wait for better paid jobs, in contrast to low income youth that have to work earlier in informal sector and; to discrimination among age groups due to absence of experience or skills, among other variables. Similarly, the youth unemployment rate in Bhutan could be attributed to ‘increasing number of youths graduating from schools and institutes every year, mismatch of skills in the job market, poor societal image and recognition of non-academic profession and high aspiration for the public-sector job. Labour market failure particularly in relation to the skill gap results to labour shortage of school graduates with required skills.’

In order to address the issues, in the 11th FYP, the MoLHR had focused on providing skilling support to different secondary and university graduates in transition to work. Several new programs were designed and implemented. Similarly, in the 12th Five Year Plan (FYP), creating productive and gainful employment has been identified as one of the National Key Result Areas (NKRA). The key performance indicators under this particular priority are to maintain national unemployment rate below 2.5 percent and reduce youth unemployment rate from 12 percent to 6.5 percent by the end of the plan period.

The national unemployment rates over the years have averaged between 3-4 percent annually while the youth unemployment rates have been increasing over the years.

The Royal Audit Authority has conducted audit on Employment Generation and Promotion Initiatives in Bhutan in 2016. It is an appropriate time to assess the implementation statuses of the recommendations provided in 2016. Further, the audit could assess the current status of employment generation schemes in terms of curbing youth unemployment, enhancing meaningful employment, and workforce productivity. The audit could also consider to assess collaboration in HRD efforts amongst different key players.

B. Environment and Natural Resource Sector

The National Key Results Areas related to environment are:

- i) NKRA 5: Healthy Ecosystem
- ii) NKRA 6: Carbon Neutrality, Climate and Disaster Resilient
- iii) NKRA 17: Sustainable Water

The challenges identified in the sector are degradation of ecosystems, rising pressures on natural environment, vulnerabilities to impact of climate change and natural disasters, increasing incidences of forest fires, risk of GLOF, drying up of water sources, shortage of drinking and irrigation water, crop diseases, windstorm and erratic and high intensity of rainfall.

The RAA intends to ensure performance audit coverage on themes and subject matters related to compliance to global environment conventions and agreements, sustainable water and natural resources, climate change, and water management under this sector.

i. Compliance to Multilateral Environment Agreements (MEAs)

The constitution of the Kingdom of Bhutan mandates that 60% of land area should remain as forest cover for all times to come and Bhutan has managed to uphold this mandate by maintaining 72% forest coverage till now. However, Bhutan is constantly challenged in managing its pristine environment because environmental concerns such as air pollution, climate change, hazardous waste, and deterioration of the ozone layer, are trans-boundary or global in nature and these are also not only caused by activities inside the country but also outside the borders. As such, many countries across the globe recognised the global dimension of the environmental problems and developed a wide range of international environmental agreements to enable them to collaborate on a broad range of such environmental challenges. MEAs are such instruments developed to address environmental problems that are trans-boundaries. Bhutan, in its commitment to preserve environment, is signatory to 19 MEAs related to environment, agriculture and forestry. Similarly, during the 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 re-iterating Bhutan's pledge to remain carbon neutral.

Since Bhutan is recognised as an environmental champion and has also made commitments to several international and regional conventions, it has become imperative for the RAA to assess the performance of MEAs obligations in order to present achievements of such obligations and also to build credibility in the international arena. More so, non-compliances to MEAs will have negative and adverse impact on the pristine environment of the country, which is preserved and kept contact till now. As such, the audit of MEAs would mainly provide assurance in terms of compliances to the multi-lateral & regional environment conventions and agreements and also to do self-reporting on the achievement of required obligations.

ii. Watershed management

Watershed is not only essential to support ecological functions but also plays an important role in enhancing social and economic lives of the communities, primarily supporting an agrarian livelihood. Thus, protection of the natural resources in our watershed is necessary to maintain the lifeline for the people and sustainable water sources for agriculture activities. Bhutan is known to have abundant freshwater resources in the form of glaciers, snow, lakes, streams, and rivers with per capita availability of 94,508 cubic meters per person annually, one of the highest in the world (Bhutan Water Facts, WWF 2018). It has strong policies, acts, and regulatory frameworks that seeks to safeguard water resources which contribute to maintaining a healthy river system.

Water Policy 2002 recognizes that sustained flow of water of good quality depends on the integrity of the watershed and calls for an integrated approach for effective management of water resources and provides directive to protect all forms of water resources. The policy also seeks sound watershed management through extensive soil conservation, watershed area treatment, conservation of forests and increasing the forest area to reduce the incidence and intensity of floods. In order to sustainably implement the strategies related to watersheds, a *Roadmap for Watershed Management in Bhutan* was developed in 2014. Currently, the country is divided into 186 watersheds and a total area of 5,18,882 hectares has been identified as critical watersheds in different water basins (WMD, 2011).

National Environment Commission and Watershed Management Division under the Department of Forest and Park Services are responsible for effective and integrated watershed management, maintain and improve water and watershed conditions and contribute to sustainable livelihoods through provision of watershed services. However, in the 12th FYP, under the water flagship program, the Ministry of Works and Human Settlement is entrusted to implement the component-promotion of integrated watershed management with a budget outlay of Nu. 40 million. Additionally, a total of Nu. 290 million budget outlay is allocated to Ministry of Agriculture and Forests for effective management of wetlands and watersheds.

Although there is abundant water in the country, communities are still facing acute shortage of water for drinking and irrigation due to climate change and disturbances to the water resources. Such issues are frequently covered in print and social media. Thus, this topic has been selected to see whether there is effective management of the watershed in sustaining an adequate supply of freshwater to meet agricultural and domestic requirements of the communities.

iii. Mining Operations

Bhutan is endowed with rich mineral resources such as dolomite, limestone, gypsum, slate, and coal. It also has small deposits of marble, quartzite, granite, talc, iron ore, and pink shale. The country has further potential of discovery of many more minerals as only about 33% of the country has been geologically mapped. The composition of minerals is 54% dolomites, 27% limestone, 9% gypsum mines, 3% coal mines, 2% marble, 2% quartzite mines, and 3% others (2019). In the year of 2019, the mining and quarrying sector contributed 5% of the total GDP and in terms of figures, it has contributed Nu. 8,577 million to overall GDP during the same year (NSB website). Since minerals form the basis of industrialisation and economic development, the government has identified mining as one of the five jewels of economy besides hydropower, tourism, cottage & small industries, and agriculture. The government has always given priority to these five Jewels as they constitute the core growth areas in terms of their potential and impact to the society at large.

Apart from the Mines and Minerals Management Act 1995, Mines and Minerals Regulations 2002, a Mineral Development Policy was also developed in 2017 with an objective to build profitable, environment friendly and socially responsible mineral industry that ensures intergenerational equity for future generation to have access to our natural resources. Initially, all mining activities were carried out by the government and gradually, with the policy of privatisation, mining operations were privatised over the years. Mining activities are now mostly carried out by private companies, except for a few captive mines that are operated by state owned enterprises. State Mining Corporation Limited (SMCL) was established by the Royal Government of Bhutan in 2014 as DHI's 100% subsidiary company in order to realise the potential of mining sector's contribution to the economic development. SMCL is now operating Khothakpa Gypsum Mine, Habrang Coal Mine, Tshophangma Coal Mine, Rishore Coal Mine, Dzongthung Stone Quarry, and Kharbari Dara Stone Quarry.

Ministry of Economic Affairs (MoEA) is the lead agency in safeguarding and managing the mineral resources and in the 12th FYP, an indicative budget outlay of Nu. 297.98 million was allotted to exploration of minerals, auctioning of mines and geological mapping. The collaborating partners are National Environment Commission Secretariat, Local Government and Ministry of Agriculture and Forests.

Considering the importance of mining sector for the economic development and several pertinent issues reflected in the previous audits, mining operation has been identified as one of audit topics with an objective to bring out improvements in the mining operations including strong enforcement of regulations and requirements.

iv. Provision of drinking water in Thromdes

In Bhutan, providing access to safe drinking water to all the citizens is regarded as an important element to achieve Bhutan's goal of GNH. It is also enshrined as an individual's right in the Constitution of the Kingdom of Bhutan. Drinking water is abstracted from various sources such as rivers, streams and springs. Safe, adequate and accessible supplies of drinking water combined with proper sanitation are the essential components of primary healthcare. The National Health Survey of 2012 reports that the proportion of Bhutan's population with access to improved drinking water source is 97.7%.

However, the report on a rapid assessment of rural drinking, water quality, which was carried out by the Royal Centre for Disease Control (RCDC) in 2012, showed that only 17% of stream water sources and 28% of spring water sources, were safe for drinking. This implies that assurance of safe drinking water is a challenge in Bhutan.

According to National Statistical Bureau, the urban population was approximately 274,967 persons (37.28% of the total population) as of 2017 and it is projected that by 2022, approximately a total population of 311,994 will reside in urban areas (NSB website). The percentage of urban population having access to improved water supply increased from 84.50% in 2005 to 99.6% in 2017. However, sustainability and 24x7 reliability of urban water supply remain the main challenge. Most of the urban areas also have access to only intermittent water supply. The duration of supply generally ranges from 4 to 12 hours daily. 43% of the total urban population is supplied with 24 hours, 46% with 8 to 12 hours and 11% with less than 8 hours. 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 percent of households still need to travel for at least 30 minutes to the nearest water sources. The primary reasons identified for intermittent supply of water are poor demand management, inadequate infrastructure and unreliable water source. Climatic conditions aggravated by catchment degradation has also resulted in drying up of water sources in some areas in the recent years. With cognizance to acute shortage of drinking water, the government had set priority in the 12th FYP by initiating water flagship to ensure 24x7 safe drinking and irrigation water with a budget outlay of Nu. 3000 million.

Bhutan is known to be water abundant, with one of the highest reported water availability per capita in the region. However, issues with water accessibility continue to persist across the country. This scenario of high water availability but low accessibility exists mainly due to proper source management, inadequate infrastructure development and maintenance, and issues in governance and sector based systems as pointed out in performance audit report on provision of drinking water in Thimphu Municipal conducted in 2017. Moreover, the rapid urbanization of the city and staggering urban population growth also pose challenges for adequate water supply in the Thromdes.

Considering government priority, investments made and persistent shortage of adequate drinking water supply in the urban areas, similar audit in other Thromdes would make a greater impact on public particularly for having access to adequate and safe drinking water.

v. Disaster Management

Disaster has always been a concern for a small and vulnerable country like Bhutan because of being prone to a range of natural hazards such as earthquakes, Glacier Lake Outburst Flood (GLOF), flash floods, windstorms, forest fires, and landslides. The country's geographical location and its proximity to northeast India falling under Seismic Zone IV, and experience from past earthquakes indicate that Bhutan is at a high risk of seismic related hazards. Climate change related to GLOF is a major concern and poses serious risks to settlements and people living downstream. Seasonal strong wind causes damages to homes in rural Bhutan. Other hazards such as landslides, flash flood and forest/structural fires also sweep across the country causing significant damage to property and loss of life and

livelihoods. Emerging risks from trans-boundary movement of people and goods bringing in epidemics and pandemics are also of concern to Bhutan.

Understanding the importance of disaster management in the country, the Disaster Management Act was enacted in 2013 with an objective to ensure safety and security of public assets and services by reducing and managing risk arising out of disaster. Further, the Disaster Management Rules and Regulations 2014 was also framed to establish an administrative and regulatory framework for disaster management. Since disaster management needs multi-sectoral approach, the Act clearly delineates the roles and responsibilities of the National Disaster Management Authority (NDMA) and the different stakeholders at the National, Dzongkhags, Dungkhangs, Thromdes and Gewogs. Department of Disaster Management under the Ministry of Home & Cultural Affairs (MoHCA) acts as the national coordinating body and NDMA as the highest decision making body in the event of disasters. In the 12th FYP, an indicative budget outlay of Nu. 289 million has been allocated to MoHCA for enhancement of disaster risk reduction and management in the country. Additionally, a total of Nu. 44.79 million is allocated to Department of Geology and Mines for assessment and reduction of risks related to geo-hazards and Nu. 29 million to Ministry of Works and Human Settlement for development and implementation of disaster management contingency plan to ensure sustainable human settlements.

Disasters can occur anytime, anywhere and may have a major impact on the lives and properties. Recognising the adverse effects of such disasters in terms of damages and loss caused to infrastructure, personal properties and even to human lives, the RAA conducted disaster management in 2015 and highlighted issues related to weak enforcement of critical requirements of the Act, non-existence of national disaster contingency plan, lack of coordination, non-establishment of Emergency Operations Centres (EOCs), etc. Even after 6 long years since the last audit, not much progresses have been visibly seen in disaster management until shuddered by the current unprecedented pandemic brought about by COVID-19 in the country.

Since disasters have a social, economic and overall rippling impact to our people and to our nation as a whole, it is imperative to assess whether our country is prepared in responding and reducing the impact in the event of disasters and thus, this audit would be timely and relevant.

vi. Climate Change Projects

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 socioeconomic development.

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.

The NKRA 6 Carbon neutrality, climate and disaster resilient of the 12 FYP aims to ensure a carbon neutral 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.

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.

In 2017, Bhutan for Life (BFL), a transition fund of USD 43.1 million contributed by multilateral and private donors 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 climates 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.

Therefore, the RAA would be taking up an audit to assess the effectiveness of climate change projects implemented. The audit could focus results of mainstreaming environment in all sectoral and local government plans, enhancing mitigation and adaptation to climate change and strengthening preparedness and response to both natural and man-made disasters.

vii. Waste Management

Increasing population, economic activities, unsustainable development processes, availability of non-biodegradable imported products in the market and change in consumption patterns in the society have led to increased waste generation which are not only raising environmental concerns but also posing risks to health. As per the National Waste Inventory Survey 2019, Bhutan generates 172.16 Metric Tons of solid waste per day, of which, the household waste stands the highest at 47.34 percent followed by commercial units at 39.09 percent. In terms of household waste, the average household waste generated is 0.7 kg per day in urban areas compared to 0.4 kg per day in rural areas. Most of these wastes end up at the landfills with minimal or no recycling. In order to minimize and enhance efficiency in the management of waste, the Waste Prevention and Management Act of Bhutan was adopted in 2009 with the view to promote 3Rs and improve final disposal sites. The regulation on waste management was adopted in 2012 and revised in 2016. Similarly, integrated solid waste management strategy was formulated in 2014 with specific targets spread out in short, medium and long-term.

Over the years, waste management practices in the country has also progressed with the involvement of private sector and volunteers, especially for solid waste management. There has been visible

private sector involvement in waste management including an establishment of a plant for recycling plastic waste as road surfacing material. Nevertheless, with increasing production of waste, the management including segregation and disposal is becoming a prevalent problem particularly in urban areas. Apart from municipal solid waste, the country is also facing challenges in managing other wastes such as medical waste and e-waste due to lack of capacity, facilities and resources. Most of hazardous medical wastes, produced from BHUs and hospitals across the country, end up at the landfills. Similarly, with rapid change and advancement in technologies and high rate of obsolescence, a large number of e-waste is produced in the country, which is ultimately auctioned to dealers across the border.

Despite having several legal instruments and procedures instituted, the waste management measures have not been effectively implemented by relevant authorities resulting in increased issues of improper dumping of wastes in the open areas. This is due to various factors such as budget constraints, lack of capacity of Thromdes, Dzongkhags and implementing/collaborating agencies, lack of coordination amongst implementing agencies and lack of awareness and cooperation of the general public as stated in National Waste Management Strategies 2019.

The government has identified waste management as a flagship program with an indicative budget outlay of Nu. 1.000 billion in the 12th FYP. The Prime Minister Office is the lead agency for the flagship program and National Environment Commission has been identified as a lead agency to prepare strategies for reducing waste and also for enforcement and monitoring. The flagship program intends to provide interventions for waste management in the country through whole-of-government approach with an overall goal to achieve Zero Waste Bhutan.

Considering the growing problems related to managing wastes not only in urban but also in rural areas, this audit is selected with an aim to strengthen strategies for better management of waste including strong enforcement and monitoring of waste management and ultimately attaining zero waste society. Although an environment audit on solid waste management was conducted in 2007-2008, improvements in the policies & strategies had not been made because the waste problem still persist both in urban and rural areas and it is high time another performance audit is carried out on the same topic accounting all issues related wastes.

viii. Operations of Natural Resources Development Corporation Limited (NRDCL)

Natural Resources Development Corporation Limited (NRDCL) is responsible for the extraction of construction materials like timber, sand, and stone and ensuring that they are made available at affordable prices in a fair and equitable manner. The extraction of these natural resources is done in close consultation with the Ministry of Agriculture to ensure long-term sustainability. Natural Resources Development Corporation Ltd. was first started in 1984 as the Bhutan Logging Corporation (BLC). It was then named Forestry Development Corporation Limited (FDCL) in 1996 to reflect its diverse activities. In 2007, it was further restructured to form the Natural Resources Development Corporation Ltd (NRDCL). NRDCL is a fully-owned Druk Holding and Investments (DHI) company.

The authorized share capital of the Company is Ngultrum 50.00 million divided into 500,000 equity shares of Ngultrum 100 each. NRDCL generated revenue of Nu. 379.9 million and Nu. 397.4 million in 2015 & 2016 respectively. The details of which is presented in the Table below:

Sl. No.	Particulars	Revenue generated (Nu. In Mn)	
		2015	2016
1	Timber	280.608	282.633
2	Sand	55.002	69.313
3	Stone	9.854	15.228
4	Stone chips	34.394	30.262
Total		379.858	397.436

Profit and Expenditure of NRDCL (2012-2016)

Year	Profit (loss) (Nu. in Million)
2012	51.930
2013	30.833
2014	5.8461
2015	15.709
2016	7.830
2017	(61.827)

Although due to urbanization demand for construction material have been increasing, the profit earned by the company has been decreasing, incurring huge loss in 2017. Therefore, a Performance audit on the operations of NRDCL would give us insights on the inefficiencies and what needs to be corrected. Thereby, meeting the objective of delivering the construction materials in most accessible and affordable manner, considering sustainability of the resources and fairness and equity in the delivering of goods to public.

C. Education Sector

NKRA 7, Quality of Education and Skills is related to this sector. The plan identifies challenges of quality of education, gaps in performance of students in more demanding tasks, enrolling unreached group of children, quality programmes in vocational institutes, low competency of university graduates, youth employment etc., in this sector.

The RAA shall focus on conducting performance audit of implementation of plans and programmes related to provision of conducive and enabling environment for quality education, and inclusiveness in achieving its sectoral objectives and outcomes.

i. Quality education

The education system in Bhutan has three main forms: general education, monastic education and non-formal education. The general education system is by far the biggest and is now commonly seen as the formal educational structure. Within a period of about six decades, the modern education system has expanded from about 11 schools prior to 1961 to 1124 schools and other educational institutes in 2021, spanning from early childhood care education to technical and vocational education, and tertiary education. The expansion of the education system has been triggered by rapid growth in the student enrolment. From about 400 students in the early 1960s, total enrolment has increased at all levels of formal education and tertiary institutes within the country to 197381 employing over 10000 educators in 2021.

The overall objective of school education is to prepare citizens to become knowledgeable, skilful, creative, innovative, enterprising citizens capable of responding to the national needs and emerging global trends. The responsibility for the administration of education in Bhutan is shared amongst the Ministry of Education (MoE), Department of Curriculum and Professional Development BCSEA, Ministry of Labour and Human Resources (MoLHR), tertiary education institutes, dzongkhags, thromdes, gewogs and schools. Monastic education is the responsibility of the central monastic body and privately managed independent monasteries and nunneries.

As the future of the country lies in the hands of the youth and youth accounts for about 24 percent of the population, youth development has been pursued as a priority program in the 12th FYP. The Ministry of Education has been provided with capital outlay of Nu. 4,000.00 million to implement programmes to provide equitable and quality education in the country. Although there have been continuous efforts in the expansion of educational facilities and support mechanisms in all the five year plans, challenges continue to remain in providing access to hard-to reach areas, providing inclusive education and in improving the quality of education. Therefore, the MoE's focus in the 12 FYP on addressing the quality and inclusiveness of education, including improving the health and well-being of children, enhancing equitable and quality tertiary education, enhancing the professional development of teachers, strengthening vocational education in schools and enhancing adult literacy and lifelong learning.

The audit could consider whether MoE and the relevant stakeholders' plans and programmes are effective in improving the administration of education system in the country and providing quality education to the children of Bhutan.

ii. Special Educational Needs (SEN) program

Bhutan established its first specialized institute catering to the educational needs of the visually impaired in Khaling, Trashigang, in 1973 under the patronage of His Royal Highness Prince Namgyel Wangchuck. Through this initiative, visually impaired Bhutanese were able to participate in education for the first time and today are contributing on an equal footing to the socioeconomic development of the country. Bhutan Education Sector strategy 2020 also declared that children with disabilities shall enjoy comprehensive access to education and benefit. As of 2017, there are 12 general schools and two specialized institutes with SEN programmes, and two NG Vocational Training Centers with 498

teachers catering to 647 children with disabilities and special educational needs spread out in 12 Dzongkhags.

International donor agencies are also increasingly supporting the inclusive developmental issues like disabilities and gender. While there are programmes in support of the issue, it is necessary to ensure that such funds are utilized for better fulfilment of the envisaged goals. In Bhutan, at least 21.7 % of children aged two to nine years have mild to severe disability. Out of this only limited number apparently have access to education as 2% of the children of school going age are not enrolled into schools including children with disabilities. Although, numerous initiatives to create provisions for education and other support services to cater to the needs of children with special educational needs (SEN) are underway, there needs to be more focused plans, strategies and concerted efforts in implementation.

The challenges and issues that SEN is confronted are lack of infrastructures, resources such as trained teachers and teaching aids. In order for government to achieve its goal of 'Education for All', the Ministry of Education has initiated the development of policy and strategies to enhance the special educational services.

The audit would have an immense social impact on inclusion and mainstreaming the children with disabilities into education and society. It could contribute greatly to achievement of social goals of GNH in general and provide impetus to the ongoing SEN program in particular. This audit would help guide the future course of actions and similar programmes addressing the provision of access and equalization of opportunities for them and ultimately enabling them in attaining their full human potential.

D. Agriculture Sector

NKRA 8, Food and Nutrition Security relates to this sector. The challenges to achieving food self-sufficiency are identified to be loss of agricultural land, declining productivity, outbreak of pest and diseases, farm labour shortage etc.

The RAA intends to focus on conducting performance audits on specific themes related to implementation of plans and programs for improving self-sufficiency and achievement of sectoral goals.

i. Food Security (Production, access to markets, nutrition)

Guaranteeing food security as a basic human right has been a principal policy objective of the Royal Government of Bhutan for many years. The Ministry of Agriculture and Forests (MoAF) established in April 1985, is responsible for making rural livelihood productive and sustainable through its operations to better contribute to the pursuit of Gross National Happiness (GNH). Importance of agriculture is extensively documented and highlighted in key policy documents such as Bhutan's Vision 2020, Bhutan Economic Development Policy (2010), Five Year Plan documents, etc.

During the first to seventh plan period (1992-96), the Ministry's focus was on food self-sufficiency however, from eight FYP (1997-2001) onwards, the policy shifted to food security. Food security in Bhutan was equated with enhancing food availability through attainment of appropriate level of food

self-sufficiency not realizing that access to food and utilization of food was neglected. In the 11th and 12th FYPs, food security has been given special attention and accordingly identified as one of the National Key Result Areas (NKRA). In the 11th FYP, the food security and sustainability has been identified as NKRA-3 and the key performance indicator being cereal self-sufficiency, which includes rice. Similarly, in the 12th FYP, food and nutrition security has been identified as NKRA-8 which was linked to Sustainable Development Goal (SDG)-2 (Zero hunger) and the sustainable water (including irrigation water) was identified as NKRA-17 which was linked to SDG-6 (clean water and sanitation). Rice being the staple food in Bhutan, it is heavily dependent on quality irrigation systems. As such, irrigation has been the priority of the government in the context of attaining food security.

Agricultural practices have changed tremendously over the years. In the past, agriculture was practiced on a subsistence basis, which was supplemented by raising different kinds of domestic such as cattle, chicken, pigs and yaks. Today, increasing number of farms are mechanized with sizable investment on the machinery and other inputs that are subsidized by the government. Cash crops such as oranges, apples, cardamom, ginger, potato, etc. are exported. Farmers have increased cereal production with the propagation and practice of double cropping of the paddy production. In the livestock sector the artificial insemination covers not only for the Jersey breeds that are high yielding but also for the production of Jatsa and Jatsam that are local high yielding varieties. However, the Ministry is faced with the recurring challenges such as loss of agriculture land for other development, land fragmentations issues, rural urban migration (RUM), Human Wildlife Conflicts, increasing numbers of Gung tongs in the villages, increasing fallow land areas, limited scope for farm mechanization, huge imports of agricultural products, environmental issues, amongst others.

As per the Poverty Analysis Report 2017, 8.2% of the population is under poverty line and 14.8% (2015) of food is imported to meet the demand of the population. Although, poverty has declined by about a third from the estimate of 12% in 2012, Poverty in rural areas is significantly higher with 11.9%. Bhutan's food imports have more or less remained the same with the highest import being in 2007 with 21.9% when in the same year the domestic production started to decline. As regards the food export, it had increased by 3.8% in ten years from 2005 to 2015 (10.7% and 14.5% respectively).

Bhutan has easy access to Food products from India due to strong bilateral relationship between the two countries. Looking at the Bhutan's import statistics and potential to produce domestically to meet the consumer demand it is virtually not possible for Bhutan to restrict imports of essential food items from India and other countries. Further, Bhutan does not have a strong export sector excluding hydropower. In 2016, the total imports were at Nu.67.40 billion while export was around Nu 35.30 billion. Our overall trade imbalance is to the tune of Nu 32 billion. It is a well-known fact that more than 85% of our trade is with India.

In view of the above, a performance audit to assess the efficiency and effectiveness of Food and Nutrition Security Strategies and Programmes is merited.

ii. Operations of RNR centres (marketing, organic farming, farm mechanisation)

The Department of Agriculture (DoA) is the nodal agency for both the agriculture research and extension services in the country. The agriculture extension system is bifurcated into national, regional,

dzongkhag and gewogs level. The national and regional level extension is represented by the Department, Divisions, Central Programmes and regional ARDCs involved in supporting and providing technical backstopping to dzongkhags and gewogs. Agriculture Research and Extension Division (ARED), Agriculture Production Divisions (APD) and Agriculture Engineering Division (AED) are the division that oversee the extension plans and programmes. Further, Central programmes viz. National Soil Service Centre, National Seed Centre, Agriculture Machinery Centre, National Plant Protection Centre, National Post Harvest Centre, National Mushroom Centre and Central Machinery Unit supports dzongkhags and gewogs extension system with their mandated services.

Over the years, the Agriculture Research and Development Centres have developed and released improved varieties of rice, maize, fruits and vegetable increasing the average productivity in attaining food self-sufficiency as a result of improved technologies. Research system have increased access to improved varieties of seeds, improved management practices, and marketing opportunities for farmers thereby increasing their livelihood.

In spite of these far-reaching impacts, several structural changes over the years within the ministry and the department have affected the consistency and growth of research. These were further compounded by the lack of a formal research strategy, declining coordination between DoA and ARDCs, development activities dominating planned research activities, lack of dynamic and professional research culture, research system lacks mentoring & proper monitoring & evaluation, inactive research forums, inadequate system of sharing knowledge and information among stakeholders, no mechanism to track research outputs, lack of socio-economic research, amongst others.

Dzongkhag and gewog extensions are in the forefront of agriculture extension system working directly with farming community and agri-entrepreneurs. Agriculture Extension Services broadly include advisory, technology transfer, facilitation and administrative services. The key strategic area for extension services include but not limited to crop production, pest management, land development, farm mechanisation, irrigation water management, nutrient management, research outreach programme, market facilitation, farmers' groups and cooperatives, credit facilitation, enterprise development, land services, crop damage assessment, knowledge and information management.

Despite significant contribution by the agriculture extension system to agriculture development, the core agriculture extension programme and their services including farm inputs have not been able to keep pace with agriculture development. At the institutional level, weak linkages between extension, research and central programme has implication on the development of inappropriate technologies. Further, the agriculture extension system is faced with numerous challenges such as traditional cultivation practices, small and fragmented landholdings limiting the scope of extension services, scattered settlements, low frequency and coverage of extension services (one extension agent per gewog policy), extension agent involved in non-extension activities, agriculture activities is dominated by infrastructure development in dzongkhags, extension agents lack adequate knowledge and skills, etc.

A performance audit on the operations of the Research and Extension centres is expected to provide recommendations that will enhance the delivery of their services in agriculture farming and development.

iii. Irrigation systems development

Bhutan is rich in natural resources particularly water which is found in abundance. As per the Bhutan Water Fact (2018), Bhutan has one of the highest per capita water resource availability with 94,500 m³/capita/ annum. Water is an important source of drivers not only for the country's economy but also for agriculture as Bhutan is an agrarian country. Recognising the importance of water for irrigation, which in turn is vital for attaining food self-sufficiency and security, the 12th FYP has identified NKRA 17 as sustainable to ensure availability of adequate water for drinking and irrigation. The plan also identified water flagship programme with an indicative budget outlay of Nu.1000 million and the implementation of this program 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 (MoAF), and Ministry of Finance.

In order to have a stable and productive agriculture sector with dynamic and sustainable irrigation systems that enhances food security, the National Irrigation Policy (NIP) was developed in 1992 and revised in 2012. The policy aims towards development of sustainable irrigation infrastructure and maintenance supported by an effective institutional collaboration at all levels. It also calls for various measures to ensure reliable and efficient water use for intensification and diversification of irrigated crop production in the country. According to the NIP, irrigation is not only about building infrastructure but also encompasses efficient and effective management of irrigation systems for enhancing crop productivity to achieve food security. Thus, the NIP calls for a multi-sectoral approach combining the inputs of engineering, agriculture extension, and water and agricultural research. The MoAF developed National Irrigation Master Plan (NIMP) in 2016 to implement the objectives outlined in the NIP. The NIMP was expected to serve as the 15-years action plan and roadmap for the development of climate-adaptive irrigation schemes, explore alternate water resources for irrigation, enhance water management, and improve productivity through improved irrigation service delivery. 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. Currently, the irrigations in the country were developed mainly for the purpose of rice cultivation although it has wider use. As per the agricultural land use statistics (2019), about 56,069 acres of land (21% of the total arable land) in the country is categorized as wetland which is distributed among Dzongkhags

The rapid socio-economic development is exhorting increasing pressure on the sustainability of water resources impacting availability of water for both drinking and irrigation and ultimately posing impediment to achieve food self-sustainability and security in particular. Although there is abundance of water in the country, insufficiency of water for irrigation has been a persistent problem for farmers and has recently dominated the front pages of print medias. This calls for the RAA to conduct performance audit of irrigation systems to assess whether development and management of irrigation schemes are reliable, adequate and sustainable.

E. Infrastructure Sector

The NKRA's related to this sector are:

NKRA 9: Infrastructure, Communication and Public Service

NKRA 15: Sustainable Human Settlement

The challenges identified in this sector are ensuring reliability and quality of road network, reliability of public transport, inadequate public transportation, traffic congestions, affordable housing for middle and lower income groups, disaster resilience and safety, sanitations etc. The RAA will undertake performance audits of implementation of programs related to these NKRA's to assess the attainment of goals and targets set for this NKRA's.

i. Sustainable and Safe Road Transport

Road transport sector is a fundamental building block for economic growth, improving rural access, facilitating access to services and social cohesion, while creating job opportunities and reducing the travel time and costs. Road network remains the primary means of transportation because of rugged geographical terrains. With cognizance of importance of road transport sector to socio-economic development, priority has been accorded in the 12th Five Year Plan (FYP) to improve road network under the NKRA 9. The aim of the transport sector in the 12th FYP is to improve the accessibility, reliability, and safety of transport services through strong road safety enforcement, inclusive transport services, and eco-friendly public transport.

The Road Safety and Transport Authority (RSTA), Ministry of Information and Communication was established to provide safe, sustainable and inclusive road transport systems in the country. In order to deliver this mandate, RSTA has developed and implemented various road safety programs to prevent and reduce the road traffic accidents such as developing plans and policies, strengthening regulations, conducting driver awareness programs, and enforcing rules and regulations. However, continued increase in number of vehicles, traffic volume, limited road density and coverage have made road safety very challenging. Number of road accidents still remains highest in South Asia despite the numerous interventions and measures (State of the Nation 2013).

Along with the concerns for road safety, growth in population coupled with accelerated urban migration, enhanced affordability and increase in numbers of vehicles, and limited road coverage have led to growing traffic congestion and vehicle emissions. Urban public transportation (city buses) in Thimphu and Phuentsholing Thromdes is limited with less ridership due to low transit frequency, limited coverage, low usage, and inadequate infrastructures to accommodate the range of commuters.

Similarly, inter-Dzongkhag public transportation is privatised and the passenger bus services cater to mostly commercially viable places where transport demand is high. Reliability of public transport in rural areas is still an issue due to low frequency and the limited transport services in the rural invariably lead to limited access to services (health, education, market, etc.) that potentially fuel rural isolation and poverty.

The government priorities towards this sector and issues highlighted above give all the reason to conduct audit in this area so as to bring about improvements in road safety and strengthen as well as create an inclusive and sustainable road transport system.

ii. Farm-roads management and development

As per the Road Act of Bhutan 2013, 'Farm road' means a road that links agricultural farmland areas to national highways and other roads primarily to enable the transportation of inputs to the farm and agriculture produce to the markets. The Act also empowers Department of Roads as the national authority for all roads and Thromde, Dzongkhag & Gewog Administration are entrusted with the responsibility of administration and management of all roads constructed and maintained by them.

The financial year 2010-11 to 2020-21, the country has expended around Nu. 11,756.83 million for new construction and maintenance of farm roads. According to Population and Housing Census of Bhutan (PHCB) 2017, 62.2% of our people live in rural areas, and for the improvement of rural livelihoods, reducing poverty and enhancing regional balanced development, farm roads serve as an important catalyst in driving overall economic development of rural places and in terms of improved connectivity of farmlands to the market.

The government has accorded top priority to the development of farm road network in the country since the start of 7th FYP and by the end of 11th FYPs around 11,200 kms of farm roads were constructed in the country. Moreover, in the 12 Five Year Plan too, farm roads development has been considered as one of the high priority developmental activities. As such the budget outlay for farm roads has been shifted to the LGs and also farm roads development has been included under the budget outlay of Common Minimum Infrastructure (CMI) and flagship program – "Organic Bhutan".

Though the development of farm road network started since 7th FYP and has been considered high priority in all the subsequent FYPs, yet the condition of farm roads remains a major concern today. Issues on need for maintenance of farm roads and difficulties posed to the rural population as result of bad condition of farm roads are highlighted frequently in the media. Therefore, it is imperative for the RAA to take up an audit to determine whether the farm road network and related infrastructure are effectively and efficiently managed and value is received for the funds spent on the management and development of farm roads in the country so far.

iii. Urban Planning in Thromdes

Urban development is as old as, Bhutan's socio-economic development. However, due to changing demographic dynamics and migratory population, the development of urban areas and especially the municipalities had gained significant importance and with rapid socio-economic development, the urban centres are becoming economic hubs. This is setting a new trend and requires provision of increased level of basic amenities such as housing, roads, sewerage, water supply, waste management among others in the urban centres. Developmental activities have scaled-up multi-fold in the Thromdes to accommodate the growing number of population in the urban areas. Thus, the Constitution of the Kingdom of Bhutan, categorize Thromde into two types: Dzongkhag Thromde, which shall be further categorized as i) Class A Thromde; ii) Class B Thromde; and b) Dzongkhag Yenlag

Thromde, based upon population, density, area, trade, and revenue generation. Currently, there are four Class A Thromdes namely Thimphu, Phuentsholing, SamdrupJongkhar, and Gelephu Thromdes.

As per the Population and Housing Census of Bhutan (PHCB,2017) there are a total of 161,392 persons that reside in Class 'A' Thromdes. Therefore, the administration, management, planning, infrastructure development and provision of essential services in a sustainable manner by facilitating direct participation of the people in the development and management of their social, economic and environmental wellbeing is vital for the Thromde and its residents.

In the 12th FYP, the capital grants for Dzongkhags, Gewogs, and Thromde 'A's have been doubled to Nu. 50 billion from Nu. 25 billion in the 11th FYP. This demonstrates the government's commitment to allocate greater share of financial resources to LGs for enhanced local development and greater decentralization. Out of the capital grant of Nu. 50 billion, Nu. 10 billion has been allocation to four class 'A' Thromdes.

Due to upscaling of operations, developmental activities and spending of substantial amount of expenditure, Thromdes are faced with challenges such as unsystematic and uncoordinated manner of execution of infrastructure projects resulting in huge additional costs and inconveniences to the users of these infrastructures.

Therefore, the audit will focus on the review of execution of these infrastructure projects in terms of planning, work sequence, execution and coordination with the relevant agencies. The audit will also highlight the operational inefficiencies and provide recommendations that can help future infrastructure development projects in these Thromdes. The RAA has also conducted audit of urban planning in Thimphu Thromde in 2019 and similar audit in other Thromdes would be beneficial in improving urban planning in terms of infrastructure planning and development.

iv. Stray dog management

Dogs have been an integral part of human society since ancient times and have served various purposes ranging from companionship to utility. Today the population of dogs has reached more than 72,000 in the country according to BBS news September 2021 and the number is still increasing. With an increased population, there is an increase of dog bite cases and risk of rabies outbreaks. The Ministry of Health's 2019 Annual Health Bulletin recorded 6,760 dog bite cases in 2018, 6,416 cases in 2017 while 2016 had recorded 7,915 cases. The Department of Livestock, Ministry of Agriculture and Forests has carried out several dog population control programs but had not been effective in controlling the population.

Thus, to address the issue, the government identified waste management and stray dog as one of the flagship programs. The stray dog program aims to reduce the stray dog population to a manageable level and a budget outlay of Nu. 94.984 million, out of the total Nu. 1.00 billion of the total funds for the flagship program, has been allocated to manage the program. The allocated funds will be utilised to promote stray dog adoption; feral dog population management; and implement animal birth control activities.

Rabies was once reported from across the country; however, it has been eliminated from the northern and central region of the country through restrictive culling and mass dog vaccination. Currently,

rabies remains endemic in the southern region that shares a porous border with neighbouring states of India. The past rabies outbreak in Bhutan has been attributed to the increase in the number of stray dogs. However, the risk of new canine to human viral and bacterial infections still exists with the presence of an unmanageable stray dog population. Besides posing risk for transmission of diseases, the stray dog population has become a nuisance and a safety hazard for both locals and tourists. With the increasing number of stray dog in the country and the threat posed by dog bites to the public, it is therefore important to audit and assess whether the strategies carried out under the flagship program are effective and efficient in controlling the stray dog population. The audit is timely because stray dogs have become not only an inconvenience but also a threat to public safety.

F. Public Administration Sector

The public administration encompasses all public apparatus in delivery of public services. Therefore, the areas for performance audit shall include review the functioning of public agencies through the lens of economy, effectiveness and efficiency of the operations and delivery of services. The RAA shall, based on the opportunity for improvements, select specific agencies or services for performance audits on a regular basis. The broad themes identified in this plans are governance of public entities and public service delivery of critical services.

i. Performance management in the Public Sector

Annual Performance Agreement (APA)/Annual Performance Target (APT) was institutionalized under the Government Performance Management System (GPMS) as a tool to determine the performance level of agencies. The tool ensures the effective implementation of the Government's pledges in terms of objectives, targets and results. GPMS is managed by Government Performance Management Division (GPMD) under the Prime Minister's Office.

The common objectives of APA are:

- To establish clarity and consensus about annual priorities for the Ministry/Autonomous Agency/Dzongkhag consistent with the Five Year Plan and other priorities of the Government;
- To make the Ministry/Autonomous Agency/Dzongkhag fully responsible for driving implementation and delivering the results against the annual priorities; and
- To provide an objective and fair basis for evaluating the Ministry's/Autonomous Agency's/Dzongkhag's overall performance at the end of the year.

The APA was introduced as a tool to support and ensure effective implementation of the 11th Five Year Plan's strategic objectives, targets and results that the government has pledged to the people. APA/APT are annual operational plans to achieve the NKRA's and SKRA's of the FYPs. Assessing the performance at the individual agency level prior to and after the introduction of APA may be practical.

The audit could assess the effectiveness of performance management systems instituted in the public offices to ensure performance accountability. The audit could also consider analyzing the performance evaluation result and the plan target achievement.

ii. Corporate governance in State Owned Enterprises (SOEs)

SOEs in Bhutan are categorized into two groups; socially oriented and commercially oriented SOEs. The State portfolio consists of 38 companies of which 19 are held directly by MoF and 19 through DHI. The total paid up capital of SOEs with direct shareholding under MoF is around Nu. 50 Billion and the total value of paid-up capital of DHI portfolio companies is around Nu. 59 Billion. In 2017, SOEs contributed around 38% of the total domestic revenue and around 6% of GDP. It is also the largest provider of employment in the country with more than 12 thousand employees. SOEs constitute a major part of the country's economy operating in key strategic sectors including hydropower sector. The combined asset value of SOEs is currently around Nu. 260 Billion.

According to a review by RMA, the spending on SOEs account for 15% of the total expenditure during the 11th five-year plan. In the FY 2017-18, SOEs received subsidies in the form of interest subsidy, operational subsidy and capital grant amounting to Nu. 2,434 million. Further, MoF's annual report indicate corporate governance of SOEs owned by MoF are not performing in comparison to SOEs owned by DHI.

The SOEs have been instrumental in delivering public services and employment opportunities in the country during the 11 FYP. However, with no competition from the private sector, these companies may have few incentives to innovate. Consequently, many of them may either deteriorate or perform poorly. And it becomes the responsibility of government as an owner to bail them out by providing financial help. Poorly performing SOEs could incur high financial and economic costs and impede competitiveness and growth, in many countries becoming a fiscal burden and a source of fiscal risk as they weaken the financial system. Continued lending to unprofitable companies can create contingent liabilities and is likely to destabilize the macro economy.

The audit could consider the effectiveness of the governance system instituted and performance of the SOEs in terms of public service delivery and generating employment. The audit could also consider working out the cost-benefit of having the SOEs.

iii. Preparedness of Local Governments

The Local Government Act of Bhutan was enacted in the year 2009. It states that the Dzongkhag Tshogdus and the Gewog Tshogdes are the highest decision-making bodies in the dzongkhags and gewogs, respectively. Whereas, the Thromdey Tshodey is the highest decision making body in the Thromdeys. Thus, Local Government consist of 20 dzongkhags, 20 Thromdeys and 205 Gewogs.

Local Government do not have legislative functions but can make rules within the framework of national legislations. The Local Government Act, 2009, specifically mentions regulating air, water, noise pollution and other environmental degradation as a function of LG. LG is designed to bring development to the people. This does not only mean closer physical proximity of development services but also democratic decisions and active participation. Local Government is expected to plan and deliver services efficiently. This is their service delivery role. They are also charged with conserving culture and tradition and promoting community harmony.

Besides making policy and legal framework related interventions, equal emphasis has also been given on capacity building of the local government functionaries. At the central level, separate entities like the Department of Local Governance under the Ministry of Home and Cultural Affairs, and the Local Development Division under the Gross National Happiness Commission have been created, solely to coordinate and oversee development activities, and provide various technical backstopping to the Dzongkhag and Gewog authorities. At the local government level, continuous efforts are being made to build their capacities in terms of both human resources and infrastructure facilities.

Additionally, Annual Grants System (AGS) was introduced based on the principles of financial decentralisation to LGs as stated in Article 22.18 of the Constitution. It is a mechanism for inter-governmental fiscal transfers to LGs. It should enable better planning, prioritisation, development, and implementation of improved local plans and programmes leading to an overall improvement of local service delivery. The AGS thus changes the role of LGs from being spending agents of the centre into 'principals' in their own right, focusing on local priorities and needs. As the AGS includes a new system of annual capital grants, it is important that the LGs in these new processes be prepared and ensure public service delivery and infrastructure in an efficient and effective manner.

The audit could consider assessing the performance of LGs in the new system set-up, particularly focusing on the capacity of the LGs in use of allocated budget and implementation of developmental plans and programmes.

iv. Thromde and municipality services

The Bhutan Municipal Act, 1999 was enacted purposely to enable the establishment of Municipal corporations as legal entities with perpetual succession, and to confer on them such powers as required to forge partnerships between the Municipal Corporation, the resident and industry of the Municipality for effective development and governance of the Kingdom's urban community. Thus, the Municipal Corporation was founded to provide effective and equitable services, and promote the general well-being of the resident of the Municipality.

With the amendment of Local Government Act in 2009, the Ministry of Works and Human Settlement commenced the Thromde rule in 2011. As per the act, there are two types of Thromde; Dzongkhag Thromde and Dzongkhag Yenlag Thromde. Dzongkhag Thromdes are further categorized as Class A and Class B Thromdes. Thromdes are responsible to take care of public services, infrastructure development and the overall wellbeing of the citizens under their respective jurisdictions. Providing Thromde services are among the core tasks of a Thromde and represent a tangible and direct link with its residents. The access to Thromde services and the quality of their provision strongly influence the social, economic and environmental performance of the Thromde as well as its urban development. The annual Planning and budgeting process of the Thromde is similar to the government budgetary bodies. Thromdes prepare Annual Performance Agreements (APA) based on the 5 year plans and programmes. Thromdes receive grants from the RGoB for capital expenditure and use the revenues collected to meet recurrent expenditure.

Several issues on Thromdes' service delivery were noted in past audits and also in mainstream and social medias. An audit on Thromdes services would help in assessing the quality of the services provided as well as betterment of services through recommendations.

v. Land administration services

The National Land Commission Secretariat (NLCS) aspires to become 'a dynamic and professional organization that delivers excellent land governance services and provides reliable land information for the nation's wellbeing'. It is mandated to manage, regulate and administer the ownership and use of land, guarantee the security of land tenure and ensure easy access to reliable land information.

The need for efficient and effective land administration, management and governance is critical not because land is one of the indispensable factors of production which plays a critical role for the socio-economic development of the country, but it is the priceless asset and driver for all round conservation efforts and land based resource management. The sound land governance driven through proper spatial planning and land use zoning is one of the primary sources of well-being and happiness for the people. Thus, in the 12th FYP, the NLCS's focus is to strengthen National Spatial Data Infrastructure (NSDI) and land related service delivery. A budget outlay of Nu. 300 million is provided to NLCS in the 12 FYP.

A good land administration system should:

- a. Guarantee ownership and security of tenure;
- b. Support land and property taxation;
- c. Provide security for credit;
- d. Develop and monitor land markets;
- e. Protect State lands;
- f. Reduce land disputes;
- g. Facilitate land reform;
- h. Improve urban planning and infrastructure development;
- i. Support environmental management; and
- j. Produce statistical data.

However, in reality competing demands and conflicting interests over land use puts pressure on the limited land available. As such the Secretariat is expected to continuously improve land related service delivery through ICT platforms and maintain an up-to-date and reliable database. An Audit on land administration services will contribute in enhancing service efficiency and compliance to provisions of the Land Act and the Land Rules and Regulations and any other relevant rules and regulations.

vi. Tax administration

The Department of Revenue and Customs (DRC), Ministry of Finance (MoF) is the agency responsible for the formulation and implementation of income tax rules and regulations, assessment, collection and monitoring of taxes, reviewing and recommending tax policy changes to the MoF. The DRC with its head Office in Thimphu, has eight regional offices covering all 20 Dzongkhags in the country.

Taxes are broadly categorized as direct tax and indirect tax. Direct tax includes Corporate Income Tax, Business Income Tax, Personal Income Tax, Royalties and Other Direct Tax revenues. Indirect Tax includes Sales Tax, Excise Duty, Import Duty, Green Tax and other indirect tax. Ministry of Finance formulates policies, programmes and activities to ensure the effective collection of domestic revenue mainly through various forms of taxes.

Taxation is key in fostering economic growth and development. Taxes need to be levied in accordance with law and failure to comply with the law on part of the taxpayer should be considered as a breach. The tax administration should be able to make all those obligated to pay the correct amount of tax. It should be able to plug in holes allowing tax evasion. Therefore, the audit could assess the effectiveness of the tax administration system in levying equitable and correct taxes in the country.

vii. Fiscal Incentives

‘Fiscal Incentives’ generally means government providing temporary exemption of taxes and duties, granting income tax holidays to boost private sector development and making Foreign Direct Investment in the country more attractive. This is generally done to stimulate economic growth, foster private sector development, and generate employment in the country.

In 2010, the Ministry of Finance announced the Rules and Regulation on Fiscal Incentive 2010 and 2016. In 2017 the 9th session of the 2nd Parliament, passed the Fiscal Incentive Act of Bhutan 2017 to give effect to the fiscal incentives (tax exemptions and concession). The Act provided incentives or exemptions in the form of income tax holiday, reinvestment allowance, tax rebate, income exemption, additional expenditure deduction, TDS exemption, Sales Tax exemption, customs duty exemption and concessional customs duty. The MoF issued the Rules on the Fiscal Incentives Act of Bhutan 2017 which superseded all the previous incentives and rules.

Total estimated revenue forgone through the implementation of the Fiscal Incentives 2010 for the period 2010 to 2015 was around Nu. 4,893 million. Total estimated revenue foregone through Sales Tax and Customs Duty exemptions on plant and machinery, raw materials, primary packaging materials and adventure tourism equipment as per Fiscal Incentives 2010 is around Nu. 1,104.68 million. Total estimated revenue foregone for the period April 2010 to December 2015 was Nu. 4,893 million. Similarly, the revenue forgone for the period 1st Jan 2016 till 7th May 2017 is Nu 1,147.04 million.

With regard to benefit generated through the implementation of Fiscal Incentives, 76 hotels have already contributed Nu.581.38 million in terms of Sales Tax on sales of food, beverages, room and other hotel services for the period 2010 to 2015. Under direct tax, a total of 116 taxpayers availed tax holidays and under indirect tax, a total of 545 entities representing different sectors availed ST and CD exemptions under FI 2010 for the period 2010 to 2015. The total employment generated as on 31st December 2015 (cumulative) was 5649 jobs.

The Lhengye Zhungtshog passed a resolution to process fiscal incentives as money bill and reviewed all legal provisions which empowers the Government to grant fiscal incentives. The three Money Bills; Goods and Services Tax (Amendment) Bill of Bhutan 2021, Customs Duty Bill of Bhutan 2021, and the Tax Bill of Bhutan 2021 were also adopted. While the implementation of the Goods and Services Tax

was deferred till the 1st of July 2022, the Customs Duty for the import of most commodities are revised to 10%. And the sales tax on tobacco is revised from 100% to 0% under the Tax Bill till the implementation of the Goods and Services Tax. On 6 December 2021, the National Assembly, during the 6th session of the Third Parliament, has adopted the Fiscal Incentives bill that offers a respite for the underperforming economic sector, especially in COVID high-risk districts and proposes reduction of BIT from 30% to 10% for small, cottage and micro-business operators for the year 2021.

Recognizing the pivotal role of fiscal incentives in strengthening economy and boosting private sector growth, the government brought about changes and provided several fiscal incentives. Therefore, it is important for the RAA to audit and report on the effectiveness of fiscal incentive and opportunities to maximise the economic benefits.

viii. Debt management

Public debt management is the process of establishing and executing a strategy for managing public debt in order to raise the required amount of funding at the desired risk and cost levels. Public debt management in Bhutan is guided by the Article 14.5 of the Constitution of the Kingdom of Bhutan and it states that the Government shall exercise proper management of the monetary system and public finance. It shall ensure that the servicing of public debt will not place an undue burden on future generations.

As of 31 December 2020, hydropower sector has the highest debt at 73.9% of the total external debt. The total public debt stock stood at Nu. 225,026.288 million, an increase of Nu. 1,731.425 million (or 0.8%) which accounts to 122.6% of the GDP. Public debt in 2010 was 61% of the GDP. The 12th FYP had set target to maintain the average fiscal deficit below 3 % of GDP and to fund at least 80% of the plan expenditure through domestic revenue. Achieving this target looks increasingly uncertain in the light of elevated expenditure linked to COVID19 mitigation and recovery, and pressure on non-hydro revenue source.

The RAA conducted an audit on the public debt management in 2014 and conducting an audit in the same area would not only be timely to review the implementation statuses of the earlier recommendations but would also let the RAA consider how effective is the public debt management in ensuring that the level and rate of growth of public debt is sustainable in a wide range of circumstances and to avoid economic crises because of poorly structured debt.

G. Social and Health Sector

NKRA 14, Healthy and Caring Society relates to this sector. The FYP recognizes the challenges of communicable and non-communicable diseases, malnutrition, healthcare financing, human resources, health system efficiency etc. The RAA will conduct performance audit of implementation of the programs or the subject matters related to health sector.

i. Role and effectiveness of CSOs

Civil Society Organisation (CSO) play a critical role in our democracy, offering public services and contributing to the formulation, advocacy and defence of democratic rights. The gap between what

the democratic government can provide and what is required to achieve the development aspirations of the country can be bridged by a sound and effective CSO. Thus, a freely functioning, well-organised, vibrant and responsible civil society is essential for a democracy.

The CSOs are governed by the CSO Act of Bhutan 2007. The CSO Act defines CSOs as *“associations, societies, foundations, charitable trusts, not-for-profit organizations or other entities that are not part of Government and do not distribute any income or profits to their members, founders, donors, directors or trustees. CSOs do not include trade unions, political parties, co-operatives or religious organizations which are devoted primarily to religious worship.”* It distinguishes two types of CSOs in Bhutan: public benefit organizations (PBOs) and mutual benefit organizations (MBOs). PBOs benefit a section of the society or society as a whole, whereas MBOs advance the shared interests of their members or supporters, such as people working in a particular profession, businesses engaged in a particular industry, youths studying in a university, or people who are interested in a particular cultural activity, practice, sport, or hobby.

The CSO Authority (CSOA) is the apex regulatory body responsible for registering and regulating all CSOs in Bhutan. The Authority, besides exercising its regulatory functions, is also involved in building the capacity of CSOs through the conduct of trainings and workshops. At present, there are 53 registered CSOs¹ in diverse sectors such as Livelihood, Caregiving and Rehabilitation, Youth, Good Governance, Arts, Heritage and Culture, Environment, Animal Welfare amongst others with the aim to strengthen civil society, promote social welfare and improve the conditions and quality of life.

Despite CSOs touching lives of citizens through imparting skills, promoting debates and discussions, caring for special children, elderly, & animals, safeguarding welfare for victims of domestic violence, access services from the health facilities, etc., the CSOA is faced with hurdles such as growing number of application to register as a CSO, informal groups functioning as a CSO, non-compliances to CSO Act and rules and regulation, no roles of CSOs’ in policy making decisions, lack of visibility, non-recognition by government as partners, inadequate expertise in various fields of civil society, lack of budgetary support from the government in carrying out the authority’s plans and programs amongst others. Further, more than 50% of the registered CSOs are not audited and certified annually by a competent authority impeding promotion of accountability in CSOs.

In view of the above, a holistic review on the roles played by CSOs and effectiveness in achieving the mandates of the CSOs is highly merited. It is through this audit, the RAA will study the impact of CSOs in providing social welfare, creating an awakened citizenry in a democracy and improving the quality of life.

ii. Strong and resilient health systems

Health services in Bhutan are available through a three-tier structure, i.e., primary, secondary and tertiary levels, which is predominantly public financed and has evolved and grown considerably in the past five and a half decades. Within a short span of time, the country has developed an extensive

¹ Complementing service to Society, December 2020

public health care system that delivers services through both traditional and modern medicines. As a result, Bhutan has made remarkable progress in improving the health and quality of life of its population. Despite these impressive achievements, the Ministry of Health is also experiencing health challenges. In addition to the burden of communicable diseases that the country is battling, the non-communicable disease (NCDs) is on rise due to changing lifestyles. Challenges such as substance abuse, suicide and other mental health problems are also on rise.

Furthermore, in recent times, Bhutan, like the rest of the global community, has also been facing an unprecedented health crisis due to the global outbreak of COVID-19. As the country responds to this crisis, the health system's capacity to deal with such prolonged pandemic is of great concern on the sustainability of free healthcare services. In such situation, having a strong and resilient health system, that can withstand health shocks while maintain essential services, has become pertinent not only at the national level but also at the global context because pathogens do not respect borders and shock to the health system of one country can reverberate across regions and the world.

Bhutan under the benevolent guidance of His Majesty the King has handled the pandemic remarkably well and our health care system, so far, has not faced any immense pressure.

Due to the COVID19 pandemic and impact on the health system caused by emerging public health risks, this audit is very relevant to assess whether there is an early warning system in place for early detection of public health risks that might be national or international concern so that mitigation strategies are prepared to minimize risks for similar situations in the future. Through this audit, there is also an opportunity to strengthen core capacities for early warning, risk reduction and management of national and global health risks learning from COVID19 situation that are necessary for building a strong and resilient public health systems.

H. Information Communication and Technology Sector

The RAA will undertake specific IT audits as a part of performance audit programs to review IT systems used by public agencies for enhancing efficiency of their efficiency and delivery of services.

i. Preparedness for cyber security attacks

The last two decades have seen Bhutan undergo a far-reaching digital transformation, especially in terms of delivery and adoption of digital services. The government has implemented the national broadband network, national data centre, the national payment gateway, and many Bhutanese people have embraced card-less transactions. More recently, due to the COVID-19 pandemic, the public sector and most businesses have adopted innovative measures for service delivery. The government has several ICT initiatives in the pipeline. Similarly, the corporate sector has also increased its investments to effectively leverage ICT to enhance its operational capabilities and efficiencies.

However, as Bhutan increases national investment into its ICT infrastructure, the risk of inadequate security mechanisms to protect these technologies simultaneously increases as well. The cyber risk profile of Bhutan is very low. National Cybersecurity Strategy is in still in draft stage, national critical infrastructure is yet to be identified, risk assessment, and crisis management has not been conducted at national level. Currently, only Bhutan Computer Incidence Response Team (BtCIRT) was established

in 2016 and Financial Institution Cyber Response Team (FICRT) was formed in 2019 by the Royal Monetary Authority (RMA). However, The International Telecommunication Union's report on the assessment of BtCIRT highlighted Bhutan's lack of necessary capabilities and competencies in dealing with cyber security incidents even at the level of government organizations.

In a country where digital transformation is a work in progress, awareness of the importance of cybersecurity remains a big challenge. Thus, the rate of compromise is increasing and the methods used by malicious actors are rapidly evolving. There are several cases of cyber-attacks in the country resulting in major damages, in terms of money, data loss or service disruptions amongst other and there may be actually more cases that have not been reported and even detected. There were also various attacks on websites of government agencies specifically the websites of Ministry of Foreign Affairs and Ministry of Finance.

As Bhutan continues its digital transformation work, national capacity building in this field remains a necessity for preparedness against cyber threats. Currently, Bhutan has very limited experts and professional in this field. Department Information Technology & Telecom (DITT) is the lead agency in framing the overall landscape of cybersecurity in the country. BtCIRT is the leading body for monitoring security vulnerabilities and threats for government agencies.

With the government undertaking several ICT initiatives to build ICT-enabled knowledge society and almost all the government organizations, corporate and private sectors, business agencies and individuals adopting digitisation for daily operations, there would be increase in digital data in the cyberspace and demand for secure and effective ICT services. Increased deployment of integrated online information systems and cyber-attacks cases suggest that Bhutan's cyberspace is increasingly susceptible and vulnerable to cyber security risks. Therefore, the audit of preparedness against cyber threats is timely for the betterment of the country's cybersecurity posture in terms of assessing cyber threats and addressing vulnerabilities as the government has made a huge ICT investments and is in the process of implementing several ICT initiatives in the future.

ii. Bhutan Telecom Billing System

The telecommunication services have vital role to play in enhancing competitiveness, increasing productivity and economic development, and promoting greater social inclusion. With the socio-economic development of the country, Bhutanese population availing internet and telecom services have increased drastically over the years. According to the annual report of Bhutan Telecom Ltd (BTL). 2019, the company's active mobile customers increased from 391,403 in 2018 to 403,559 at the end of 2019 and Leased line Internet subscriptions increased from 772 in 2018 to 1,153 at the end of 2019. The company had 6,008 fixed broadband Internet subscriptions and 21,581 fixed line customers at the end of 2019.

To cater to the need of the company, BTL has developed a billing system which comprises of prepaid charging system, post-paid billing system, land line, internet service provider's services, post-paid broadband services. The latest converged billing solution was developed by Ericson Company, India in 2017 at a cost of about Nu. 120 million.

Although tariff on the use of internet and telecommunication services were set by Bhutan Infocomm and Media Authority (BICMA), public has frequently raised concerns on high charges of internet and telecom tariff and bill shocks in social media during several occasions. Additionally, the statutory and compliance audits also highlighted lapses in reconciliation and system control in the billing system. As such, the audit of telecom billing system will be relevant because of great interest to the public being the end users of telecom services and the audit impact will be huge as the audit would be checking the correctness of the bills for telecom services charged to all customers.

iii. Digital identity

Digital identity is one of components identified under the Digital Drukgyul flagship program intending to provide one digital identity for every Bhutanese citizen and this is going to change and revolutionise the way individuals would apply for and process transactions wherein the applicant need not be present physically. Identity is a crucial element for every individual as it defines who the individual is and identifies the main traits of each and every person. Similarly, digital identity is equally important, retaining the inherent characteristics that make identity such a defining factor and, at the same time, serving as an enabler for governments in achieving social inclusion, digital transformation, improvement in quality of services and so forth.

The objective of this digital identity project is to build the infrastructure and applications necessary to securely and reliably authenticate online digital identity, which will enable end-to-end provision of online services for all citizens and residents of Bhutan irrespective of which agency provides the service. This transformation will dramatically strengthen the G2C services that have been deployed and will also become the platform for accelerated transformation of conventional services in the future. The project will have enhanced security using two-factor authentication with digital signatures and if necessary three factor authentication using biometrics to enable secured online and also offline public service transactions.

DITT, in collaboration with Public Service Grievance Redressal Division under Cabinet, Department of Census Registration and Department of Immigration will be implementing digital identity. Under the project, DITT has introduced single sign-on for the G2C services and biometric of citizens are currently being collected across the country.

Since important information such as health, land, tax, revenue, bank, census, education records will be stored based on digital identity of a person, there will be security and privacy issues that will outweigh the benefits if appropriate data security and privacy controls are not implemented in the national digital identity system. Thus, this audit will help to ensure information security is maintained in all the records supporting the digital identity and support to bring in efficiencies in the operations of the digital ID.

iv. E-Patient Information System

The health indicators in Bhutan are among the best in the low- and middle-income countries in 2017, average life expectancy was 70.2 years, sustained child immunization coverage was above 95% and household out-of-pocket expenditure on health was low. The government provides a comprehensive

range of free health services to all its citizens. A key component in increasing the resilience of a health system is having updated health and patient information system. Management and governance of health information in Bhutan are, overall, highly fragmented. Fragmentation of maintaining information within the Ministry of Health is a major challenge preventing efficient data sharing and analysis. This has direct and indirect effects on all aspects of health care. For example, the lack of an accurate, timely and reliable patient information system makes it difficult to track and refer patients and to coordinate the continuum of care between primary health care and higher-level hospital care. A particular problem is reliance on paper-based medical records, which is resource intensive and often inefficient in monitoring, evaluating and delivering optimal health services.

Electronic Patient Information System (ePIS) is an integrated system, which is proposed as one of the key components under the Digital Drukylu flagship program with a budget outlay of Nu. 500 million (<https://flagship.gnhc.gov.bt/>). Ministry of Health (moH) is the lead agency with JDWNRH, regional & district hospitals, Khesar Gyalpo University of Medical Science (KGUMS) and Gross National Happiness Commission (GNHC) for implementing ePIS. The system will be developed to centrally manage patient records of all health centers for improving health care service delivery. Other than the patient record feature, the system is also aimed at tracking down outbreaks of flus and early detection of non-communicable diseases at early stages. It will also ensure patients do not have to wait in long queues at the hospitals to do retesting which as per Ministry of Health (MoH) will ensure that optimal resource utilization and time effectiveness for patients. The ePIS will be implemented in 27 hospitals, 23 BHU-I and 186 BHU-II by 2022-2023.

Currently, there is no electronic patient information with patient details and health history in the country. The audit will have potential to improve data confidentiality and privacy, enhance IT controls in the ePIS and bring in efficiencies in operations of health facilities leading to earlier and better diagnosis and treatment.

v. **Bhutan Integrated Tax System**

In Bhutan the recurrent expenditure is met through the domestic tax revenue. Tax revenue comprises of different heads such as the Corporate Income Tax (CIT), Business Income Tax (BIT), Personal Income Tax (PIT), tax on property, tax on goods and services, tax on capital transaction, sales tax, exercise duties, green tax etc. The mode of collection of taxes are mostly through manual and through use of standalone systems. For instance, the customs offices use Bhutan Automated Customs System (BACS) for collection of taxes and the tax sections uses RAMIS. The current system of collection of taxes have gaps and lapses which result in tax leakages and fraudulent activities. The Department of Revenue and Customs, Ministry of Finance is undertaking a modernization process that will result in evolving to a function based organization, incorporates risk based evaluation of taxpayers, and integrates its tax operations to allow a “whole of client” view of a taxpayer’s tax situation. To overcome the lapses and to meet the requirements of Bhutan’s tax laws and procedures, DRC is initiating to acquire solution in terms of Bhutan Integrated Tax System (BITS) intending to host all taxes that DRC administers over the coming years including digitising the GST through the system. This integrated system is also aimed to enable better risk management and more effective and efficient tax monitoring. The system is also expected to significantly improve tax-related decision-making in the government, which will ultimately improve policies on taxes in the country. Thimphu TechPark is currently developing the system with

support of experts from Armenia. The government has allocated Nu. 600 million to develop the system.

As major chunk of the country's domestic revenue comes from tax collection, the audit of this integrated tax system would support in ensuring proper management of the tax collection and generation of information related to taxes that would ultimately contribute towards better decision making.

vi. Electronic Public Expenditure Management System

The Department of Public Accounts (DPA) initiated the enhancement of the PEMS system to e-PEMS by incorporating a payment system through the new e-Payments flagship initiatives. It was developed in-house by a pool of ICT officials with the help of 2 consultants. The main business goals of the e-Payment initiative are: to eliminate manual cheque transactions, improve timeliness and convenience in making payments, automate the bank reconciliation, improve government reporting, prevent excess withdrawals, prevent processing of payments outside of PEMS, automatic transfer of loans and remittances, reduce paperwork, Pave way to cashless modality and Minimize the risk of corruption. The first phase of the enhancement is focused on the implementation of the e-Payment initiative that will ensure automated and real-time settlement of RGoB payments originating in the PEMS. The e-Payment modality is to cover real-time, any mode of payment to any commercial bank in Bhutan. High level objectives/ requirements are inter-banking clearance should be real time for all types of transactions, mandatory acknowledgements for funds transfer (e-PEMS to RMA system), acknowledgement for receipt of funds by the payees/suppliers, correction of wrong funds transfer must be in place, satisfy audit requirements, automated link between e-PEMS, RAMIS and RMA's systems, approvals with authorized signatories, mandatory requirement to receive detailed payroll and remittances schedules and need to have very robust secure and reliable systems.

The system enhancement was completed and launched on 22 July 2019. After the launch of the system, there were issues reported both through financial audit reports and print media for the embezzlement of funds in some gewogs revealing the system issues. With that, the RAA through performance audit of e-PEMS is intended to assess if the e-PEMS is meeting above stated objectives of enhancing the system and If the ICT controls are effective in delivering the business objectives.

Various issues are pointed out through the Performance Audit of PEMS conducted in FY 2016-2017. Through this audit, the RAA will review the implementation statuses of the recommendations provided in the PEMS audit report.

I. List of audit topics

Sl.No.	Theme	Audit Topics
1	Economic Sector	Technical and Vocational Education Training
2		Employment Generation
3		Cottage and Small Industries
4		Tourism Development
5		Hydropower development in Bhutan
6		Foreign Direct Investments
7	Environment and Natural Resource Sector	Mining Operations
8		Watershed management
9		Disaster Management
10		Waste management
11		Provision of drinking water in Thromdes
12		Compliance to Multilateral Agreements
13		Climate change projects
14		Operations of Natural Resources Development Corporation Ltd.
15	Education Sector	Quality education
16		SEN program
17	Agriculture Sector	Operations of RNR centres
18		Food security
19		Irrigation System development
20	Public Administration	Corporate governance in SOEs
21		Preparedness of LGs
22		Performance management in the Public Sector
23		Land administration services
24		Thromde and municipality services
25	Public Finance	Tax administration
26		Fiscal Incentives
27		Debt management
28	Infrastructure Sector	Safe and Sustainable Road Transport
29		Farm Roads management and development
30		Urban Planning in Thromdes
31		Stray dog management
32	Social and Health Sector	Role and effectiveness of CSOs
33		Strong and resilient health systems
34	ICT Sector	Preparedness for cyber security attacks
35		Bhutan Integrated Taxation System
36		Digital identity

37		Bhutan Telecom Billing System
38		e-patient Information System
39		Electronic Public Expenditure Management System

ANNEXURES

Annexure 'A': Potential audit topics and areas or subject matters solicited from external stakeholders

Sl. No.	Name of Agency	Suggested Audit Topics
1	Anti Corruption Commission	1. Human resource management :deployment and development 2. Land administration 3. Procurement 4. Tax administration: leakages 5. Prosecution Services by OAG 6. Parliament Resolutions 7. Selection of Executives 8. Prosecution Services by OAG 9. Audit of ticketing procurement of seeds in MoAF 10. procurement of consultancy services for professional development of teachers 11. selection of textbooks and reading materials
2	ARDC, Wengkhar	Audit the outcome of investment/project/expenditure
3	ARDC, Yusipang	1. Human resource management 2. Misuse of govt. vehicle 3. Quality of works
4	Bank of Bhutan Ltd.	1. Procurement 2. Loans 3. Human resource management
5	Bhutan Narcotics Control Authority	1. Construction activities in the Thromdes such as footpaths, sewer lines, street lights, water lines 2. Review the regulatory compliances to existing laws and reports of regulatory bodies. 3. Human resource management : selection process
6	Bhutan Power Corporation Limited	1. Quality management and assurance of public infrastructure management system 2. Performance
7	Bhutan Standards Bureau	1. Adoption of Quality management systems in relevant agencies 2. Complince in use of BSB certified products
8	BICMA	
9	Credit Information Bureau of Bhutan	1. 3Es in use of public resources
10	Dagachhu Hydro Power Corporation Limited	1. Procurement
11	Department of Hydro power and Power System	1. Proper management and utilization of available existing office resources
12	Divisional Forest Office, Samtse	1. Environmental impact assessment 2. Allocation of dredging sites 3. Human resource management (transfers)
13	Dzongkha Development Centre	1. Infra-structure development (constructions) 2. TA/DA 3. Farm roads 4. Need to see how quality of education has improvd through start of professional devlopment(pd)

14	Dzongkhag Administration, Bumthang	1. Community contract protocols 2. Regular road maintenance
15	Dzongkhag Administration, Chhukha	1. LG audit : capacity and entitlements 2. Environmental issues
16	Dzongkhag Administration, Gasa	1. Procurement 2. management and utilisation of govt. vehicles 3. Use of Power Tiller, Excavator and JCB in the Dzongkhags 4. Construction of irrigation and farm road
17	Dzongkhag Administration, Haa	1. IT systems audit 2. Performance management system
18	Dzongkhag Administration, Lhuentse	1. Year planning strategy 2. Fund release mechanism for external assisted projects 3. Repeated Training/Awareness programs need based assessment 4. Impacts made by the program/activity at the end. 5. Transfer of civil servants 6. Due diligence of public servants 7. Quality of works
19	Dzongkhag Administration, Monggar	1. Human resource management 2. Audit of travel budget
20	Dzongkhag Administration, Punakha	1. Human resource management : deployment 2. .Auditing regularly hampers other works
21	Dzongkhag Administration, SamdrupJongkhar	1. Performance management system 2. Human resource management and development
22	Dzongkhag Administration, Tashiyangtse	1. Quality assurance of goods and services supplied in Dzongkhags
23	Dzongkhag Administration, Trongsa	1. Dzongkhag Development Grant (DDG)
24	Dzongkhag Administration, Tsirang	1. Environmental issues
25	Dzongkhag Administration, Zhemgang	1. Human resource management: work load in terms of experience and qualification
26	Election Commission of Bhutan	1. Advancement and improvement in use of technology in conduct of elections to ensure free and fair elections 2. Human resource management
27	Financial Institutions Training Institute	2. IT system auditing
28	Gelephu Thromde	1. Human Resource management 2. Ex-country travel
29	Gross National Happiness Commission secretariat	1. Construction audit : delay in work and arbitration and court case
30	Local Government	1. Capacity of the LGs in terms of service delivery and implementation of developmental plans

31	Ministry of Agriculture and Forests	1. Audit the value for money from the funds invested in agriculture 2. Farm roads condition and future plans 3. Audit of TA/DA 4. Effective utilization of budget 5. Audit of SOEs 6. Budgeting process 7. Handing and taking processes 8. Transparency in ex-country training program 9. Budgeting :Weightage of fund spent to activity 10. Project performance 11. Performance management system
32	Ministry of Economic Affairs	1. Audit of industrial park developments 2. Human resource management 3. Asset management 4. Audit of govt. vehicles: mileage and use 5. Excountry travels 6. Economic impact assessment 7. Ethics and true intentions 7. Accountability on individuals and not on the head
33	Ministry of Education	1. Audit of IFAD project in education sector
34	Ministry of Foreign Affairs	1. Performance management system : alingment in APA to the overall objective of the organization 2. Maintenance of vehicle (fuel and spare parts)
35	Ministry of Health	1. Integrity Audit 2. TA/DA 3. Construction 4. Procurement of supplies 5. IT systems audit 6. Helicopter services 7. mining 8. Gender responsive planning 9. Use of pool vehicles in gewogs 10. Performance of
36	Ministry of Home and Culture Affairs	1. Human resource management: right person in right job 2. Use of public resources
37	Ministry of Information and Communication	1. Audit of ICT projects 2. Audit of incountry and excountry travels 3. Procurement of works 4. Digitazation of service delivery 5. Budget Allocated against how citizens are benefited (Eg. Firm produces vs. MoAF budget) 6. Employee bonus vs social contribution 7. Overall impact of G2C services 8. Major activities carryout by Ministry and department 9. Quality of works 10. TA/DA
38	Ministry of Labour and Human resources	1. Budgetary usage 2. Audit of Hydro-power projects : delays, cost escalation, technical failure
39	Ministry of Works and Human	1. Human resource development process pertaining to trainings outside country and work distribution 2.
40	National Assembly of Bhutan	1. Performance Management system 2. Human resource management : training and promotions 3. Construction audits 4. Efficiencies in public service delivery : land and trade services 5. Regular audits 6. Financial Sustainability of Solid Waste Management in Thromdes: Case of Thimphu and Phuentsholing. 7. qulaity education : infrastructure and equipments
41	National Assembly Secretariat	1. Food sufficiency 2. Operation of city bus 3. IT systems audits
42	National Biodiversity Centre	1. Performance management system
43	National Commission for Women and Children	1. Gender audits : gender budgeting and gender and climate change 2. Regular audits
44	National Council of Bhutan	1. Land transaction : land substitution done by HQ and Dzongkhags

45	National Land Commission Secretariat	1. Systems audit 2. Audit of land administration 3. Audit of asset management 4. Performance management system 5. Readiness of the agencies in using advance technology 6. Compliance to service standard 7. Human resource management : misuse of professionals
46	Office of the Attorney General	1. Performance management system :defining the objective criteria
47	Regional Poultry Breeding Centre	1. Performance management system: leading to inefficiencies
48	Royal Bhutan Embassy, Dhaka	1. Performance management system : linkages in the performance management process adopted
49	Royal Bhutan Helicopter Services Ltd.	1. Performance management system
50	Royal Bhutan Police	1. Impact of excountry trainings
51	Royal Civil Service Commission	1. Public service delivery
52	Thimphu Thromde	1. Audit on land administration 2. Infrastructure developments in the Thromdes 3. Human resource management: qualification vs. the actual output 4. Construction of irrigation and farm road 5. Performance management system 6. Basis for identifying an area for LAP
53	Ugyen Wangchuck Institute for Environmental Conservation and Research	1. Performance management system: going beyond records

Annexure 'B' : Performance Audit Topics from Revised Strategic Plan (2018-2020)	
Sl. No	Audit Topics
1	Effectiveness of Special Educational Needs (SEN) program (inclusive schools) in Bhutan
2	Efficiency and effectiveness in delivery of Dzongkhag services
3	Performance based IT Audit of RSTA (Safe & Sustainable Road transport)
4	Performance audit of operations of NRDC
5	Protection and promotion of women and children's rights

Annexure 'C': List of audit topics suggested by internal stakeholders

Sl. No.	Division/Region	Suggested Audit Topics
1	Compliance and Outsourced Audit Division (COAD)	1. Human resource management 2. Concurrent audit on construction of infrastructure 3. Procurement 4. Effectiveness of services delivery 5. Recruitment and selection procedure/method carried out by corporate offices 6. Government Subsidies and its impact 7. Utilization of machinery (Farm machinery) and Bio gas Project 8. Regulation of Bank interests by the Banking Sectors and impact to the Economy and Citizen at large 9. Rental crises 10. Agriculture related topics 11. Audit class X students who passed the board examination enrolment in class XI 12. Effectiveness of Plantation Programs carried out by DoFPS
2	Department of Performance and Compliance Audit (DPCA)	1. Performance audit on overall functioning (system) of Road Safety and Transport Authority 2. Performance audit on Service delivery system of Geog Power Tiller and Bolero provided by the government.
3	Department of Sectoral Audit (DSA)	1. Plantation works by DoFPS
4	GGD	1. Agriculture sector (Farmers' training) 2. Farm road construction and
5	Office of the Assistant Auditor General (OAAG)- Samdrupjongkhar	1. CARLEP project implemented by six eastern Dzongkhags 2. Areas where the government has made huge investments in cash or kind but the results are not as expected. 3. Audit for the supply of power tiller to the Gewogs 4. Audit for the supply of earth moving machinery to the Dzongkhags
6	Performance Audit Division (PAD)	1. Royal Bhutan Helicopter Services Limited 2. Tax administration 3. Audit of the Flagship programmes 5. Public service delivery 6. Impacts of FDI 7. Performance management system in the public sector 8. Employment generation schemes and its sustainability 8. Farm-roads management and development 9. Irrigation channel
7	Research and Quality Assurance Division (RQAD)	1. Cost and time over-run on construction projects Project effectiveness
8	Resource, Trade, Industry and Communication Division (RTICD)	1. Performance by the RNR Extensions of Agriculture in Geogs 2. Irrigation
9	Social, Culture and Information Division (SCID)	1. Review on Sustainable agriculture food system in the Country 2. Department of Agriculture, Ministry of Agriculture & Forest 3. Role of Ministry of Agriculture on sustainability of the Agriculture in Bhutan and its positive Impacts and development till date

10	Thematic Audit Division (TAD)	<ol style="list-style-type: none"> 1. Preparedness of one health 2. PA of RSTA 3. PA of cybersecurity preparedness in Bhutan 4. PA of BOLT system in NLCS 5. PA of RAMIS 6. PA of SCADA systems 7. PA of risk management of critical information infrastructure 8. Performance audit of consultancy services, Effectiveness of Office of Consumer Protection in delivery of its mandates 9. Determination of borrowing (loan) rate of interest and how does Central bank regulate it 10. Waste Management , 11. Government Property Management 12. Functioning of Royal Bhutan Helicopter service. (Office functioning including revenue management).
----	----------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Annexure 'D' : List of audit topics formulated based on the programmes identified under NKRA in 12th FYP

NKRA	Lead Agency	Situation and challenges in brief	Strategies	Programmes	Capital Outlay (For programme Nu. In million)	AKRAS	Possible Audit Topics
ONE: Macro Economic Stability	MoF	<ol style="list-style-type: none"> 1. Containing Expenditure Growth 2. Managing Public Debt 3. Limited Domestic Savings 4. Creating productive and gainful employment 	<ol style="list-style-type: none"> 1. Broadening revenue area and streamlining tax administration 2. Instituting expenditure control measures on public construction and procurement 3. Exploring additional concessional financing windows 4. Boosting private investment and savings 	<ol style="list-style-type: none"> 1. Strengthening macro-economic coordination 	19	<ol style="list-style-type: none"> 1. Economic Growth Sustained 2. External Sector position improved 3. Non Hydro contribution to economy promoted 	<ol style="list-style-type: none"> 1. Debt Management
				<ol style="list-style-type: none"> 2. Strengthening fiscal sustainability 	620	<ol style="list-style-type: none"> 1. Resource allocation and utilization strengthened 2. Fiscal stability ensured 3. Resource Mobilization Strengthened 	<ol style="list-style-type: none"> 1. Revenue Management (Tax System) 2. GST system

						<p>4. Performance of RGoB agencies enhanced</p> <p>5. Blateral and multilateral environmental implemented</p> <p>6. Ease of doing business and enabling environment for economic activities improved</p>	
				3. Strengthening public financial management	61	<p>1. Accountability and transparency in financial and procurement management improved</p> <p>2. Preservation of tradition and culture</p> <p>3. Public service delivery improved</p> <p>4. Women in decision making positions enhanced</p>	<p>1. Corporate Governance in SOEs</p> <p>2. Public Procurement</p> <p>3. Government Property Management</p>

TWO: Economic Diversification	MoEA	<ol style="list-style-type: none"> 1. Limited commodities for export 2. Challenges related to ease of doing business 3. Delay in commissioning of hydropower projects 	<ol style="list-style-type: none"> 1. Attracting private and foreign investment by creating enabling environment 2. Promotion of high value added Cottage and Small Industries 3. Accelerating tourism sector 4. Diversifying into allied hydropower industries 	<ol style="list-style-type: none"> 1. Enhancing economic growth through sector diversification 	2,118.75	<ol style="list-style-type: none"> 1. Ease of doing business and enabling environment for economic activities improved 2. Hydro contribution to economy promoted 3. Non-hydro export and investment enhanced 4. Jobs created 	<ol style="list-style-type: none"> 1. Ease of doing business (cross sectoral) 2. Licensing systems and regulation of businesses 3. FDIs - implementation and operationalization of policy 4. Regulation of mining companies
				<ol style="list-style-type: none"> 2. Promoting Export 	116.5	<ol style="list-style-type: none"> 1. External sector position improved 2. Non-hydro export and Investment enhanced 	<ol style="list-style-type: none"> 1. Reforms in improving ease of doing business 2. Consumer protection 3. Implementation of licensing policy
				<ol style="list-style-type: none"> 3. Creating business and investment friendly environment 	110.25	<ol style="list-style-type: none"> 1. Ease of doing business and enabling environment for economic activities improved 	<ol style="list-style-type: none"> 1. Export promotion initiatives

				4. Enhancing hydropower generation and transmission	177.5	1. Hydropower investment and Installed Capacity enhanced 2. Hydropower Security ensured	
				5. LG programmes on poverty reduction, income generation and job creation			
THREE: Reducing poverty and inequality		1. Existing Poverty 2. Existing inequality	1. Target the poor 2. Continue broad based social investments Specific poor policy measures	All Programmes integrated with other NKRA's			
FOUR: Preservation of Culture		1. Maintaining vibrancy of intangible culture 2. Preserving culture heritage	1. Preserving age old traditional festivals 2. Supporting important historical community managed lhakhangs 3. Promoting Dzongkha and	1. Sustenance and continuity of cultural heritage 2. Enhancing spiritual values	2,562.00	1. Intangible Cultural Heritage Preserved and Promoted	

			Dzongkha computing 4. Promoting cultural industries as an economic enterprise 5. Promoting contemporary art such as films and music 6. Including culture as criteria for resource allocation of LGs	3. Promotion of national language and local indigenous languages 4. LG Programmes on preservation and promotion of culture and tradition			
FIVE: Healthy Ecosystem		1. Degradation of ecosystem 2. Drying up of water sources 3. Conversion of forests into other land uses on the rise 4. Habitat fragmentation 5. Illegal forest harvesting and poaching compounding pressure	1. Exploring innovative financing for sustainable management of protected areas 2. Initiating payment for ecosystem services 3. Strengthening research on biodiversity information 4. Promoting traditional knowledge and customary practices in conservation and sustainable use of biodiversity	1. Sustainable natural resources management and utilization	655.9	1. Management of Natural Resources for sustainable utilization of ecosystem goods and services enhanced 2. enhanced Management of Natural Resources for sustainable utilization of ecosystem goods and services 3. tangible Cultural Heritage preserved and promoted	1. Sustainable management and utilization of timber 2. Community forest management and conservation 3. Forest and wildlife offences 4. Nature based eco-tourism 5. Management of wetlands and watershed 6. Conservation and sustainable utilization of biodiversity

				2. Enhanced environmental service delivery			
				3. Strengthening air quality monitoring system			
SIX: Carbon neutrality, climate and disaster resilient		<p>1. Emission from other sectors such as industries and transport sectors increasing over the years</p> <p>2. There are increasing incidence of forest fires</p> <p>3. Risk of GLOF, drying up water sources, crop diseases, windstorm, erratic and high intensity of rainfall</p>	<p>1. Mainstreaming environment in all sectoral and local government plan</p> <p>2. Managing waste as a national flagship programmes</p> <p>3. Exploring eco friendly public transport system</p> <p>4. Enhancing mitigation and adaption to climate change</p> <p>5. Strengthening preparedness and response to both natural and man made disasters</p>	1. Climate Smart and disaster resilient development			<p>1. Livestock farming</p> <p>2. livelihood choices for marginalized farmers</p> <p>3. Irrigation systems</p> <p>4. Climate change mitigation measures</p>
				2. Strengthening waste prevention and management			1. Waste Management
				3. Implement action of bilateral and multilateral environment programme			

				4. Enhancement of disaster risk reduction and management	289	1. Disaster Resilience enhanced	
				5. Weather and climate services for building climate resilience			
				6. Hydrology, cryosphere and water resources information and early warning services			
				7. Promote use of alternative renewal energy	787.21	1. Industrial sector emissions minimized through cleaner production and low emission development practices. 2. emissions reduced through demand side management of energy 3. Promote clean renewable energy technologies	1. Mainstreaming environment in all sectoral and local government plan - to what extent it is implemented 2. Waste Management 3. Transition of eco-friendly transport system

						through climate mechanisms 4. Access to electricity enhanced	
				8. Safe, reliable econ friendly and sustainable surface transport	959	1. Sustainable, eco-friendly (mass) and inclusive trans- port system enhanced2. Road Safety enhanced3. effective and efficient public service delivery improved	

				9. LG programme on carbon neutral climate and disaster resilient development			
SEVEN: Quality Education and Skills		1. Quality of Education 2. Enrolling of un-reached group of student 3. TVET systems have not been able to effectively align with the needs of the economy 4. Limited intake into TVET professions 5. Low competency of graduates and high unemployment among university graduates	1. Making teaching a professional choice 2. Strengthening ECCD and primary education 3. Shifting from examinations based to holistic and formative assessment 4. Creating pathways between mainstream and vocational education 5. Transforming TVET for sustainable development 6. Strengthening GNH based value education in schools and institutes	1. Improve quality and inclusive school education	942.5	1. Sustainable inclusive quality primary and secondary education enhanced	
				2. Strengthen and expand vocational education in schools	250	1. Access to quality training and skills enhanced	
				3. Enhance teacher development and support	910	1. teacher Development and Support Programme	
				4. Enhance equitable and quality of tertiary education	1,482.50	1. Access and equitable quality tertiary education enhanced	

				5. Improve health and well being of children and youth	365	1. Health and well-being of children and youth enhanced	
				6. Enhance adult literacy and lifelong learning	50	1. enhanced Adult Literacy and Lifelong learning	
				7. Transform technical and vocational education and training	2,104	1. Access to Quality training and Skills Development enhanced 2. Quality and Relevance of TVET education Improved	
				8. Improve quality and relevance of school curriculum and implementation			
				9. Enhance the quality/standard of examinations and assessment systems			

				10. Enhance quality and relevance of programmes			
				11. Enhance research, innovation and scholarship			
				12. Promote innovation and entrepreneurship			
				13. Enhance management and professional development project			
				14. Enhance quality of medical and health education and skills			
				15. Excellence through sports for all			

				16. LG programme on quality education and skills improvement			
EIGHT: Food and Nutrition Security		<ul style="list-style-type: none"> 1. Loss of agricultural land and declining productivity 2. Outbreak of pest and diseases 3. Farm labour shortage 	<ul style="list-style-type: none"> 1. Encourage cultivation of fallow land 2. Expansion and strengthening of irrigation system 3. Enhancing farm labor supply 4. Establishing network of post-production and marketing facilities 5. Strengthening price support for agriculture produce 6. Strengthening research and extension services 7. Farm mechanization 	1. Food and Nutrition security	1,228.19	<ul style="list-style-type: none"> 1. Food Self-sufficiency and Nutrition Security enhanced 2. organic Farming for Sustainable Development enhanced 	
				2. Value chain and enterprise development	297.28	<ul style="list-style-type: none"> 1. RNR Marketing & Value Chain enhanced 2. Increased RNR Sector Contribution to National economy 	
				3. Research and extension services	224.08	1. RNR Research Services Strengthened	

NINE: Infrastructure, communication and public service		1. Public service delivery - delays and inefficiencies 2. Transport - Reliability and quality of road network3. Information and communication - Coordination and integration, adoption of frontier technologies and enhancing digital literacy	1. Streamlining public services through whole of government approach2. Strengthening G2C Office3. Leveraging ICT as an enabler and an industry4. Exploring alternative mode of transport such as electric vehicles, ropeways and cycling5. Ensuring all weather road network including blacktopping of remaining GC Roads	1. Safe, reliable, eco-friendly and sustainable surface transport	10,731.14	1. Climate proof road accessible throughout the year in all types of weather2. Reduction in travel time3. Quality infra- structure constructed and maintained	
				2. Management and operation of air transport services	1787	1. Airport Customer Services enhanced 2. Airport Safety and security enhanced 3. Conne- tivity to Domestic and Inter- national air routes enhanced	
				3. Digital transformation and innovation in the use of ICT and media	559	1. Application of ICT for promoting efficiency, governance and economy strengthened 2. Adoption of ICT for improved service delivery 3. Adoption of ICT for improved service delivery	

						4. Access to Information and Media enhanced 5. Culture and tradition kept alive through creative media	
				4. Building and ensuring safe, reliable, secure and competitive aviation services	185	1. Standard of Civil Aviation Safety and Security enhanced	
				5. Government performance management and public service delivery enhancement programmes			
				6. LG programme on transparent, effective and efficient public service delivery			

TEN: Gender Equality		1. Gender parity in tertiary education 2. Low enrolment in STEMS subjects and vocational education 3. Female unemployment rate higher than that of male 4. Total women labour force lower 5. Women participation in decision making lower 6. Gender based violence prevalent	1. Implement specific support measures 2. Mainstream gender into policies, plans and programmes	1. Enhancing gender equality and strengthen child wellbeing and protection			
				2. Gender equality promoted, women and girls empowered			
ELEVEN: Productive and gainful employment		1. Unemployment rate on increasing trend 2. Manufacturing sector providing least number of jobs 3. 67,805 to enter job markets within 12 FYP	1. creating gainful employment/jobs by accelerating tourism and CSIs 2. Providing dedicated job placement services 3. Skilling the workforce 4. Promoting entrepreneurship	1. Create productive and gainful employment	696	1. Jobs Created and Facilitated 2. enabling environment for employment Creation Improved 3. entrepreneurship and Business Development enhanced	

			5. Incentivizing LGs to create jobs	2. LG programmes on poverty reduction, income generation and job creation			
TWELVE: Corruption reduced		1. 80% respondents perceive problem of corruption to be either very serious or quite serious 2. Bhutan Transparency Initiative show that about 32.5% Bhutanese think corruption has increased somewhat	1. Mandatory mainstreaming of corruption reduction measures and KPIs into agency and LG's plans	1. Enhance efficiency, effectiveness and credibility of ACC			
			2. Strengthening corruption prevention measure both at individual and system level	2. Mainstreaming of integrity and anti-corruption measures in agencies			
			3. Inculcating ethical behavior among different sections of society and occupational groups 4. Strengthening institutional capacities of key law enforcement agencies	3. Improve public sector performance			
THIRTEEN: Vibrant democracy and decentralization		1. Sustaining participation in electoral process	1. Sustaining voter turnout 2. Promoting political discourses on pledges	1. Free and fair election and electoral management			

			<ul style="list-style-type: none"> 3. Implementing divisions of responsibilities framework 4. Implementing full fledged annual grants at Gewog Level 	<ul style="list-style-type: none"> 2. Strengthen election commission of Bhutan 			
				<ul style="list-style-type: none"> 3. Enhance decentralization at local governments 	59	<ul style="list-style-type: none"> 1. Decentralization and Good Governance strengthened 	
				<ul style="list-style-type: none"> 4. LG programmes on democracy and decentralization enhancement 			
FOURTEEN: Healthy and caring society		<ul style="list-style-type: none"> 1. Non communicable disease 2. Communicable disease 3. Malnutrition 4. Human Resource 5. Healthcare financing 6. Health system efficiency 	<ul style="list-style-type: none"> 1. Curbing non communicable disease 2. Upgrading skills of health-workers and ensuring adequate need based deployment 3. Strengthening tertiary health care services including referral system 4. Strengthening health care services and facilities at Dzongkhag and Gewog levels 	<ul style="list-style-type: none"> 1. Governance, health workforce and financing 	88	<ul style="list-style-type: none"> 1. Improved access to quality health care services that is inclusive, responsive and equitable 2. efficiency, effectiveness in delivery of health services strengthened 3. Governance of health services strengthened 4. 	

			5. Automating and digitizing patient information for efficient management, tracking and follow up	2. Health promotion and disease prevention	523	1. Improved access to quality health care services that is inclusive, responsive and equitable 2. Prevention, promotion and rehabilitation services improved 3. 7. Drinking water supply and sanitation improved 5. 8. Nutritional status of general population improved.	
--	--	--	---------------------------------------------------------------------------------------------------	--------------------------------------------	-----	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--

				3. Medical services	268	<ol style="list-style-type: none">1. Improved access to quality health care services that is inclusive, responsive and equitable2. Prevention, Promotion and rehabilitation services improved3. efficiency, effectiveness in delivery of health services strengthened4. Disaster Resilience enhanced5. An effective and sustainable system for protection and empowerment of women	
--	--	--	--	---------------------	-----	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--

				4. Medicines, healthcare technologies and infrastructure	2,511.00	<ol style="list-style-type: none">1. Improved access to quality health care services that is inclusive, responsive and equitable2. efficiency, effectiveness in delivery of health services strengthened3. Governance of health services strengthened4.	
--	--	--	--	----------------------------------------------------------	----------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--

				5. Traditional medicine services	190	<ul style="list-style-type: none"> 1. Improved access to quality health care services that is inclusive, responsive and equitable 2. efficiency, effectiveness in delivery of health services strengthened 3. Intangible cultural heritage preserved and promoted 4. Strengthened Universal health coverage through collaboration of traditional Medicine into national health care delivery 	
				6. Improved access to quality tertiary health care services			
				7. Strengthening of medical products and regulatory services			

				8. Drug demand and supply reduction			
				9. Strengthening patient safety and quality of health care services			
				10. Sustaining primary healthcare service in Bhutan			
				11. LG programmes on community health enhancement and water security			
FIFTEEN: Sustainable Human Settlement		1. Providing adequate affordable housing has become a critical issue 2. Improving sanitation facilities 3. Issue of safety in rising crimes	1. Promoting green and energy efficient buildings 2. Mainstreaming measures to reduce vulnerability to disasters 3. Enhancing access to safe, inclusive and green public spaces 4. Promoting	1. Enhance sustainability of human settlement	693	1. Safe and Sustainable Human Settlement enhanced 2. Drinking water supply im- prove 3. Solid waste safely managed 4. Waste water safely managed 5. Intangible cul-	

			<p>efficiency and effectiveness of Thromde and municipality services</p> <p>5.Promoting affordable housing and home ownership schemes</p> <p>6. Implementing comprehensive National Development Plan 2030</p>			<p>tural heritage preserved and promote</p> <p>6. Disaster Resilience enhanced</p>	
				2. Pursue green growth in construction sector	312	<p>1. Construction sector professionalized</p> <p>2. ease of Doing Business and enabling environment for economic activities improved</p> <p>3. Adoption of ICT for improved Service Delivery</p> <p>4. Public Service Delivery enhanced</p> <p>5. Jobs Created</p>	
				3. Strengthen safe and secure society			

				4. LG programme on livability and human settlement development			
SIXTEEN: Effective justice services		1. No of pending cases increasing 2. Inadequate qualified legal professionals 3. Increasing crime rates	1. Enhancing HR capacity and redeployment based on case load 2. Improving coordination among judiciary sector agencies to provide end to end integrated justice services 3. Harmonizing conflicting or inconsistent laws 4. Strengthening rehabilitative and reformative programmes for inmates	1. Strengthen effective delivery of legal services			
				2. Enhance judicial accessibility through improved services and management system			
				3. Strengthen administration of justice services			
				4. Strengthen capacity of JSW School of Law			
				5. Strengthen safe and secure society			

SEVENTEEN: Sustainable water		<ul style="list-style-type: none"> 1. Shortage of irrigation water 2. Only 81% of housing unit have reliable water supply 3. 69% communities comprising of 946 households have no water source 4. Drying up water sources 	<ul style="list-style-type: none"> 1. Building and rehabilitating adequate and climate resilient drinking water infrastructure 2. Improving drining water quality and safety 3. Providing adequate irrigation water 4. Implementing water legislation and governance 5. Exploring creation of a dedicated water agency 	1. Sustainable natural resource management and utilization			
				2. Climate smart and disaster resilient development	535.68	<ul style="list-style-type: none"> 1. Climate Smart and Disaster Resilient Development enhanced 2. Enhanced Management of NR for Sustainable Utilization of ecosystem Goods and Services 3. National Food Self-sufficiency enhanced 	
				3. Water, sanitation and hygiene			
				4. Enhance sustainability of human settlement			
				5. Weather and climate services for building climate resilience			
				6. LG programme on community health enhancement and water security			

Annexure 'E': List of potential audit topics identified for 2021-2025			
Sl.No.	Theme	Audit Topics	Ranking
1	Economic Sector	TVET	1
2		Employment	2
3		CSIs	3
4		Tourism	3
5		Hydropower development in Bhutan	4
6		FDIs	5
7	Environment and Natural Resource Sector	Mining Operations	1
8		Watershed management	2
9		Disaster Management	3
10		Waste management	4
11		Provision of drinking water in Thromdes	5
12		MEAs	6
13	Climate change projects	6	
14	Education Sector	Quality education	1
15		SEN program	2
	Agriculture Sector	Irrigation development and management	1
16		Food security	2
17		Operations of RNR centres	3
18	Public Administration	Corporate governance in SOEs	1
19		Preparedness of LGs	1
20		Performance management in the Public Sector	2
21		Land administration services	2
22		Thromde and municipality services	3
23	Public Finance	Tax administration	1
24		Fiscal Incentives	2
25		Debt management	3
26	Infrastructure Sector	Farm roads development and management	1
27		Urban Planning in Thromdes	2
28		Stray dog management	3
29	Social and Health Sector	Role and effectiveness of CSOs	1
30		Strong and resilient health systems	2
31	ICT Sector	Preparedness for cyber security attacks	1
32		Bhutan Integrated Taxation System	2
33		Digital identity	2
34		Bhutan Telecom Billing System	3
35		e-patient Information System	4



REPORTING ON ECONOMY, EFFICIENCY & EFFECTIVENESS IN THE USE OF PUBLIC RESOURCE