Data Needs Assessment for the 13ᵗʰ Five Year Plan

2024-2029

PART I
Meta Data Analysis of the 13th Five Year Plan
2024 - 2029

Fore**WORD**

The Data Needs Assessment for the 13th Five-Year Plan (FYP) is a journey towards evidence-based governance and transformative development. The document synthesizes findings from the Meta-data Analysis of the 13th FYP Key Performance Indicators (KPIs) and the Review of the Indicator Framework for Monitoring the Implementation of the 13th FYP, prepared with technical support from the Economic and Social Commission for Asia and the Pacific (ESCAP). It charts out a course for aligning Bhutan's statistical capacity with its national ambitions and international commitments.

The 13th FYP envisions a Bhutan that is economically robust, socially inclusive, secure, and governed by resilient institutions. These aspirations are underpinned by a comprehensive indicator framework comprising 291 KPIs, designed to monitor progress across four strategic clusters of economic, social, security, and governance. However, our analysis uncovered significant challenges, including overlapping targets, insufficient data disaggregation, infrequent updates, and over-reliance on administrative sources.

Data is the bedrock of informed policy making and accountability. This assessment underscores the urgency of elevating Bhutan's statistical systems to global standards, ensuring that the monitoring framework for the 13th FYP drives meaningful progress and inspires trust among stakeholders.

This endeavour was made possible through collaboration with the Office of Cabinet Affairs and Strategic Coordination (OCASC), whose strategic oversight proved invaluable. I extend my heartfelt gratitude to the Statistical Officers and Planning Officers from line ministries, agencies, and local governments for their cooperation and remarkable inputs.

As Bhutan embarks on the 13th FYP, we are confident this document will serve as a foundation for achieving our shared vision of a high-income GNH economy through enhanced data systems.

Sonam Tenzin
Director General

Acknowledgement

We express our gratitude to Mr. Jan Smit, Regional Advisor on Official Statistics of the Economic and Social Commission for Asia and the Pacific (ESCAP) for his invaluable technical support. His expertise and commitment were instrumental in ensuring the quality and relevance of this report.

This report was prepared with continued guidance from the Director General, NSB and Director, OCASC throughout the process. We acknowledge the efforts of the Planning Officers from all clusters, whose inputs significantly enriched the preparation of this report.

We extend our sincere appreciation to all stakeholders in the National Statistical System (NSS) for their critical feedbacks during consultations and preparation of the document.

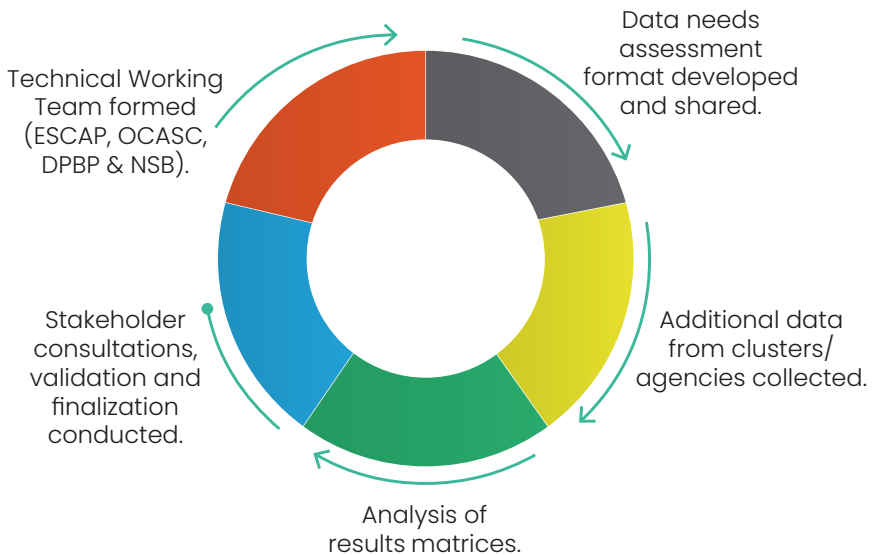The preparation of this report was led by Mr. Birkha Gurung, Dy. Chief Planning Officer, NSB and Mr. Pema Nima, Asst. Planning Officer, OCASC.

This report reflects the collective effort and shared vision of all participants, who believed in the meaningful contribution to achieving the aspirations of the 13th FYP and strengthening Bhutan's journey towards evidence-based planning, policy formulation and service delivery.

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1 Data Sources

1. Key observations;
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3. Recommendations.

4 Data repository

Technical Working Team formed (ESCAP, OCASC, DPBP & NSB).

Data needs assessment format developed and shared.

Additional data from clusters/ agencies collected.

Stakeholder consultations, validation and finalization conducted.

Analysis of results matrices.

Timeline

January 2024
- Meeting among OCASC, ESCAP, MoF and NSB

June 2024
- Stakeholder consultations on KPI review and data needs assessment.

September 2024
- Presentation on the Review Report of the Indicator Framework and Data Needs Assessment for the 13th FYP

May 2024
- Virtual consultations and review of draft reports.
- Compilation of additional data for results matrices.

August 2024
- Reviews and consultations with Clusters on KPIs

DEFINITIONS

Data source: A data source refers to a specific data along with its corresponding report title and the agency responsible for producing or providing the data.

Aggregated data: Aggregated data refers to information that is summarized or combined from individual data points into a more condensed form to provide a broader overview of a dataset. For example, aggregated at national level, dzongkhag level, gewog level, and chiwog level.

Data repository: A data repository is a centralized location, systems and technologies, where data is stored, managed, and organized in a structured manner for easy access and retrieval. For example, systems such as EMIS, ePIS, CPMS, BSDS, etc.

Disaggregated data: Disaggregated data is data broken down by detailed sub-categories. For example by, **age, gender, geography or level of education,** etc.

Data frequency: Data frequency refers to the interval at which data is collected, recorded, or updated over a specific time period. For example, **weekly, monthly, quarterly, bi-annually, annually,** etc.

Data collection methodology: Data collection methodology refers to the systematic approach or process used to gather data for decision-making purposes.

For example:

1. Survey Data: Data collected through systematic inquiries or questionnaires administered to a sample of individuals or organizations to gather specific information.

2. Census Data: Data collected from a complete enumeration or count of all individuals or households within a specified geographic area.

3. Administrative Data: Data collected as part of routine administrative processes within organizations or government agencies, such as transaction records, registrations, and licenses.

KPI Summary

KPIs	National	Economic Cluster	Social Cluster	Security Cluster	Governance Cluster	Total
Outcome KPIs	10	8	26	11	10	65
Output KPIs		30	130	31	35	226
Grand total						**291**

KPI Revision

Clusters	Economic Cluster	Social Cluster	Security Cluster	Governance Cluster	Total
KPIs	7	139	12	15	173
173/291X100 = 60% of the KPIs were revised based on ESCAP recommendations					**60%**

ALL CLUSTERS
## Summary (Data Source)

1. Key observations:
- The majority of data is sourced from administrative records (218 KPIs), significantly more than surveys (62 KPIs). A small part (12 KPIs) is derived from a combination of both survey and administrative sources.

2. Inference:
- The heavy reliance on administrative data indicates that most data collection efforts are likely driven by routine government processes. Survey data, which can provide more specific and targeted information, is underused.

3. Recommendations:
- It is critical to strengthen the quality of administrative data since a majority of the KPIs are being verified through the these sources.
- To ensure a more comprehensive data landscape, it is advisable to increase the use of survey methods in data collection. This approach would capture diverse perspectives and insights that administrative data alone might miss.

Data Source
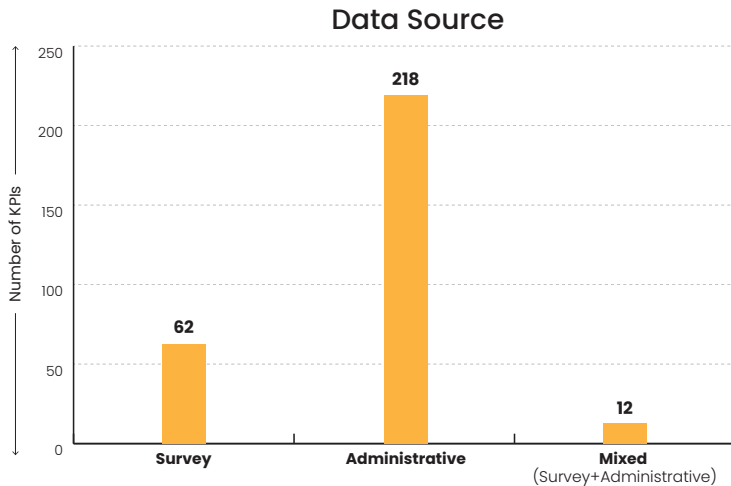
All Clusters
Summary (Data Frequency)

1. Key observations:

- The most common frequency of data collection is annually (189 KPIs), followed by decennially (49 KPIs). There is limited use of higher frequency data collection methods such as daily, monthly, or quarterly.

2. Inference:

- The dominance of annual data collection suggests that the data is likely used for regular, but not real-time, monitoring. The limited collection at higher frequencies may result in missed opportunities for timely intervention and decision-making, especially in rapidly changing environments.

3. Recommendations:

- To enhance timeliness and responsiveness of data, increasing the frequency of data collection (e.g., quarterly or monthly) should be considered, particularly for key indicators that require immediate attention. This shift would support more proactive and dynamic policymaking.

Data Frequency
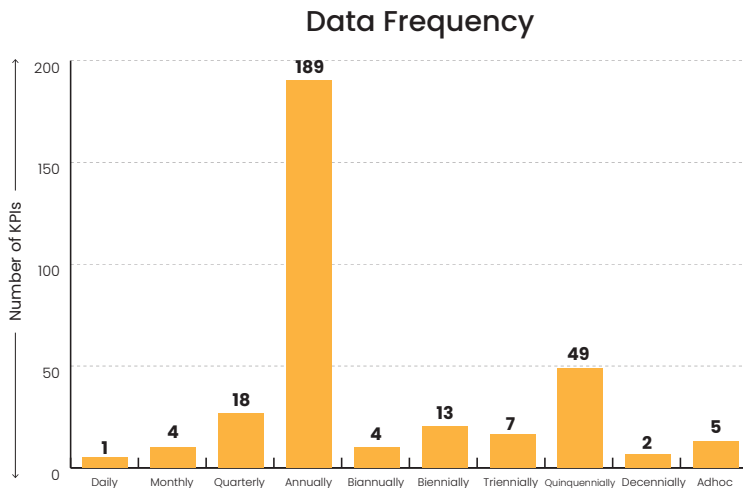
All Clusters
Summary (Data Disaggregation)

1. Key observations:

- Data is predominantly disaggregated at the National/Agency levels (265 KPIs), with much less attention given to dzongkhag (9 KPIs), gewog (14 KPIs), and chiwog (2 KPIs) levels.

2. Inference:

- The focus on national-level data may obscure local-level dynamics, which are crucial for targeted interventions. Limited disaggregation at more localized levels (dzongkhag, gewog, chiwog) may hinder efforts to address specific regional needs and inequalities.

3. Recommendations:

- Enhancing data collection and disaggregation at the dzongkhag, gewog, and chiwog levels is crucial for local planning and development. This would allow for more tailored programs that directly address the unique challenges faced by the local government.

Geographic disaggregation

Level	Number of KPIs
National/Agency Level	265
Dzongkhag Level	9
Gewog Level	14
Chiwog Level	2
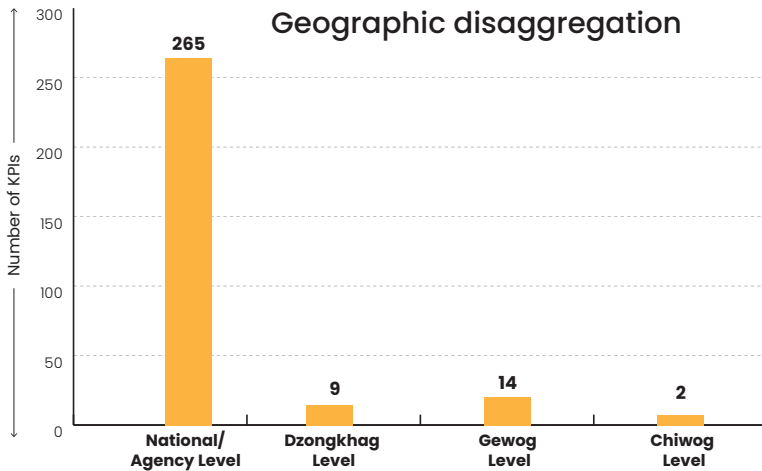
All Clusters
Summary (Data Repository)

1. Key observations:

•   The majority of data is stored in MS Word/Excel formats (166 KPIs), followed by database systems (92 KPIs), with other formats being used the least (34 KPIs).

2. Inference:

•   The reliance on MS Word/Excel for data storage may pose challenges in data management, analysis, and integration, potentially leading to inefficiencies and errors. Database systems, which offer more robust data management capabilities, are underused.

3. Recommendations:

•   It is recommended to shift data storage from MS Word/Excel to dedicated database systems for enhanced data security, accessibility, and analytical capabilities. Training and capacity-building initiatives should be implemented to support this transition. Additionally, exploring other modern data storage solutions could improve data handling and integration.

Data Repository

Number of KPIs

Maintained in a database system	Maintained in MS word/excel	Other formats
92	166	34
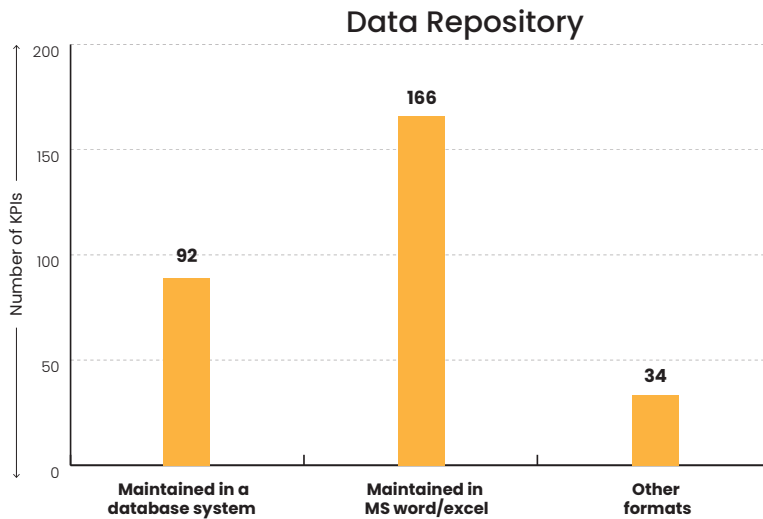
NATIONAL KPIs

Data Source

1. Key observations:

- Survey data is the primary source for KPIs, accounting for six out of 10 KPIs, while administrative and mixed data sources account for two KPIs each.

2. Inference:

- The reliance on surveys for KPIs suggests a preference for data that can capture specific and targeted insights, potentially allowing for more context-specific measurement of performance. However, limited use of administrative data may overlook readily available information that could complement survey data.

3. Recommendations:

- To optimize the effectiveness of KPI tracking, administrative data should be incorporated where appropriate. This would provide a more comprehensive and continuous stream of data, enriching the survey-based insights and leading to more robust KPI assessment.

Data Source
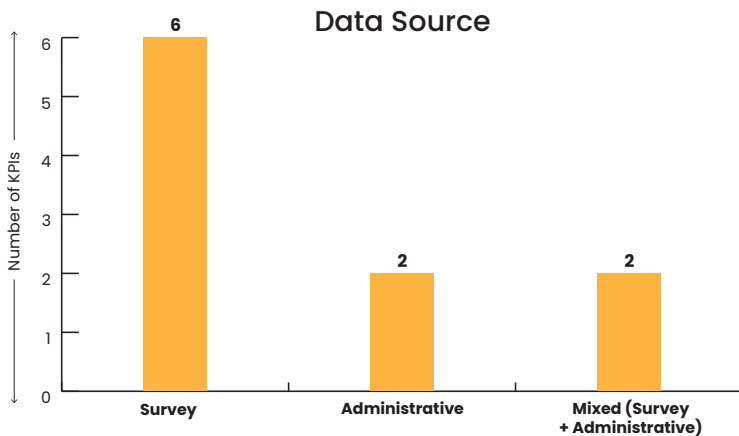
National KPIs
Data Frequency

1. Key observations:

•   Quinquennial data collection is the most common (five KPIs), followed by quarterly (three KPIs). Annual and biennial collections are each used in one KPI, with no KPIs being measured at a higher frequency.

2. Inference:

•   The preference for quinquennial data collection may indicate a focus on long-term trends and changes. However, the lack of more frequent data collection (eg: monthly, daily) could hinder the ability to monitor short-term developments and respond to them on time.

3. Recommendations:

•   To improve responsiveness and timely decision-making, it is recommended that the frequency of data collection be increased, especially for KPIs that are sensitive to rapid changes.

Data Frequency

Category	Number of KPIs
Adhoc	
Decennially (Every 10 years)	
Quinquennially (Every 5 years)	5
Triennially (Every 3 years)	
Biennially (Every 2 years)	1
Biannually	
Annually	1
Quarterly	3
Monthly	
Daily	

Number of KPIs
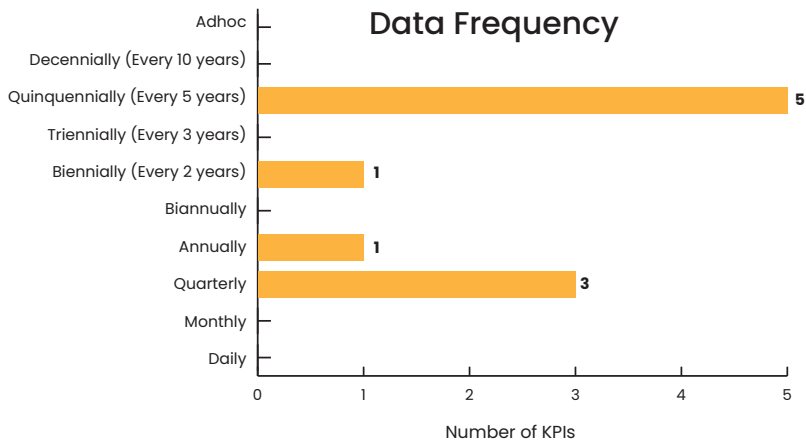
National KPIs
Geographic Disaggregation

1. Key observations:

• KPIs are overwhelmingly disaggregated at the National/Agency levels (eight KPIs), with only two KPIs at the gewog level. No disaggregation is done at the dzongkhag level.

2. Inference:

• The focus on national/agency-level disaggregation might result in a lack of localized data insights, potentially overlooking dzongkhag or gewog-specific performance issues.

3. Recommendations:

• Expanding the geographic disaggregation to include dzongkhag and gewog levels more consistently would allow for more granular analysis of KPIs.

Geographic disaggregation
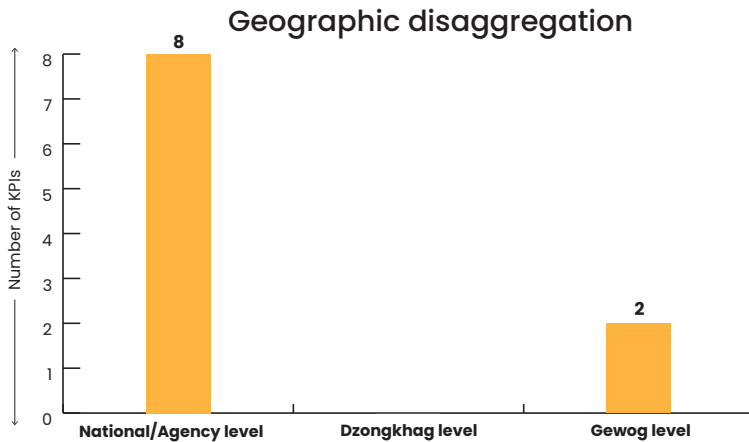
National KPIs
Data Repository

1. Key observations:

- The majority of KPI data is maintained in MS Word/Excel formats (seven KPIs), with minimal use of database systems (one KPI) and some other formats (two KPIs).

2. Inference:

- The heavy reliance on MS Word/Excel may lead to challenges in data management, particularly in terms of data consistency, accessibility, and analytical ability.

3. Recommendations:

- Transitioning KPI data storage from MS Word/Excel to dedicated database systems is recommended to enhance data management efficiency, security, and the ability to perform better analysis. Additionally, exploring the use of other modern data storage formats could optimize data accessibility and usability.

Data Repository

Bar chart titled "Data Repository". Y-axis labeled "Number of KPIs" from 0 to 8. Bars: Maintained in a database system = 1, Maintained in a MS word/excel = 7, Other formats = 2.
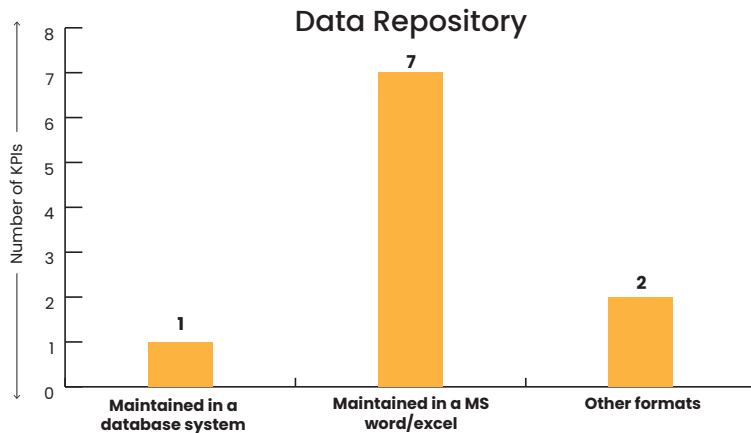
GOVERNANCE CLUSTER

Data Source

1. Key observations:

- The majority of KPIs (35 KPIs) rely on administrative data sources.
- Surveys contribute to nine KPIs.
- Only one KPI is based on a mixed data source (survey + administrative).

2. Inference:

- Heavy reliance on administrative data may indicate that KPI tracking is dependent on existing governmental or institutional records.
- Limited use of surveys suggest less engagement with direct data collection methods, which may affect the depth and specificity of the data collected.

3. Recommendations:

- Diversify data sources: Increase the use of mixed data sources and surveys to provide more nuanced and comprehensive insights. This could improve the reliability of the KPIs.
- Validate and strengthen administrative data: Administrative data quality assessment and validation and cross-checks with survey data could ensure the accuracy and relevance of administrative data used to measure KPIs.

Data Sources
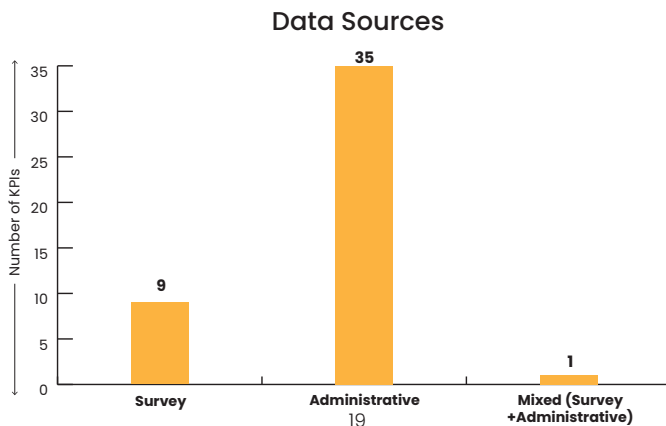
Governance Cluster
Data Disaggregation

1. Key observations:

- National/Agency-Level Dominance: The overwhelming majority of data (42 KPIs) is disaggregated at the National/Agency level, indicating that most data collection and reporting focuses on the broader national context.
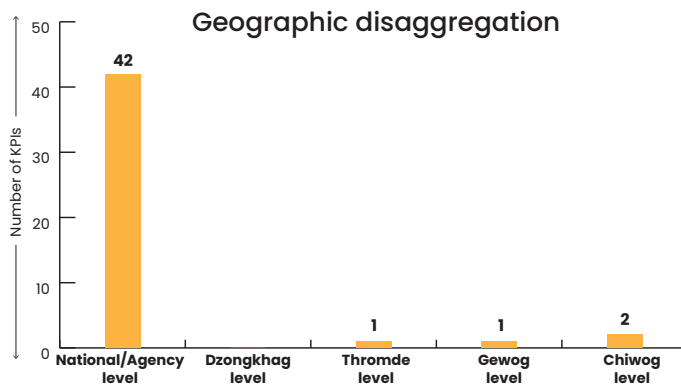
- Limited Local-Level Disaggregation: There is no data disaggregated at the dzongkhag (district) level.

- Minimal data is available at the thromde (municipal) level, at only one KPIs.

- Similarly, the gewog (block) level has no data representation.

- The chiwog (village) level shows a small presence, with just two KPIs.

2. Inference:

- Centralized Data Focus: The concentration of data at the National/Agency level suggests that reporting and analysis are primarily conducted at a higher administrative level, potentially overlooking localized issues.

- Lack of Local Insights: The absence of data at the dzongkhag and gewog levels, coupled with limited data at the thromde and chiwog levels, highlight a significant gap in the availability of geographically granular data.

3. Recommendations:

- Increase Local-Level Data Collection: To enhance the granularity and relevance of data, efforts should be made to collect and disaggregate data at the dzongkhag, thromde, gewog, and chiwog levels.

Geographic disaggregation

Level	Number of KPIs
National/Agency level	42
Dzongkhag level	
Thromde level	1
Gewog level	1
Chiwog level	2

Governance Cluster
Data Frequency

1. Key observations:

• Annual data collection is the most common, with 32 KPIs.

• Less frequent data collection intervals include biennial (every two years) with four KPIs, quarterly with three KPIs, and a few cases of quinquennial (every five years), triennial (every three years), and biannual frequencies.

• There is one instance of ad-hoc data collection.

2. Inference:

• The dominance of annual data collection may ensure regular updates and monitoring of KPIs but could miss out on more dynamic changes that could be captured with more frequent data collection.

• Infrequent, or ad-hoc data collection may lead to gaps in data continuity and potentially affect timely analysis of trends.

3. Recommendations:

• Increase Data Collection Frequency: Consider increasing the frequency of data collection, at least quarterly, for critical KPIs to capture more dynamic changes and trends.

Data Frequency

Category	Number of KPIs
Adhoc	1
Decennially (Every 10 years)	
Quinquennially (Every 5 years)	2
Triennially (Every 3 years)	2
Biennially (Every 2 years)	4
Biannually	1
Annually	32
Quarterly	3
Monthly	
Daily	

Number of KPIs
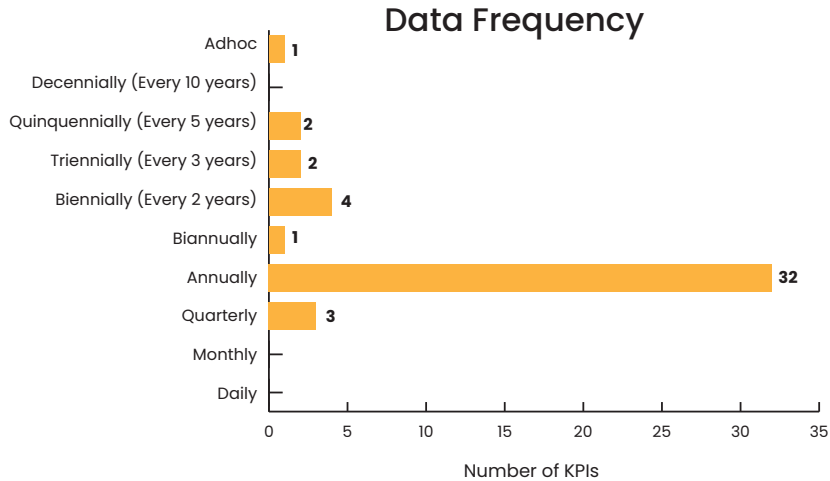
Governance Cluster
Data Repository

1. Key observations:

- A significant portion of data (30 KPIs) is maintained in a database system.
- 12 KPIs are stored in MS Word/Excel formats.
- A small number (three KPIs) are maintained in other formats.

2. Inference:

- Use of database systems for the majority of KPIs is positive, indicating that data is likely well-organized, easily accessible, and can be efficiently queried for analysis.
- The presence of KPIs stored in MS Word/Excel formats suggest some data may be less structured and harder to manage, especially as data volumes grow.

3. Recommendations:

- Standardize Data Storage: Transition all KPI data to a centralized database system to enhance data management, reduce redundancy, and facilitate better data analysis.
- Improve Data Integration: Ensure that all data, regardless of format, is easily integrated and can be accessed seamlessly across platforms, enhancing the ability to cross-analyze and report on multiple KPIs simultaneously.

Data Repository
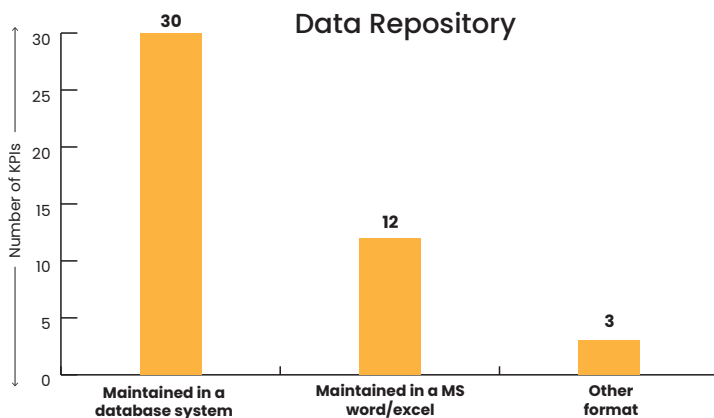
ECONOMIC CLUSTER

Data Source

1. Key observations:

- The majority of data (31 KPIs) comes from administrative sources.

- Surveys contribute to seven KPIs.

- No data is sourced from mixed methods (survey + administrative).

2. Inferences:

- The reliance on administrative data suggests a strong dependence on existing records.

3. Recommendations:

- Strengthen the administrative data to generate economic data and statistics.

- Increase the use of survey data to capture insights that may not be covered by administrative records.

Data Source

A bar chart titled "Data Source" with the y-axis labeled "Number of KPIs" ranging from 0 to 35. Survey: 7, Administrative: 31, Mixed (Survey + Administrative): 0.
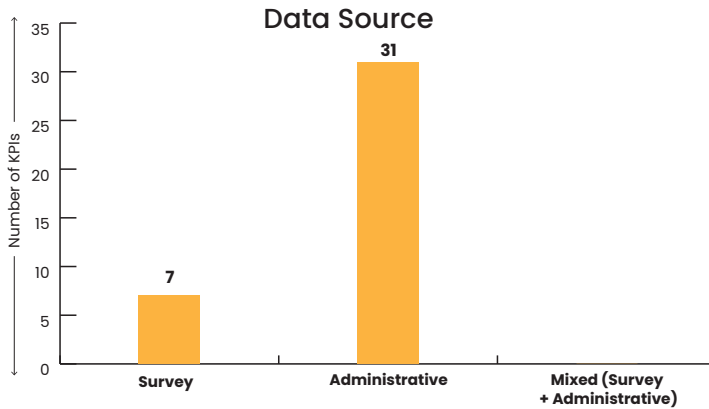
Economic Cluster
Data Frequency

1. Key observations:

• Annual data collection is the most common at 20 KPIs.

• Quarterly data collection is also significant at nine KPIs.

• Data is collected quinquennially (every five years) in five cases, while monthly, ad hoc, and daily frequencies account for two, one, and one KPIs, respectively.

2. Inferences:

• The predominance of annual data collection suggests a focus on long-term monitoring but may not be agile enough for rapidly changing situations.

• Quarterly and monthly data collection is encouraged to capture more frequent trends.

3. Recommendations:

• Increase Collection Frequency: Consider increasing the use of quarterly and monthly data collection for KPIs that require more frequent monitoring to ensure timely and responsive decision-making.

Data Frequency

Category	Number of KPIs
Adhoc	1
Decennially (Every 10 years)	
Quinquennially (Every 5 years)	5
Triennially (Every 3 years)	
Biennially (Every 2 years)	
Biannually	
Annually	20
Quarterly	9
Monthly	2
Daily	1

Number of KPIs
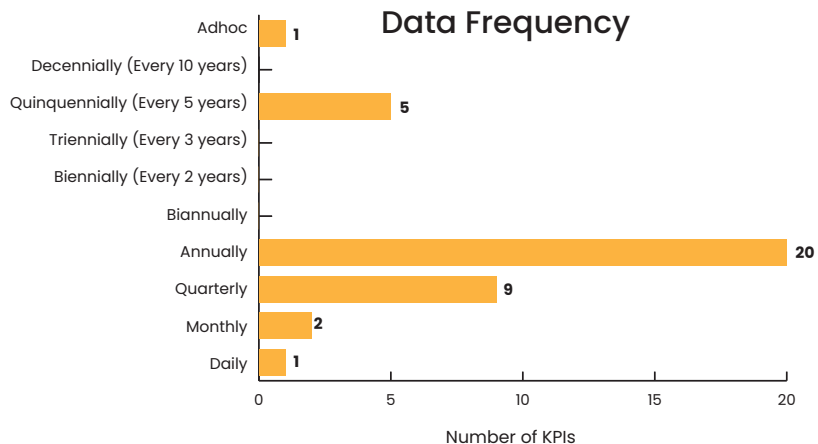
Economic Cluster
Data Disaggregation

1. Key observations:

- National/Agency level data is overwhelmingly dominant at 36 KPIs.

- Gewog (block) level data disaggregation accounts for just two KPIs, while there is no data disaggregated at the dzongkhag (district) level.

2. Inferences:

- The focus on national-level data disaggregation may lead to an oversight of localized challenges.

- The lack of data at the dzongkhag level indicates a potential gap in the ability to address and respond to district-specific issues.

3. Recommendations:

- Enhance Local Disaggregation: Increase the disaggregation of data at dzongkhag and gewog levels to better understand and address local needs and disparities.

Geographic Disaggregation
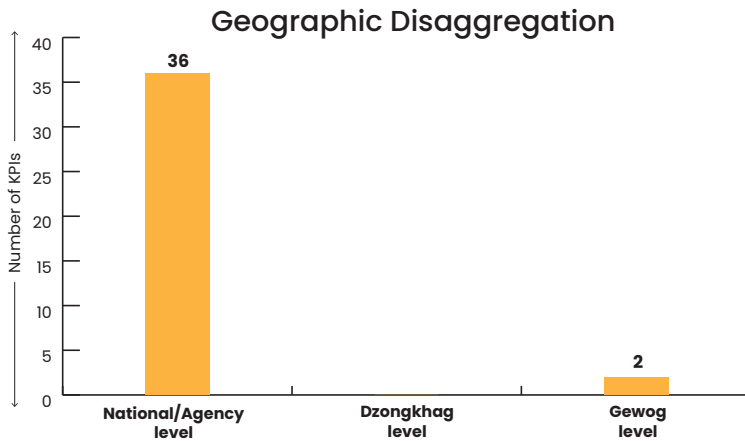
Economic Cluster
Data Respository

1. Key observations:

- Data is almost evenly split between being maintained in database systems (17 KPIs) and MS Word/Excel (18 KPIs).

- A smaller portion of data (three KPIs) is maintained in other formats.

2. Inferences:

- The substantial use of MS Word/Excel for data storage may pose challenges for data integration, analysis, and consistency, especially as the dataset grows.

- The presence of data in other, potentially less structured, formats could hinder efficient data management and retrieval.

3. Recommendations:

- Standardize Data Storage: Transition data, currently maintained in MS Word/Excel and other formats, to a centralized database system to enhance data accessibility, integration, and analysis.

Data Repository

Bar chart titled "Data Repository". Y-axis: Number of KPIs (0 to 20). Bars: Maintained in a database = 17, Maintained in a MS word/excel = 18, Other format = 3.
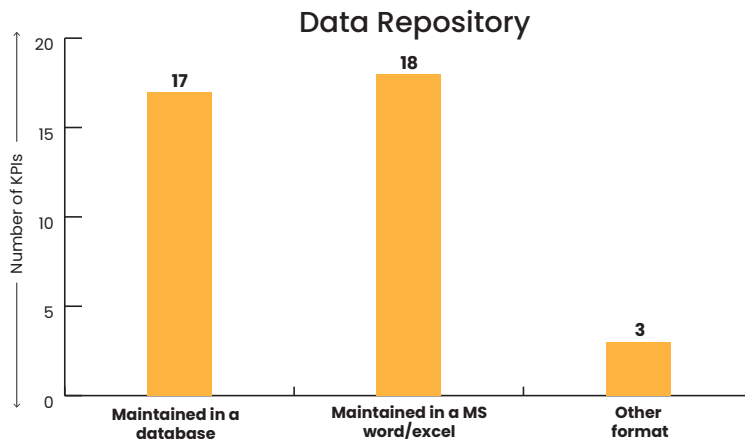
SOCIAL CLUSTER

Data Source

1. Key observations:

- A significant majority of KPIs (115 KPIs) rely on administrative data sources.
- Surveys account for 32 KPIs.
- Only nine KPIs use a mixed data source (survey + administrative).

2. Inference:

- The heavy reliance on administrative data indicates that the KPIs are predominantly based on pre-existing records, which may limit the scope of data collection to areas where administrative processes are strong.

3. Recommendations:

- Expand Data Collection Methods: Consider increasing the use of surveys and mixed data sources to capture a broader picture, particularly in areas where administrative data may not provide sufficient depth. At times, administrative data may be limited to only those availing of the services.

Data source
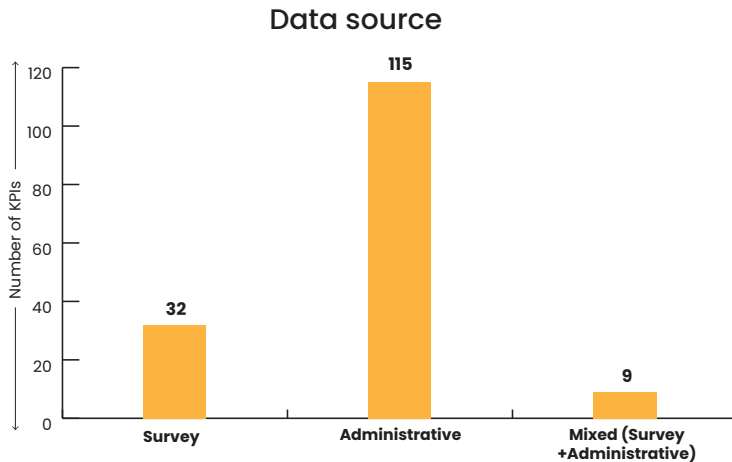
Social Cluster
Data Frequency

1. Key observations:

- Annual data collection is the most common at 106 KPIs.

- Other notable frequencies include quinquennial (every five years) at 32 KPIs, and biennial (every two years) at eight KPIs.

- There are a few KPIs of ad hoc, triennial, biannual, quarterly, and monthly data collection.

2. Inference:

- The dominance of annual data collection ensures regular monitoring and updates but might not capture more immediate changes or trends that could be important for timely decision-making.

- The presence of quinquennial and biennial data collection indicates a focus on long-term trends, but infrequent updates could lead to data gaps in dynamic environments.

3. Recommendations:

- Increase Data Collection Frequency: For KPIs that are critical to timely decision-making, quarterly data collection is recommended.

Data Frequency

Category	Value
Adhoc	2
Decennially (Every 10 years)	2
Quinquennially (Every 5 years)	32
Triennially (Every 3 years)	3
Biennially (Every 2 years)	6
Biannually	1
Annually	106
Quarterly	1
Monthly	1
Daily	
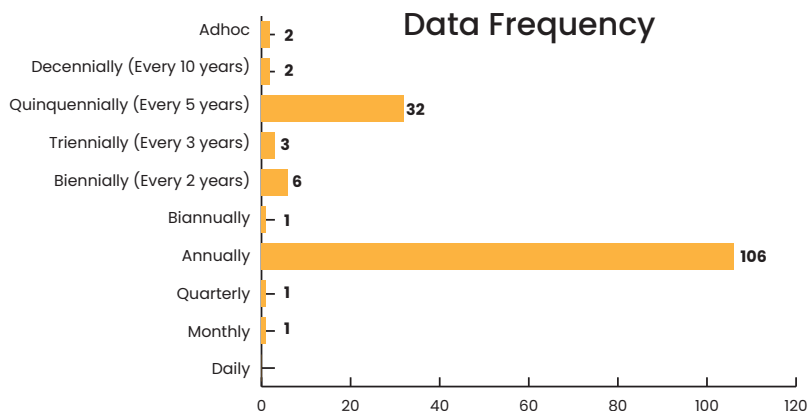
Social Cluster
Data Disaggregation

1. Key observations:

• The vast majority of 140 KPIs are disaggregated at the National/Agency level.

• Dzongkhag (district) level disaggregation accounts for nine KPIs, and gewog (block) level disaggregation accounts for seven KPIs.

2. Inference:

• The strong focus on national-level disaggregation may indicate that the KPIs are designed for national-level policy and decision-making, but this could overlook local variations.

• Limited disaggregation at the dzongkhag and gewog levels may hinder the ability to address local issues and implement targeted interventions.

3. Recommendations:

• Enhance Geographic Disaggregation: Increase disaggregation of KPIs at the dzongkhag and gewog levels to better capture and address regional disparities and local challenges.

Geographic disaggregation
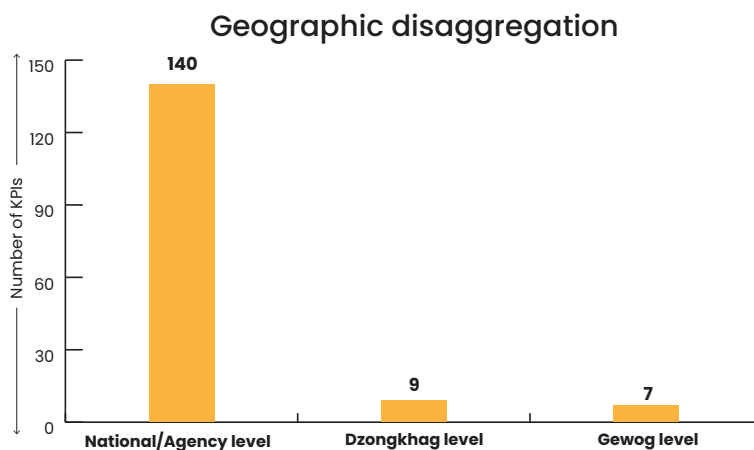
Social Cluster
Data Repository

1. Key observations:

• A large portion of data (102 KPIs) is maintained in other formats.

• MS Word/Excel formats are used for 29 KPIs, while only 29 KPIs are maintained in a database system.

2. Inference:

• The reliance on non-database formats for data storage suggests potential challenges in data accessibility, management, and analysis, particularly as data volumes increase.

• Data maintained in MS Word/Excel or other formats may be less structured, leading to inefficiencies in data retrieval and analysis.

3. Recommendations:

• Standardize Data Storage: Transition all KPI data to a centralized database system to enhance data management, accessibility, and integration.

Data Repository

Number of KPIs

Maintained in a database system	Maintained in a MS word/excel	Other format
	15	27
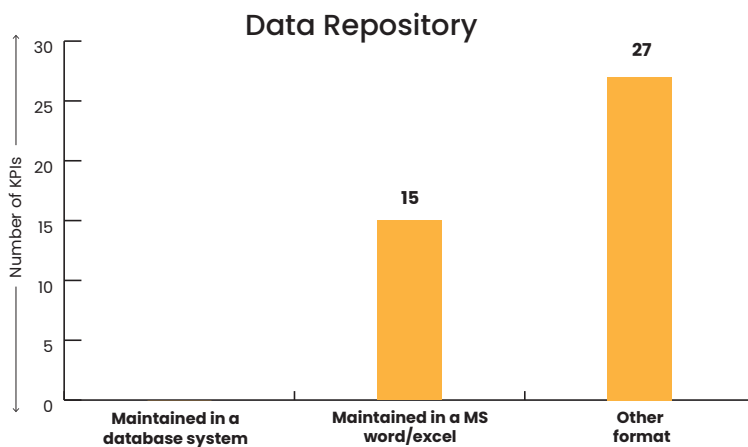
SECURITY CLUSTER

Data Source

1. Key observations:

• A heavy reliance on administrative data sources (82 percent of KPIs).

• Limited use of survey data (18 percent of KPIs).

• No integration of mixed data sources.

2. Inference:

• The over-reliance on administrative data could limit the scope and diversity of insights, as survey data may capture different or more information.

3. Recommendations:

• Consider increasing the use and reuse of survey data to complement administrative data.

• Explore the integration of mixed data sources to leverage the strengths of both administrative and survey data for more comprehensive KPI measurement.

Data source
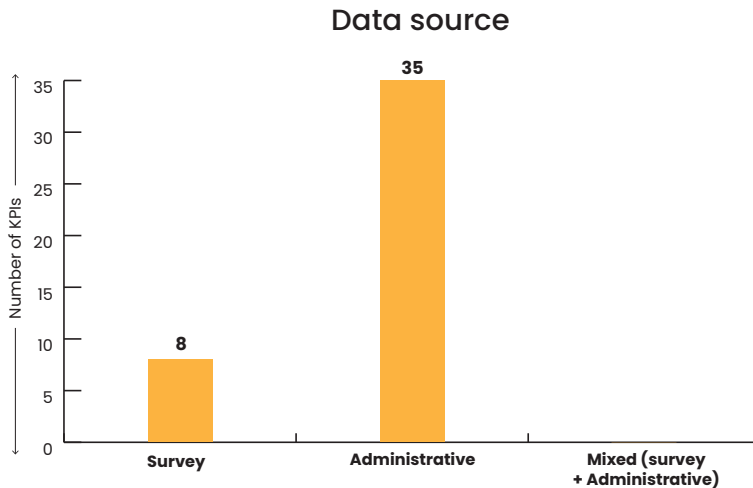
Security Cluster
Data Frequency

1. Key observations:

- A significant majority of KPIs (about 70 percent) are measured annually.

- Infrequent data collection for many KPIs, with only a few being updated biannually, triennially, or quinquennially.

- Minimal reliance on more frequent (eg: monthly, quarterly) data collection.

2. Inference:

- Annual data collection may be insufficient for timely decision-making, especially for dynamic indicators that require more frequent monitoring.

- The infrequency of data collection for some KPIs could hinder the ability to detect trends or respond to changes effectively.

3. Recommendations:

- Assess the potential benefits of increasing the frequency of data collection, particularly for KPIs that may require timely updates.

- Consider quarterly or monthly data collection for key indicators to enhance responsiveness and data-driven decision-making.

Data Frequency

Number of KPIs
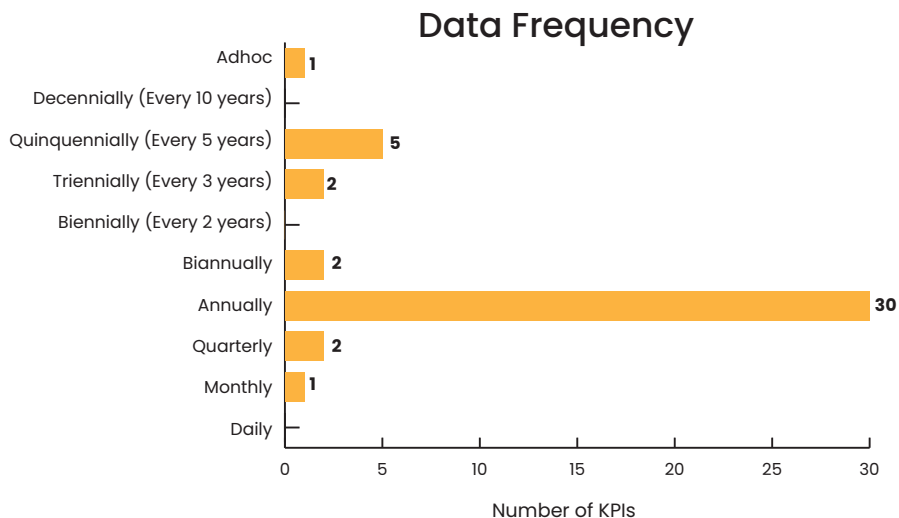
Security Cluster
Data Disaggregation

1. Key observations:

• Predominance of national-level data disaggregation.

• Limited disaggregation at local levels of dzongkhag, thromde, and gewog.

2. Inference:

• The lack of disaggregated data at sub-national levels may obscure regional disparities and hinder targeted policy interventions.

• National-level aggregation may overlook important local trends and needs.

3. Recommendations:

• Encourage disaggregation of KPIs at more localized levels to better understand regional variations and to support more targeted, equitable policy responses.

• Develop strategies to improve data collection at dzongkhag, thromde, and gewog levels to enhance granular measurement of KPIs and its utility.

Geographic disaggregation
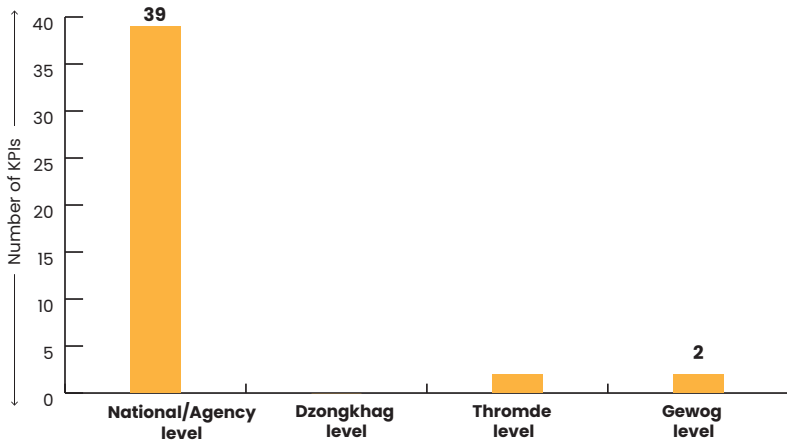
Security Cluster
Data Repository

1. Key observations:

* A significant portion of KPIs are stored in less structured formats, which may include physical documents, PDFs, or other non-digital formats.

* Limited use of structured database systems for KPI management.

2. Inference:

* The reliance on unstructured formats may hinder data accessibility, analysis, and integration, potentially leading to inefficiencies.

3. Recommendations:

* Transition KPIs to structured database systems to improve data management, accessibility, and analysis capabilities.
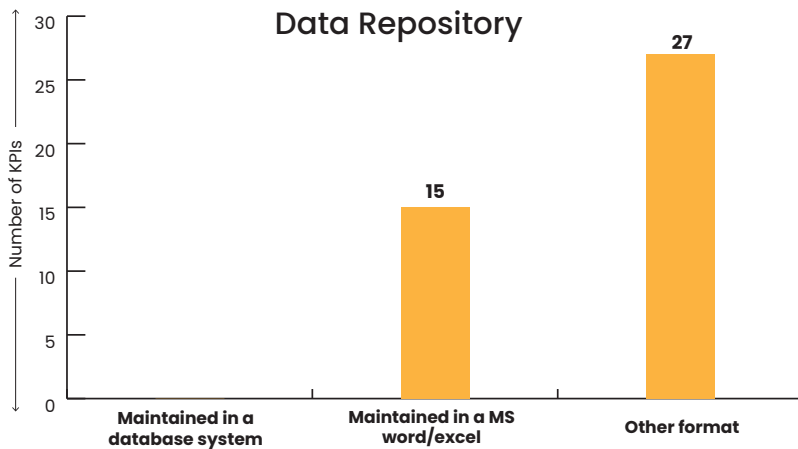
Recommendation Summary

Sl.	Data	Short-term	Medium-term	Long-term
1	Sources	Validate and improve quality of administrative data through assessments.	Introduce and implement mixed data sources (administrative and survey) for a broader perspective on KPIs.	Conduct administrative data quality assessment of priority sectors.
2	Frequency	Increase data collection frequency for critical KPIs, shifting from annual to quarterly or even monthly updates, where necessary.	Develop data infrastructure for real-time data collection for dynamic indicators.	Publish data and statistics with increased frequency for certain domains.
3	Disaggregation	Increase data disaggregation at dzongkhag and gewog levels to support local planning.	Expand disaggregation efforts to include chiwog level data, allowing for more granular insights.	Generate disaggregated data and statistics at the lowest administrative levels.
4	Repository	Transition KPI data from MS Word/Excel formats to a centralized database system to improve data accessibility, management, and analysis capabilities.	Develop data infrastructure capable of supporting real-time data storage.	Develop and implement data governance/statistical infrastructure.

PART II
Review of the Indicator Framework for Monitoring the Implementation of the 13th Five Year Plan

NATIONAL STATISTICS BUREAU
OFFICE OF CABINET AFFAIRS AND STRATEGIC COORDINATION
2024

Review of the Indicator Framework for Monitoring the Implementation of the 13th Five Year Plan

Review of the Indicator Framework for Monitoring the Implementation of the 13th Five Year Plan

List of Abbreviations

ACC ....Anti-Corruption Commission
BCRS ....Bhutan Civil Registration System
BHSQA ....Bhutan Healthcare Standard for Quality Assurance
BOC ....Bhutan Olympic Committee
BPST ....Bhutan Professional Standards for Teachers
CBS ....Centre for Bhutan and GNH Studies
CGSI ....Core Government System Integration
CME ....Continuing Medical Education
COFOG ......Classification of Functions of Government
CPD ....Continuing Professional Development
CPI ....Consumer Price Index
CRVS ....Civil Registration and Vital Statistics
CVD ....Cardiovascular Diseases
DCEI ....Digital Citizen Engagement Index
DCRC ....Department of Civil Registration and Census
DHI ....Druk Holding and Investments Limited
ECCD ....Early Childhood Care and Development
EIU ....Economist Intelligence Unit
EMC ....Entrepreneurship Mindset Curriculum
ePIS ....Electronic Patient Information System
GDP ....Gross Domestic Product
GPI ....Global Peace Index
GNH ....Gross National Happiness
GNI ....Gross National Income
GBT ....WHO Global Benchmarking Tool
GTMI ....GovTech Maturity Index
HALE ....Health-Adjusted Life Years
HCI ....Human Capital Index
HE ....Higher Education
HIV ....Human Immunodeficiency Virus
HRD ....Human Resources Development
HSI ....Human Society International
IBLS ....Integrated Business Licensing System
ICLS ....International Conference of Labour Statisticians
IEC ....Anti-corruption Information, Education and Communication
IHR ....International Health Regulations
ISO ....International Organization for Standardization
JSW ....Jigme Singye Wanchuck
JSWSL ....Jigme Singye Wanchuck School of Law

KGUMSB ....Khesar Gyalpo University of Medical Sciences of Bhutan
LG ....Local Government
MoAF ....Ministry of Agriculture and Forestry
MoFAET ......Ministry of Foreign Affairs and External Trade
MoENR ....Ministry of Energy and Natural Resources
MoF ....Ministry of Finance
MoH ....Ministry of Health
MoHA ....Ministry of Home Affairs
MHSI ....Mental Health Status Index
MTCT ....Mother-to-Child Transmission
MVA ....Motor Vehicle Agreement
NA ....National Assembly
NC ....National Council
NCD ....Non-Communicable Diseases
NEET ....Not in Employment, Education or Training
NGP ....National Gyalsung Program
NKPI ....National Key Performance Indicator
NMS ....National Medical Service
NSB ....National Statistics Bureau
OCASC ......Office of Cabinet Affairs and Strategic Coordination
OOPS ....Out-of-Pocket Spending
PSDI ....Public Service Delivery Index
R&D ....Research and Development
RBE ....Royal Bhutan Embassy
RGoB ....Royal Government of Bhutan
RIM ....Royal Institute of Management
RBP ....Royal Bhutan Police
RMNCAH ...Reproductive, Maternal, Newborn, Child and Adolescent Health
RUB ....Royal University of Bhutan
SDG ....Sustainable Development Goal
SEN ....Special Education Needs
SOE ....State-Owned Enterprises
STEPS ....Stepwise Approach to Surveillance
STEM ....Science, Technology, Engineering and Mathematics
TAT ....Turnaround Time
TEI ....Teacher Education Instruction
TOE ....Tonnes Oil Equivalent
TVET ....Technical and Vocational Education and Training
UNESCO ....United Nations Educational, Scientific and Cultural Organization
UIS ....Institute of Statistics
WHO ....World Health Organization

Contents

Preface

The Royal Government of Bhutan developed the 13th Five-Year Plan for the country,[1] to be implemented between July 2024 and June 2029. The government, through the National Statistics Bureau (NSB) and the Office of Cabinet Affairs and Strategic Coordination (OCASC), requested United Nations Economic and Social Commission for Asia and the Pacific's (ESCAP) support in assessing the need for data to facilitate the monitoring of the implementation of the Plan in October 2023.

The strategic objectives of the Plan are organized in four clusters, covering sustainable economic development, social development, security and governance. The Plan foresees the implementation of eight comprehensive and transformative "National programmes and initiatives", while delivering 40 outputs towards achieving eight outcomes across the clusters. Ministry, agency and local government-specific programmes are to be integrated into this framework to ensure coherence and mutual reinforcement of the outcomes and objectives.

To increase transparency and accountability around implementation of the Plan, while ensuring the effectiveness of its implementation, the Plan's outcomes and objectives are associated – where possible – with, what in the Bhutan context is called, "key performance indicators", or KPIs. From the international perspective, however, KPIs are neither "key" nor "indicators". On the former, the four clusters encompass a total of 289 KPIs, of which 41 relate to outcomes and 248 to outputs. Perhaps more importantly, on the latter, KPIs are, in most cases, phrased as targets. In some cases, a statistical indicator (i.e., a measurable construct) is embedded in the KPI wording, but even then, it is usually insufficiently defined. In most cases, however, KPIs (as they are formulated as policy targets) are not measurable at all.

This report reflects the work undertaken by ESCAP with NSB and OCASC, as well as with other relevant ministries and government agencies, between May and early August 2024 to review the Plan's monitoring framework. This work consisted of desk reviews, frequent online meetings with NSB and OCASC, as well as a review mission to Paro on June 10-12, 2024 that featured intensive in-person discussions among all the mentioned parties. The ESCAP review

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[1] *See https://www.pmo.gov.bt/wp-content/uploads/2019/09/13th-FYP.pdf*

team consisted of Pietro Gennari, consultant, and Jan Smit, Regional Adviser on Official Statistics.

Following a brief introduction of the Plan, some general observations on the monitoring framework were presented. This was followed by an initial assessment of the key gaps in the data needed for monitoring the implementation of the Plan. The final, lengthiest part of the report provides reasoned suggestions for measurable, statistical indicators to assess progress against each of the targets in the Plan.

As the next step, the government will have to decide which, if any, of the suggested statistical indicators it wants to adopt for monitoring the implementation of the Plan, a process that has partly been set in motion at the time of writing this report. ESCAP will then be able to extend further support, emanating in a separate report, in terms of identifying (possible) data sources, modifications that might have to be made to existing data sources, periodicity of data collection and/or compilation, and the extent to which the indicators can be disaggregated.

Introduction

The Economic and Social Commission for Asia and the Pacific (ESCAP), through a team consisting of Pietro Gennari, consultant, and Jan Smit, Regional Adviser on Official Statistics, reviewed with the National Statistics Bureau (NSB) and the Office of Cabinet Affairs and Strategic Coordination (OCASC) of the Royal Government of Bhutan, as well as other relevant ministries and government agencies between May and September 2024.

A draft indicator framework for monitoring the implementation of Bhutan's 13th Five-Year Plan was organized in results matrices for the 10 national key performance indicators and 289 indicators arranged in four clusters of sustainable economic development, social development, security and governance.

This work, at ESCAP's end, emanated in the report "Review of the indicator framework for monitoring the implementation of the 13th Five-Year Plan of Bhutan" submitted to NSB and OCASC, in revised final form, in September 2024.

On September 17, 2024, NSB, OCASC and ESCAP presented their respective works on the indicator framework to the Cabinet Secretary of the Government. The ESCAP presentation, delivered by the Regional Adviser, took stock of the extent to which the ESCAP recommendations contained in the review report had been implemented,[1] and provided several additional recommendations for implementation in the short term and for implementation ahead of the preparations for the 14th Five-Year Plan.

Following discussions, it was decided to group the remaining recommendations, i.e., those contained in the review report not (yet) implemented and the additional recommendations, into those for immediate implementation, for implementation in the short to medium term, and for implementation ahead of the preparations of the next five-year plan. In the following, this note contains these recommendations.

ESCAP stands ready to consider whether, and if so how, it can support the implementation of the recommendations if requested.

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1. ESCAP understood at the time that OCASC planned to undertake further work on the results matrices. At the time of writing, it is not aware of the latest status in this respect.

Recommendations for immediate implementation

1. Reiterating a point made in the review report, it is recommended that the Government establishes an institutional mechanism to monitor the implementation of the Plan. Such a mechanism would be responsible for coordinating data flows emanating from different data producers to facilitate annual progress assessments, and not only at the end of the Plan period, so that any necessary corrective actions can be taken to ensure that the implementation of the Plan remains on track.

2. Reiterating another point made in the review report, it is recommended that a metadata repository be established. It will integrate the metadata already contained in the results matrices with additional essential information on the data source(s), methodology for compilation, coverage and disaggregation, and comparability with and/or deviation from international standards of the indicators. In this context, ESCAP has provided NSB and OCASC with a metadata template in early June 2024.

3. It is recommended that the metadata repository be used to facilitate an in-depth data needs assessment for the implementation of the Plan. Such an assessment would determine indicators that are already being produced, while generating, to the extent missing, the metadata mentioned under the previous recommendation. The assessment would also determine the most suitable approach for the indicators not yet produced. This could involve, among other things, examining existing administrative holdings for relevant data; adding steps/ questions to existing public service delivery processes and/or existing data collection instruments such as surveys; examining to what extent "big data" and data science methods can help; participating in relevant international data collection efforts; or, least preferred, developing new data collection instruments.

Recommendations for implementation in the short to medium term

1. To ensure consistency across targets contained in future iterations of the Plan, especially in the macroeconomic area, such as between those related to gross domestic product (GDP), sector value added, inflation and the income distribution, it is recommended that the Government establishes the needed modelling capacity. The recommended macroeconomic model(s) would need as input, a regularly updated input-output table and/or social accounting matrix, and would presumably benefit from collaboration between NSB, OCASC, Ministry of Finance, and Royal Monetary Authority.

2. Noting that http://www.dewa.gov.bt/ is apparently no longer functional, it is recommended that a data platform be established for the dissemination of the indicators contained in the Plan, possibly along with other indicators.[2]

Recommendations for implementation ahead of the preparations of the 14th Five-Year Plan

1. It is recommended that the process to formulate targets and develop the indicator framework be given the necessary, ample time.

2. It is recommended that NSB, as the central authority for the production and dissemination of all official statistics, be involved right from the beginning of the process.

3. It is recommended that measures be taken to ensure staff members of all ministries and agencies, expected to contribute to the development of the indicator framework, have the required data literacy skills.[3]

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2 *Many countries, including Armenia, Azerbaijan, Kyrgyzstan, Nepal, Republic of Korea, Türkiye and Vanuatu in Asia in the Pacific, are using Open SDG, https://open-sdg.org/, for managing and publishing Sustainable Development Goal-related data and statistics. Work is underway between the Office of National Statistics of the United Kingdom of Great Britain and Northern Ireland and ESCAP to generalize Open SDG into a multipurpose dissemination platform for data and statistics, which might be of interest to Bhutan.*

3 *The self-paced e-learning course Developing National Indicator Frameworks for SDG Monitoring, https://siap-elearning.org/course/view.php?id=130, developed by the Statistical Institute for Asia and the Pacific (SIAP) of ESCAP, could be helpful in this respect. Although the title indicates that the course is SDG-focused, a lot of the material is relevant for the development of broader national indicator frameworks as well.*

4.   To avoid different ministries and agencies, involved in the indicator development process, taking different approaches, it is recommended that clear guidance be issued in this regard.

5.   It is recommended that the development of the indicator framework for the next Plan, and the subsequently needed in-depth data needs assessment, be completed before developing the next national strategy for the development of statistics (NSDS) so that the former can become essential, basic input for the latter.

1. Deliverables, strategies, and programmes

The 13th Five-Year Plan of Bhutan, to be implemented from July 2024 to June 2029, is framed within a broader 10-year strategic framework. The strategic objectives of the Plan, organized in four clusters, foresee that by mid-2029 Bhutan will:

1. Be a high-income country driven by innovation and sustainability **(Sustainable economic development)**

2. Have a healthy and productive society founded on equitable and high-quality health, education and social protection **(Social development)**

3. Safeguard and strengthen its sovereignty, territorial integrity, security, unity, wellbeing, resilience and economic prosperity **(Security)**

4. Have a transformed and trusted governance ecosystem that drives accelerated economic growth and improves people's lives **(Governance)**

The Plan foresees eight comprehensive and transformative "National programmes and initiatives" to be implemented collaboratively by central agencies, local governments and partners, while delivering 40 outputs towards achieving eight outcomes across the Plan's economic, social, security and governance clusters.

Ministry, agency and local government-specific programmes are to be integrated into this framework to ensure coherence and mutual reinforcement of these outcomes and objectives.

2. The monitoring framework – General observations

To increase transparency and accountability around the implementation of the 13th Five-Year Plan, while ensuring the effectiveness of its implementation, the Plan's outcomes and objectives were associated – where possible – with quantitative targets, the achievement of which are to be monitored with the help of outcome and output indicators.

The four clusters encompass a total of 289 indicators, of which 41 are outcome indicator and 248 are output indicators. This extensive monitoring framework is complemented by 10 national key performance indicators (NKPIs) representing highly visible impact constructs. Data for most indicators are to be provided by administrative sources (for a total for 224 indicators, of which, three are NKPIs and 221 are at the cluster level), while 50 indicators (five NKPIs and 45 at the cluster level) are to be derived from survey data, and 15 from mixed data sources (two NKPIs and 13 at the cluster level).

This first metadata documentation exercise, carried out by the National Statistics Bureau (NSB) between April and June in collaboration with all ministries and government agencies producing data, is currently being redone, as the data needs assessment workshop, held on June 10-12, 2024 in Paro, led to the replacement or removal of several indicators. The aim of the exercise is to gather all required information (such as detailed data sources, data collection methodology, frequency and disaggregation level for each indicator, as well as the ministry or agency responsible for their production) to produce a comprehensive data needs assessment report to monitor the implementation of the Plan.

Despite these limitations, the close relationships between indicators and policy decisions have two important implications. The more 'authority' is given to indicators, the more thorough the quality assurance mechanisms to ensure compliance with relevant statistical standards should be. The selected indicators should provide reliable and accurate information, especially those that can be trusted by relevant stakeholders. The specific modalities adopted for implementing these quality assurance mechanisms on the various data sources (whether through self-assessment or external audit) will largely depend on the presence of a dedicated quality team at NSB and the availability of financial resources for implementing a comprehensive quality assurance strategy. On the other hand, the importance to be attributed to statistics must be balanced against adequate statistical governance. In this context, it is

crucial that an institutional mechanism is put in place to regularly monitor the implementation of the Plan. This implies assessing implementation progress every year (or at least every two years), and not only at the end of the five-year period, to understand if the country is on track to achieve the targets set and enable the government to take required actions to correct observed trends. The institutional mechanism would, therefore, be tasked with coordinating data flows emanating from different data producers and through the conduct of annual progress assessment exercise.

This coordination mechanism would also be essential to obtain document and preserve the metadata essential to carry out a proper data needs assessment for the Plan. The new metadata template provided by ESCAP to NSB is meant to integrate the information already collected through the current Excel results matrices. Although containing valuable information to start this exercise, it lacks some essential information on the indicators and associated data sources (i.e., on the methodology used for data collection, coverage of the data source, etc.) that is required to conduct an in-depth assessment.

The first substantive comment on the monitoring framework itself relates to the formulation of indicators (or KPIs). Generally, it is advisable to separate the description of the "policy targets" from the indicators and, at the same time, to clearly specify the statistical indicators selected to measure progress against them. Currently, the two dimensions (target and statistical construct to monitor it) are often consolidated in one single statement (column B of the original matrix), which often makes it difficult to define the actual indicator to be monitored. In this document, therefore, outcome and output indicators have been renamed as outcome and output targets, respectively, while the indicators are renamed as statistical indicators. In the associated Excel file, a column to each matrix has consequently been added so that in column 'A' (of the new matrix) the statistical indicator to be used for the monitoring exercise is clearly defined.

Secondly, it is important to underline the excessive number of indicators to be monitored, almost 300, which is bound to overstretch the already limited capacity of NSB and other national data producers. As such, they are already required to compile many indicators to respond to national and international data requirements. It would, therefore, be advisable to streamline the targets and drop a substantial number of indicators, especially those that either do

not have a specific data source or a baseline value[4] (or both). In addition, it would be desirable to determine which indicators have been produced through an 'ad hoc' (one shot) data collection exercise and which can be produced only on a five-year basis, given the necessity to assess progress in implementing the Plan frequently.[5] Finally, output indicators that are not closely linked to specific policy measures that the government is planning to implement in five years up to 2029 could probably be dropped.

Thirdly, the framework intensively uses composite indices. Composite indices are useful tools for communication, but not so much for the formulation and monitoring of public policies. They often mix diverse dimensions on which specific information is needed to inform and monitor the policy measures foreseen. Moreover, it is impossible to set meaningful targets for composite indices, as they are qualitative, not quantitative, in data and therefore cannot be used for progress assessment, i.e., to measure by how much an index can change or has changed over time.

The advice would be to unpack the composite indices into their underlying indicators, which are easier to interpret and should be available as they have been used to calculate the composite index. While unpacking the composite indices, it would also be possible to choose those underlying indicators that seem most relevant for the target to be monitored, and avoid the risk of further inflating the overall number of indicators.

In this context, specific consideration should be given to the gross national happiness (GNH) index, which is a visible and highly distinctive feature of the national statistical system of Bhutan. Various components of the GNH index are used as outcome targets in almost each results matrix. However, these components are often a duplication of indicators already present in the matrix. Moreover, as the index is produced every five years, it does not allow for monitoring the Plan with sufficient and timely periodicity. A discussion with the entity responsible for collecting and compiling the index is recommended to verify the possibility of changing the frequency of the upcoming surveys (planned in 2028 and 2033), at least for a subset of the underlying data, and align it to the monitoring requirements of the Plan (proposed dates of the reduced survey: 2024, 2027, 2030).

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4 In some cases, however, the lack of a baseline value seems to be caused by the absence of a clear (internationally agreed) definition of the indicator, rather than by the absence of a suitable data source.

5 For this reason, the indicators should preferably be expressed as annual KPIs, even if the target value is established for a future date (typically 2029).

Additional considerations relate to the composite indices produced by international organizations or non-governmental organizations (e.g., the Global Liveability Index, Global Peace Index, Corruption Perception Index, Government Technology Maturity Index) with or without the collaboration of entities part of the national statistical system. The use of these indices allows for the benchmarking of Bhutan's performance, relative to that of countries in the areas of interest and, therefore, for a potential demonstration of Bhutan's leadership in the international context. On the other hand, Bhutan lacks control over the methodology, data sources and timing of the compilation of the indices and underlying indicators. In extreme cases, it may well happen that certain indices are discontinued by the international/non-government organization producing them. For these reasons, it would be advisable to adopt the relevant international methodology and verify the possibility of producing comparable indices by national entities using national data sources.

A fourth issue is the misclassification of some KPIs. It seems some output indicators need to be reclassified, in some cases, as outcome indicators and, in other cases, as activity indicators. In the first case (i.e., output indicators to be reclassified as outcome indicators), not only should a decision be taken to include these indicators in the list of outcome indicators, but also to replace the outcome indicator with a relevant output indicator. In the second case (i.e., output indicators to be reclassified as activity indicators), the indicator should be dropped and replaced by a proper output indicator. In this context, it needs to be stressed that output indicators monitor the immediate results of the policy or legal measure implemented by the government, rather than the implementation of policy measure itself.

A fifth issue to highlight is the possibility of using some of Sustainable Development Goal (SDG) indicators instead of some current KPIs. The proposal here is not to prioritize SDGs and/or replace the national Plan with 2030 Agenda for sustainable development. This proposal is triggered by the fact that, in some cases, the SDG indicators match (almost) exactly the KPIs, while in other cases they can be considered as valid proxies of the selected KPIs. In these situations, the OCASC and NSB could decide whether it is cost-effective to use the SDG indicators as KPIs, so the overall reporting burden for the entire statistical system of Bhutan will be reduced.

3. Review of the results matrices

3.1 National key performance indicators

The national KPIs comprise 10 targets, four for the prosperity objective, three for the people objective and three for the progress objective.

Prosperity

1. Target 1: Increase GDP from USD 2.5 to USD 5 billion by 2029, and USD 10 billion by 2034

Statistical indicator: Real annual average GDP growth rate. The data source of this indicator is NSB's quarterly national accounts.

The target gross domestic product (GDP) growth is expressed in nominal terms. The recommended statistical indicator to monitor the target is the GDP growth rate in real terms, as the target could be, otherwise, achieved with a high inflation rate (only). The target of doubling GDP in five years and quadrupling it in 10 years is ambitious. It would require an average compound growth rate of the nominal GDP of 14.9% per year, which implies an annual average GDP growth rate in real terms of 10%, given an annual inflation rate not greater than 5%. This target is higher than the one set by outcome 1 in the economic results matrix (8%), and considerably higher than the average growth rate over the last 10 years.

2. Target 2: Increase GDP per capita from USD 3,833 to above USD 6,174 by 2029, and USD 12,000 by 2034

Statistical indicator: Real annual average GNI per capita growth rate. The data source of this indicator is NSB's quarterly national accounts.

The target GDP per capita growth is expressed in nominal terms. Also, in this case it would be advisable to monitor the target in terms of the real annual average per capita GDP growth rate, otherwise the target could be achieved with a high inflation rate. In addition, given the important role remittances and social policies play on the income of households and individuals, monitoring gross national income (GNI) per capita rather than GDP per capita is recommended. The recommended statistical indicator to monitor this target is the annual average GNI per capita growth rate in real terms. The nominal target could be achieved with an average annual increase of the GNI per capita in real terms of 4.4%, given an annual inflation rate not greater than 5% and an annual population growth of 0.6%.

3. Target 3: By 2027, create full employment (97.5%) with quality jobs

Statistical indicator: Unemployment rate. The data source for this indicator is NSB's quarterly Labour Force Survey.

Given the new international definition of employment adopted by the 19th International Conference of Labour Statisticians (ICLS) held in October 2013, which distinguishes work from employment and considers employment as work performed for others in exchange for pay or profit, the recommended statistical indicator to monitor this target is the unemployment rate (see outcome 2 in the economic result matrix). The unemployment rate was 4.1% in the first quarter of 2024, while in 2019 (pre-COVID period) it was 2,.72%. The target of an unemployment rate of 2.5% does not seem unrealistic to achieve.

4. Target 4: By 2029, income of the bottom 40% quadrupled

Statistical indicator: Gini index. The data source for this indicator is the Bhutan Living Standards Survey, conducted by NSB every five years. To be useful for monitoring the implementation of the Plan, it is recommended to change the periodicity of the survey.

This target implies that the income of the bottom 40% of the population needs to grow at an annual rate of 32% (which is completely unrealistic). Even if Bhutan would be able to attain the target of doubling nominal GDP in five years, this would mean that the income of the remaining 60% of the population needs to decrease by 2.6% per year (by 12% in total over five years). The target of sharply reducing income inequalities is also in contradiction with the target set by outcome 5 of the economic result matrix, which is to maintain the Gini index at its current value (0.285 in 2022), which is already rather low compared to other countries. The recommended statistical indicator to monitor the income distribution is the Gini index. A further reduction of income inequalities could be achieving by setting a target Gini index of 0.25 (which would mean that the highest income is three times higher than the lowest income).

People

5. Target 5: Bhutanese identity and social cohesion are preserved at all times

Statistical indicator: Bhutanese identity and social cohesion score. The data source for this indicator is the GNH survey conducted by Centre for Bhutan and GNH Studies (CBS) every five years (the next surveys are

planned for 2028 and 2033). To be useful for monitoring the implementation of the Plan, it is recommended to change the periodicity of the survey.

The target could be to maintain the same score registered in the last GNH survey. Otherwise, it would be difficult to set a target value for such a composite index.

6. Target 6: By 2034, gap between preferred and actual family size reduced

Statistical indicator: Total fertility rate. Bhutan Civil Registration System (BCRS) maintained by the Department of Civil Registration and Census (DCRC) under the Ministry of Home Affairs (MoHA).

At international level, there is an established negative correlation between the average size of families and the level of income per capita, where with higher income per capita, the average size of families tends to decrease. Moreover, the size of a family can be maintained artificially high by having newly formed families living with parents. It seems that the underlying objective of the legislator is to reverse the declining trend in the total fertility rate.

7. Target 7: By 2029, the human capital index is increased from 0.475 (2020) to 0.61 by 2029 and 0.71 by 2034

Statistical indicator: Expected years of schooling. The indicator measures the number of years a child of school-entrance-age is expected to spend in the education system if the current age- specific enrolment rates persist throughout the child's years of schooling. The data source is the United Nations Educational, Scientific and Cultural Organization (UNESCO) Institute for Statistics (UIS).

The Human Capital Index (HCI) is a metric, ocassionally produced by the World Bank. The last publication dates to 2020. The index, moreover, is complex to calculate and to explain. The index measures human capital that a child born today is expected to attain by age 18, given the prevailing risks of poor health and poor education in the country. It is suggested to replace it with the expected years of schooling which indicates the future level of education of the population. In 2022 the Expected years of schooling in Bhutan was 13 years. The target could be to reach 15 years in 2029.

Progress

8. Target 8: By 2029, ensure safe and liveable human settlement in all 20 dzongkhags with the Thimphu-Paro capital region ranked among 20 top liveable cities in the world

Statistical indicator: Health Adjusted Life Expectancy (HALE) at birth is the average number of years a person is expected to live in good health by considering years lived in less than full health due to disease and/or injury. The indicator is calculated by the World Health Organization (WHO) based on Bhutan Civil Registration and Vital Statistics (CRVS) data. By applying the WHO methodology, the indicator can be disaggregated at subnational level. In 2019, Bhutan's HALE was 63.4 years. The target could be to reach 67 years by 2029.

Indicator proposed to be dropped: Bhutan Liveability Index. The index is produced annually by the Economist Intelligence Unit (EIU) for 173 cities worldwide. The report does not cover Bhutan. It is, therefore, impossible to monitor Thimphu-Paro capital region and rank it among the 20 top liveable cities in the world by 2029. NSB cannot produce a comparable index given its complex methodology (see below) and qualitative nature. The EU team plays a key role in the assessment. The detailed analytical dataset and matrix can only be purchased for USD 12,000.

The Global Liveability Index quantifies the challenges that might be presented to an individual's lifestyle by living in one of the 173 cities. Each city is assigned a score for over 30 qualitative and quantitative factors across five broad categories: stability, healthcare, culture and environment, education and infrastructure. Each factor in a city is rated as acceptable, tolerable, uncomfortable, undesirable or intolerable. For qualitative indicators, a rating is awarded based on the judgement of EIU analysts and in-city contributors. For quantitative indicators, a rating is calculated based on the relative performance of external data sources. All factors are then weighed to produce a rating, where 100 represents a city's suitability for living and 1 grades its unsuitability.

Category 1: Stability (weight: 25% of total)

	Indicator	Source
1.	Prevalence of petty crime	EIU rating
2.	Prevalence of violent crime	EIU rating
3.	Threat of terror	EIU rating
4.	Threat of military conflict	EIU rating
5.	Threat of civil unrest/conflict	EIU rating

Category 2: Healthcare (weight: 20% of total)

	Indicator	Source
1.	Availability of private healthcare	EIU rating
2.	Quality of private healthcare	EIU rating
3.	Availability of public healthcare	EIU rating
4.	Quality of public healthcare	EIU rating
5.	Availability over-the-counter drugs	EIU rating
6.	General healthcare indicators	Adapted from World Bank

Category 3: Culture & environment (weight: 25% of total)

	Indicator	Source
1.	Humidity/temperature rating	Adapted from average weather conditions
2.	Discomfort of climate to travellers	EIU rating
3.	Level of corruption	Adapted from average weather conditions
4.	Social or religious restrictions	EIU rating
5.	Level of censorship	EIU rating
6.	Sporting availability	EIU rating of 3 sport indicators
7.	Cultural availability	EIU field rating of 4 cultural indicators
8.	Food & drink	EIU field rating of 3 food & drink indicators
9.	Consumer goods & services	EIU rating of product availability

Category 4: Education (weight: 10% of total)

	Indicator	Source
1.	Availability of private education	EIU rating
2.	Quality of private education	EIU rating
3.	Public education indicators	Adapted from World Bank

Category 5: Infrastructure (weight: 20% of total)

	Indicator	Source
1.	Quality of road network	EIU rating
2.	Quality of public transport	EIU rating
3.	Quality of international links	EIU rating
4.	Availability of good quality housing	EIU rating
5.	Quality of energy provision	EIU rating
6.	Quality of water provision	EIU rating
7.	Quality of telecommunications	EIU rating

9. Target 9: By 2034, all Bhutanese have access to comprehensive social protection mechanisms and services across the life cycle, particularly for the most vulnerable

Statistical indicator: Proportion of population covered by social protection floors/systems disaggregated by sex, unemployed persons, older persons, persons with disabilities, pregnant women, newborns, work-injury victims and the poor and the vulnerable (SDG indicator 1.3.1). Data for Bhutan is available in the global SDG database.

10. Target 10: By 2029, increase GNH index from 0.781 to 0.850

Statistical indicator: GNH index score. The data source for this indicator is the GNH survey conducted by CBS every five years (the next surveys are planned for 2028 and 2033). To be useful for monitoring the implementation of the Plan, it is recommended that the periodicity of the survey is changed.

The target is to achieve a GNH score of 0.850 by 2029. It remains to be seen whether this target is feasible or if it is sufficiently ambitious, given the difficulties in interpreting the values for such a composite index.

3.2 Economic results matrix

The aim of the Plan is to transform Bhutan into a high-income country by 2029, driven by innovation and sustainability. Despite rapid economic growth, with GDP per capita reaching USD 3,833.03 in 2022, job creation remains limited, and economic diversification is hindered by geographic challenges, inadequate infrastructure, and institutional barriers. Youth unemployment and out- migration are critical issues. Bhutan's economic growth is affected by low productivity, high administrative costs, and limited market access due to infrastructure limitations and policy hurdles. The private sector is weak, with limited access to finance, especially for small businesses, and the capital market remains underdeveloped.

The Plan's economic cluster is focused on four key deliverables: improving business ecosystem, enhancing infrastructure and connectivity, developing a skilled labour force, and increasing sustainable contributions of strategic sectors to GDP. To achieve these goals, three national programmes were outlined. The Economic Transformation Programme emphasizes private sector development, strategic infrastructure investments, and exploring new growth sectors such as agriculture, tourism, hydropower, renewable energy, manufacturing, and the digital economy. The aim is to diversify the economy, create jobs, and promote sustainable development.

The 21st Century Skilling Programme is aimed at equipping Bhutanese with the necessary education and skills through technical and vocational education and training (TVET), tertiary education, and various other skilling initiatives, enhancing workforce capabilities and competitiveness. The Ecological Diversity and Resilience Programme underscores Bhutan's commitment to climate-resilient development, focusing on sectors like hydropower, tourism, agriculture, forestry, and water management. By integrating eco-friendly practices and enhancing resilience to climate change, this program aims to decouple GDP growth from greenhouse gas emissions. Through these comprehensive strategies and programmes, Bhutan aims to achieve sustained economic growth, job creation, and diversification, leveraging its cultural and environmental assets for long-term prosperity.

The economic results matrix comprises eight outcome targets under the overarching objective to "Transform Bhutan into a high-income country by enhancing productivity and diversifying products and markets by 2029". This overarching objective and the eight outcome targets are supported by 36 output targets.

Overarching objective: Transform Bhutan into a high-income country by enhancing productivity and diversifying products and markets by 2029

1. Outcome target 1: Maintain annual GDP growth of at least 8%

Statistical indicator: Real annual average GDP growth rate. The data source for this indicator is NSB's quarterly national accounts.

A more ambitious target for this indicator is set by the NKPI 1 (at least 10% average annual real growth, given an average annual inflation rate lower than 5%). It may be advisable to remove this outcome target.

2. Outcome target 2: Reduce youth unemployment rate

Statistical indicator: Youth unemployment rate (15-24 years old). The data source for this indicator is NSB's quarterly Labour Force Survey. The indicator can be disaggregated by sex and rural/urban areas (but not by dzongkhag).

3. Outcome target 3: Maintain average annual inflation rate under 5%

Statistical indicator: Annual percentage growth rate of the consumer price index (CPI). The data source for this indicator is NSB's monthly consumer price survey. The indicator can be disaggregated by three regions and the capital city.

4. Outcome target 4: Reduce trade deficit

Statistical indicator: Trade deficit as a percentage of GDP. The data source for this indicator are quarterly trade statistics compiled by Department of Revenue and Customs, Ministry of Finance (MoF) and NSB's national accounts.

5. Outcome target 5: Maintain Gini coefficient

Statistical indicator: Gini index. The data source for this indicator is NSB's Bhutan Living Standards Survey, conducted every 5 years. To be useful for monitoring the implementation of the Plan, it is recommended that the periodicity of the survey is changed.

A more ambitious target for this indicator is set by the NKPI 4. It may be advisable to remove this outcome target.

6. Outcome target 6: Increase percentage of non-hydro exports

Statistical indicator: Annual percentage real growth of non-hydropower exports. The data source is Department of Revenue and Customs's quarterly trade statistics.

The target should preferably be set in terms of percentage growth of non-hydro exports, rather than in terms of increased share of non-hydro exports over total exports.

7. Outcome Target 7: GNH living standards score improved

Statistical indicator: GNH living standards score. The data source of this indicator is the GNH survey conducted by CBS every five years (the next surveys are planned for 2028 and 2033). To monitor the Plan's implementation, it is recommended that the periodicity of the survey is changed. In case the GNH survey cannot be conducted with higher frequency, an alternative indicator would be the 'Real annual average GNI per capita growth rate', produced by NSB and already used to monitor the second NKPI.

8. Outcome target 8: GNH ecological diversity and resilience score improved

Statistical indicator: GNH ecological diversity and resilience score. The data source for this indicator is the GNH survey conducted by CBS every five years (the next surveys are planned for 2028 and 2033). To be useful for monitoring the implementation of the Plan, it is recommended that the periodicity of the survey is changed. In case the GNH survey cannot be conducted at higher frequency, an alternative indicator would be 'Annual percentage value of natural capital depletion', which could be produced by NSB annually by implementing the Natural Capital Accounting/System of Environmental-Economic Accounting (SEEA) Experimental Ecosystem Accounting.

Output objective 1: Improved business ecosystem

1. Output target 1: By 2029, increase foreign direct investment

Statistical indicator: Net inflows of foreign direct investment (FDI) as percentage of GDP. The data sources are Royal Monetary Authority's (RMA) Balance of Payments (FDI) and NSB's quarterly national accounts (GDP).

The target should preferably be set in terms of annual flows, rather than in terms of stock (capital). Moreover, the indicator should preferably be measured in relative terms, as a percentage of total investment, or GDP.

2. Output target 2: Increase private sector investment, including by DHI and state-owned enterprises (SOEs)

Statistical indicator: Real average annual growth rate of private sector investment. Thereare three major components in private investment: non-residential investment, residential investment, and expenditure on consumer durables. Administrative data of the Ministry of Industry, Commerce and Employment cover only non-residential investment annually, while NSB's quarterly national accounts cover all three components.

3. Output target 3: Client satisfaction score increased on each business service (scale: 1-5)

Statistical indicator: Businesses' degree of satisfaction towards public services. Despite a set baseline (2021) and target value, no data source for this indicator is mentioned. A survey on the degree of satisfaction of private businesses towards the provision of public services could conceivably be conducted on a regular basis (e.g., every three years).

4. Output target 4: Industries upscaled

Statistical indicator: Number of large-scale manufacturing enterprises. Only the manufacturing sector is apparently considered. International standards normally set the size of enterprises in terms of the number of employees: 1-9 (micro); 10-49 (small); 50-249 (medium); 250 and over (large). Given the small number of large enterprises, the indicator can be monitored in absolute, rather than relative, terms (e.g., percentage growth).

5. Output target 5: Startups/industries established and operationalized

Statistical indicator: Number of start-ups created. Administrative data of the Ministry of Industry, Commerce and Employment provided annually. The source mentioned in the matrix is the Integrated Business Licensing System (IBLS), which, however, does not provide data on a regular basis (i.e., frequency is ad hoc/one-shot).

6. Output target 6: New trade agreements signed and new trade agreements with four countries initiated

Statistical indicator: Export diversification index. The signing and initiation of trade agreements are activities, not outputs. The results of these activities are expected to lead to an increased volume and diversification of international trade. Since the increased volume of international

trade is monitored elsewhere, the indicator selected here is the export diversification index. This index measures, for each product, the degree of export market concentration by country of origin. It varies between 0 and 1 and indicates whether a large share of commodity exports is accounted for by a small number of countries (values closer to 0) or, on the other hand, exports are well distributed among many countries (values closer to 1). The export diversification index of Bhutan for the baseline year (2023) would be compared with the value of the index in subsequent years. The data source are trade statistics compiled by the Department of Revenue and Customs (MoF) and the NSB quarterly.

7. Output target 7: Intellectual property applications processed for registration

Statistical indicator: Government R&D expenditure as proportion of total government expenditure (SDG indicator 9.5.1). This indicator seems more relevant if the objective is to measure the effectiveness of the public sector in promoting innovation, rather than in discharging administrative tasks. The data source is Government Finance Statistics, with research and development (R&D) expenditure easily identifiable if the Classification of Functions of Government (COFOG) is adopted. There is no data for this SDG indicator for Bhutan in the global SDG database at present.

Output objective 2: Quality infrastructure, connectivity, and energy ensured

1. Output target 1: Travel time on all national highways reduced

Statistical indicator: Proportion of national highways in km adequately paved. This indicator is recommended for adoption as the length of travel time on national highways seems to be influenced by different factors, of which only the quality of the roads is in the hands of the government. The role of the government is supposedly to ensure that the quality of the roads is good, rather than to ensure that travel time is reduced. The source is administrative data compiled by the Ministry of Infrastructure and Transport annually.

2. Output target 2: Number of cross-border railway links established

Statistical indicator: Number of train departures for international destinations per year. The number of new cross-border railway links established is not recommended for adoption, as this reflects an activity, not an output. The result of the activity is an increase in the number of train departures for international destinations per year. The source

is administrative data compiled by the Ministry of Infrastructure and Transport annually.

3. Output target 3: Air connectivity, both domestic and international enhanced (upgrade of domestic to international)

Statistical indicator: Number of domestic and international flights per year. Upgrading a domestic airport to an international airport is an activity, not an output. The result of the activity is an increase of the number of international flights in a year. In addition, internal connectivity should also be improved, and this is monitored by the number of domestic flights. The source is administrative data compiled by the Ministry of Infrastructure and Transport annually.

4. Output target 4: Number of trade and industrial facilitation infrastructures developed and operational (dry ports, industrial estates, business centres)

Statistical indicator: None recommended. The realization of these facilities are activities, not an output. The result of this activity is an increase in industrial production and exports, indicators for which are already covered elsewhere.

5. Output target 5: Increase renewable energy-generating capacity (wind and solar)

Statistical indicator: Megawatt of renewable energy-generating power capacity broken down by type of alternative sources. Even though this indicator has a baseline and target value, it is unclear which entity can produce the indicator on a regular basis (perhaps, the Ministry of Energy and Natural Resources every year based on administrative sources).

6. Output target 6: Increased monthly accessibility and reliability of electricity in hours

Statistical indicator: Average number of interruptions of electricity supply per month. It seems that the target does not aim at measuring the proportion of the population with access to electricity, as apparently full coverage has been achieved. Instead, the interest is in the reliability and absence of interruptions in the access to electricity. The indicator is produced by the Ministry of Energy and Natural Resources based on administrative sources monthly.

7. Output target 7: Fossil fuel consumption reduced (10% reduction)

Statistical indicator: Tonnes of oil equivalent (TOE) fossil fuel consumption. Even though this indicator has a baseline and target value, it is unclear which national entity can produce the indicator on a regular basis (perhaps the Ministry of Energy and Natural Resources every 5 years based on administrative sources).

8. Output target 8: Liveability of settlements enhanced/Accessibility to services and amenities enhanced through planned development

Statistical indicator: Proportion of the rural population who live within 2-km of an all-season road (SDG indicator 9.1.1). The challenges in constructing a national liveability index based on the methodology developed by EIU have already been discussed under NKPI 8. Even if SDG indicator 9.1.1 partially covers the output target, it is a key indicator of accessibility to services and amenities. Bhutan's data for SDG indicator 9.1.1 are available in the global SDG database. Data for this indicator could be produced based on the population census, to be updated with administrative data.

Output objective 3: Supply of skilled domestic labour force ensured

1. Output target 1: Percentage of labour force supply with TVET certification increased namely in automobiles, plumbing, electrical, construction, etc.

Statistical indicator: Proportion of youth labour force (15-24 years old) with TVET certification.

The data source for this indicator is the quarterly Labour Force Survey. The possibility of obtaining disaggregated data by TVET certification types is limited.

2. Output target 2: Proportion of labour force with tertiary qualifications (engineering, teaching, medicines, ICT) increased

Statistical indicator: Percentage of adult labour force (>= 25 years old) with tertiary level educational attainment. The data source for this indicator is the quarterly Labour Force Survey. The possibility of obtaining disaggregated data by type of degree is limited.

3. Output target 3: Proportion of existing labour force skilled/re-skilled

Statistical indicator: Percentage of youth (15-24 years old) not in employment, education or training (NEET) that have successfully completed skilling, re-skilling and upskilling programmes. The data source

for this indicator is the quarterly Labour Force Survey (denominator) and administrative data on participants in skilling programmes (numerator).

Output objective 4: Increased sustainable contributions to GDP of strategic sectors (construction, tourism, mining, agriculture, energy, forestry, digital economy)

1. Output target 1: GDP output target of Agriculture increased

Statistical indicator: Real average annual growth rate of agricultural value added. The data source for the indicators from 1 to 8 are the national accounts compiled by NSB quarterly.

2. Output target 2: GDP output target of Mining increased

Statistical indicator: Real average annual growth rate of mining value added

3. Output target 3: GDP output target of Manufacturing increased

Statistical indicator: Real average annual growth rate of manufacturing value added

4. Output target 4: GDP output target of Construction increased

Statistical indicator: Real average annual growth rate of construction value added

5. Output target 5: GDP output target of Digital technology increased

Statistical indicator: Real average annual growth rate of digital economy value added

6. Output target 6: GDP output target of Energy increased

Statistical indicator: Real average annual growth rate of energy value added

7. Output target 7: GDP output target of Forestry increased

Statistical indicator: Real average annual growth rate of forestry value added

8. Output target 8: GDP output target of Water and Water-based industries increased

Statistical indicator: Real average annual growth rate of value added of water-based industries

9. Output target 9: Contribution to GDP from climate financing and carbon trading increased

Statistical indicator: Contribution to GDP of climate financing and carbon trading. It seems this indicator is occasionally produced by Ministry of Energy and Natural Resources from administrative sources (Adaptation Fund, Mitigation Fund or Mixed funding).

10. Output target 10: Tourist arrival increased

Statistical indicator: Average annual growth rate of the number of tourists. Indicator monitored by the Department of Tourism and NSB annually.

3.3 Social results matrix

The 13th Plan for social development in Bhutan aims to foster a healthy and productive society with equitable, high-quality health, education, and social protection by 2029. Bhutan has made significant progress in human development, with its HDI improving from 0.581 in 2010 to 0.681 in 2022, and a reduction in multidimensional poverty. However, challenges persist in ensuring the quality, inclusiveness, and sustainability of health and education services, and effective social protection for vulnerable groups. Demographic shifts, such as declining fertility rates and rising old- age dependency, alongside out-migration of younger people, present significant implications for human capital and productive capacity.

Key deliverables in social development focus on three main outcomes: improving health and wellbeing, enhancing access to quality education and lifelong learning, and establishing a comprehensive social protection system. The health outcome includes seven key deliverables of promoting healthy lifestyles, managing public health concerns, improving access to quality health services, and strengthening the health workforce and financing systems. The education outcome aims to improve learning through a competent education workforce, quality infrastructure, dynamic curricula, and lifelong learning opportunities. The social protection outcome focuses on creating an enabling environment for comprehensive social protection, expanding essential programmes, and ensuring a sustainable population scenario.

National programmes driving these outcomes include the Healthy Drukyul Programme, which seeks to achieve universal health coverage, promote healthier lifestyles, and improve healthcare accessibility and quality. The Education Transformation Programme aims to enhance education

outcomes through early childhood care, curriculum transformation, teacher development, and infrastructure investments. The Sociocultural Resilience and Community Vitality Programme aims to establish a comprehensive social protection system, including inclusive schemes for the disadvantaged, expanding provident fund benefits, and promoting work-life balance through structural and legal reforms. Through these initiatives, the government aims to build a robust, inclusive, and sustainable social development framework.

The social results matrix comprises 21 outcome targets supported by 149 output targets.

Outcome objective 1: By 2029, More Bhutanese enjoy improved health and wellbeing

1. Outcome target 1: Mental Health Index (Tracers: Mental health status (3), Mental health service coverage (6)

Statistical indicator: The Mental Health Index, as currently defined, combines three outcome indicators on mental health status with six output indicators on mental health service coverage. To distinguish causes from effects for policy purposes, it is recommended to unpack the index and only consider the Mental Health Status Index (MHSI) as the metric to measure the outcome target.

The MHSI is measured by MoH only every five years (even if the NHS survey is conducted annually), not allowing to monitor the Plan with sufficient frequency. MoH might consider conducting the survey at higher frequency to produce the index at least for 2027 and 2030.

The interpretation of the index poses an additional issue. The MHSI is, in fact, a qualitative indicator and, therefore, cannot measure progress for quantitative indicators.

As an alternative, the three components of the MHSI could be monitored separately with the following:

Statistical indicator 1: Suicide mortality rate (SDG indicator 3.4.2)

Statistical indicator 2: Proportion of adult population "depressed"

Statistical indicator 3: Alcohol per capita consumption (aged 15 years and older) within a calendar year, in litres of pure alcohol (SDG indicator 3.5.2)

This would have the advantage of simplifying the interpretation of the indicators, and at the same time allow production of at least two SDG

indicators that would increase Bhutan's contribution to the global monitoring of the 2030 Agenda for Sustainable Development.

2. Outcome target 2: Health Status Index (Tracers: Mortality (4), CVD risk (1), RMNCH (6))

Statistical Indicator: The Health Status Index, as currently defined, combines the death risk for cardiovascular diseases (CVD) with a multitude of mortality rates, including for reproductive, maternal, newborn, and child health (RMNCH), making the interpretation and use of the index for policy purposes difficult. Also in this case, the index is measured by MoH every five years (even if the NHS survey is conducted annually). MoH might consider conducting the survey at higher frequency to produce the index at least for 2027 and 2030.

As an alternative to producing the HSI, its components could be monitored separately, allowing to produce the following SDG indicators for Bhutan:

Statistical indicator 1: Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease (SDG indicator 3.4.1) – no data available for Bhutan in the global SDG database

Statistical indicator 2: Maternal mortality ratio (SDG indicator 3.1.1) – data available for Bhutan in the global SDG database (estimates of international organizations)

Statistical indicator 3: Under-5 mortality rate (SDG indicator 3.2.1) – data available for Bhutan in the global SDG database (estimates of international organizations)

Statistical indicator 4: Neonatal mortality rate (SDG indicator 3.2.2) – data available for Bhutan in the global SDG database (estimates of international organizations)

3. Outcome target 3: GNH Health score improved (Variables: Self-reported health status, healthy days, disability, mental health)

Statistical indicator: GNH Health score. This index summarizes the perception of health, mental health and disability status from a sample of the population interviewed through the GNH survey. This survey is conducted by CBS every five years, with the next surveys planned for 2028 and 2033. To monitor the implementation of the Plan, it is recommended to change the periodicity of the survey. More importantly, the information produced with this index largely overlaps with the two indexes described above, which are produced using a different data source, entailing

duplication of effort as well as the possibility of obtaining conflicting results. An alternative solution would be to monitor only the disability component by including perception- based questions on the disability status in the national health survey conducted by the MoH annually.

Output objective 1: More Bhutanese practice healthy lifestyle

1. Output target 1: NCD risk factors index (Tracers: 5 – tobacco & alcohol (non-use), physical activity, fruits and vegetables intake, salt intake)

Statistical indicator: Non-communicable disease (NCD) risk factors index. The index summarizes four different risk factors. The data are produced by the MoH every five years (even if the NHS is – while not covering the whole country – conducted annually). MoH might consider conducting the survey at higher frequency to allow for production of the index at least for 2027 and 2030. As an alternative, the NCD risk factors could be monitored separately to produce two SDG indicators for Bhutan:

Statistical indicator 1: Alcohol per capita consumption (aged 15 years and older) within a calendar year in litres of pure alcohol (SDG indicator 3.5.2)

Statistical indicator 2: Age-standardized prevalence of current tobacco use among persons aged 15 years and older (SDG indicator 3.a.1)

Statistical indicator 3: INVERSE OF proportion of people (15-69 years) not consuming recommended portions of fruits and vegetable

Statistical indicator 4: INVERSE OF proportion of people (15-69) not meeting the WHO's recommendation for physical activity

Output objective 2: Control and elimination of priority public health diseases achieved

1. Output target 1: Number of targeted priority diseases of public health concern with sustained elimination and eradication status (Eliminated – Measles, Rubella, Leprosy, Maternal & Neonatal Tetanus Eradicated (Free) – Poliomyelitis)

The target requires counting the number of diseases for which sustained eradication has been achieved. Expressed in these terms, the target appears of limited use for policy purposes. What might be usefully monitored instead is the proportion of population affected by each type of disease and the proportion vaccinated against these diseases. In that case, the first of these would be an outcome indicator, and the second

an output indicator. A multiplicity of data sources (both surveys and administrative data) is needed to produce these indicators annually.

Outcome statistical indicator 1: Proportion of the population affected by measles, rubella, leprosy, maternal & neonatal tetanus, poliomyelitis

Output statistical indicator 2: Proportion of the target population covered by all vaccines included in the national programme (SDG indicator: 3.b.1)

2. Output target 2: Number of targeted priority diseases of public health concern, including NTDs controlled and eliminated (Controlled: Dengue, Death from snake bites, Human deaths from dog-mediated rabies, Tuberculosis/Eliminated: Leishmaniasis, Chikungunya, Japanese encephalitis, Cervical cancer, Mother-to-child-transmission (MTCT) of HIV, Syphilis and Hepatitis B, Indigenous Malaria)

The target requires counting the number of diseases for which sustained control or elimination has been achieved, including nontransmissible diseases. Expressed in these terms, the target appears of limited use for policy purposes. What might be usefully monitored instead is the proportion of population affected by each type of disease and those vaccinated and/or assisted against these diseases. In that case, the first of these would be an outcome indicator, and the second an output indicator. A multiplicity of data sources (both surveys and administrative data) is needed to produce these indicators annually.

Outcome statistical indicator 1: Number of new HIV infections per 1,000 uninfected population, by sex, age and key populations (SDG indicator 3.3.1)

Outcome statistical Indicator 2: Tuberculosis incidence per 100,000 population (SDG indicator 3.3.2)

Outcome statistical indicator 3: Malaria incidence per 1,000 population (SDG indicator 3.3.3)

Outcome statistical indicator 4: Hepatitis B incidence per 100,000 population (SDG indicator 3.3.4)

Output statistical indicator 1: Proportion of target population covered by all vaccines included in the national programme (SDG indicator: 3.b.1).

Output statistical indicator 2: Proportion of population affected by the listed diseases who are assisted in health facilities

Output objective 3: The health system has strengthened quantity and quality workforce

1. Output target 1: Bhutan Healthcare Standard for Quality Assurance (BHSQA) Index – National Referral Hospital

Statistical indicator: BHSQA Index – National Referral Hospital. Produced by the MoH annually based on administrative records.

2. Output target 2: BHSQA Index – Regional Referral Hospitals

Statistical indicator: BHSQA Index – Regional Referral Hospitals. Produced by MoH annually based on administrative records.

3. Output target 3: BHSQA Index – Cluster hospitals and below

Statistical indicator: BHSQA Index – Cluster hospitals and below. Produced by MoH annually based on administrative records.

4. Output target 4: Proportion of health technologies introduced or expanded or consolidated or decommissioned after HTA

Statistical indicator: Proportion of health technologies decommissioned based on Health Technology Assessment score. Produced by MoH every six months based on administrative records.

5. Output target 5: Proportion of basket of safe and quality essential medicines and consumables available in all health facilities at any point of time

Statistical indicator: Proportion of health facilities that have a core set of relevant essential medicines available and affordable on a sustainable basis (SDG indicator 3.b.3). What might be usefully monitored is the proportion of health facilities that have a core set of essential medicines, rather than the proportion of a core set of essential medicines available in health facilities. Produced monthly by MoH based on administrative records.

6. Output target 6: TAT for ambulance services

Statistical indicator: TAT (turnaround time) for ambulance services. Definition: TAT begins when an ambulance arrives at the Emergency Department and ends when the signal is given that the unit is back in service. Produced monthly by MoH based on administrative records (mixed mode in the matrix).

7. Output target 7: Population using safely managed drinking-water services

Statistical indicator: Proportion of population using safely managed drinking-water services (SDG indicator 6.1.1). The data source is the STEPS survey conducted every five years by MoH. To be useful for monitoring the implementation of the Plan the periodicity of the survey should be reconsidered.

8. Output target 8: Percentage of population using safely managed sanitation services

Statistical indicator: Proportion of population using safely managed sanitation services (SDG indicator 6.1.2 a). The data source is the STEPS survey conducted every five years by MoH. To be useful for monitoring the implementation of the Plan the periodicity of the survey should be reconsidered.

9. Output target 9: Proportion of hospital infrastructures with disability friendly features (wheelchair ramps, seating priority, visual signages, disabled friendly toilets)

Statistical indicator: Proportion of hospital infrastructure with all disability friendly features. Produced by MoH every five years based on administrative records. To be useful for monitoring the implementation of the Plan this frequency needs to be increased.

10. Output target 10: Percentage of critical medical equipment safe and functional at all hospital at any point of time

Statistical indicator: Proportion of critical medical equipment safe and functional at all hospital at any point of time. Produced by MoH every year based on administrative records.

10. Output target 11: Health service coverage index (Tracers: RMNCAH – 16, Infectious Diseases – 4, NCD – 6, Service Capacity and access – 4)

Statistical indicator: Mental Health Service Coverage index (6 indicators). Considered separately from the outcome indicator 'Mental Health status'. It is advisable to unpack the index into its underlying indicators to facilitate ease of interpretation.

Statistical indicator 2: Health service coverage index (Tracers: Reproductive, maternal, newborn, child and adolescent health – RMNCAH – 16, Infectious diseases – 4, NCD – 6, Service capacity and access – 4). It

is advisable to unpack the index into its components to facilitate ease of interpretation.

Both indices are measured by MoH annually based on mixed data sources.

Output objective 4: Adequacy and competency of health workforce

1. Output target 1: Percentage of health facilities fulfilling human resources as per the HR Standard

Statistical indicator: Proportion of health facilities fulfilling human resource standards. Data are produced annually based on administrative reports (source changed from RCSC to HRD, NMS)

2. Output target 2: Critical health workforce attrition rate

Statistical indicator: Proportion of critical health workers who leave their job over the total number of critical health workers. Data are produced annually based on administrative reports (source RCSC).

3. Output target 3: Percentage of health professionals fulfilling basic professional development requirements

Statistical indicator: Proportion of health professionals fulfilling the minimum continuing medical education (CME) credits as a part of their continuing professional development (CPD) requirements. Data are produced annually based on administrative reports (source RCSC).

Output Objective 5: Sustainable financing for health is ensured

1. Output target 1: Total public spending on health as a percentage of GDP

Statistical indicator: Proportion of total government expenditure spending on health. This indicator is better suited to monitor the priority given by the government to health expenditure (than the ratio over the GDP, which depends crucially also by the trend of the denominator). The data source is annual government finance statistics (mixed sources available every two years according to the matrix).

2. Output target 2: Out-of-pocket spending (OOPS) as a percentage of current health expenditure

Statistical indicator: OOPS as a proportion of current health expenditure. According to the matrix the data are produced with mixed sources every two years.

3. Output target 3: Proportion of health expenditure on preventive healthcare

Statistical indicator: Proportion of preventive healthcare expenditure over total health expenditure. According to the matrix the data are produced with mixed sources every two years.

4. Output target 4: Number of sustainable health financing schemes introduced

Statistical indicator: Number of new sustainable (self) financing schemes introduced for personal health insurance. Data are foreseen to be produced by administrative reports annually.

5. Output target 5: Health governance and diplomacy index

Statistical indicator: Average number of months required for the endorsement of national health strategies, policies and bills by the relevant bodies. This indicator demonstrates the priority given to health issues by government bodies. It can be monitored through administrative reports.

Output Objective 6: Regulatory, Monitoring, And Health Security Systems Strengthened

1. Output target 1: WHO Global Benchmarking Tool (GBT) Maturity Level for Medical Products

Statistical indicator: Maturity level of Bhutan's national regulatory system of medical products according to the GBT. Data are produced by WHO annually based on mixed data sources.

2. Output target 2: Incidence of non-compliance on controlled substances, precursor chemical and tobacco products

Statistical indicator: Proportion of tests in which controlled substances, chemical and tobacco products are non-compliant. Source: Annual administrative reports.

3. Output target 3: Incidence of reports on substandard and falsified (defective) medical products

Statistical indicator: Proportion of medical products that are reported as substandard or defective. Source: Annual administrative reports.

4. Output target 4: Proportion of exotic livestock and agriculture pests and diseases prevented (average of the livestock and agriculture sections).

Statistical indicator: Proportion of health expenditure allocated to the prevention of agricultural and livestock pest diseases. The indicator has been reformulated because it is impossible to know which agriculture and pest diseases have been prevented. Data source are annual government finance statistics.

5. Output target 5: Number of food businesses issued with Food Safety License

Statistical indicator: Proportion of food businesses with valid food safety licences. Source: Annual administrative reports.

6. Output target 6: International Health Regulation (IHR) Core Capacity Index

Statistical indicator: IHR core capacity index according to WHO. Source: Annual administrative reports

7. Output target 7: Proportion of health facilities complying with BHSQA standards

Statistical indicator: Proportion of health facilities complying with BHSQA standards. Source: Annual administrative reports.

8. Output target 8: Percentage of regulatory services delivered to clients within specified TAT

Statistical indicator: Proportion of health administrative services delivered to clients within specified turnaround time. Data are produced with mixed sources on an annual basis.

9. Output target 9: Proportion of laboratory and certification services for food and agricultural products meeting international standards (ISO/ IEC standards)

Statistical indicator: Proportion of laboratory and certification services for food and agricultural products meeting international standards (ISO/ IEC). Source: Annual administrative reports.

10. Output target 10: Percentage of drug treatment/rehabilitation centres registered with the competent authority and complying with national standards

Statistical indicator: Proportion of drug treatment/rehabilitation centres registered with the competent authority and complying with national standards. Source: Annual administrative reports.

11. Output target 11: Quality assurance systems meeting international standards (ISO/IEC)

Statistical indicator: Proportion of reference laboratories that meet international quality assurance standards (ISO/IEC). According to the matrix, data are produced with mixed sources annually.

Output objective 7: Information and technology harnessed to enhance health systems efficiency

1. Output target 1: Proportion of health facilities using electronic-Patient Information System (ePIS)

Statistical indicator: Proportion of health facilities using an ePIS. Source: Annual administrative reports.

2. Output target 2: Health information surveillance and population health needs index (Tracers: Information system and surveillance (7), Adjustment to population health needs (5)

Statistical indicator: Health information surveillance and population health needs index. It is recommended to unpack the index into its underlying indicators for policy monitoring purposes. According to the matrix, data are produced with administrative sources annually. It seems unrealistic that the indicators monitoring the population health needs are produced with administrative data.

Outcome objective 2: By 2029, More Bhutanese equitably access and benefit from quality and wholesome education and lifelong learning

1. Outcome target 1: Increased access to ECCD

Statistical indicator: Proportion of children enrolled in early childhood care and development (ECCD). Source: Annual administrative reports.

2. Outcome target 2: Increased access to Basic education

Statistical indicator: Proportion of children enrolled in basic education. Source: Annual administrative reports.

3. Outcome target 3: Increased access to Higher education

Statistical indicator: Proportion of diploma graduates enrolled in tertiary education. Source: Annual administrative reports.

4. Outcome target 4: Increased access to TVET (annual enrolment)

Statistical indicator: Proportion of youth (15-24 years old) enrolled in a technical and vocational education and training (TVET) programme. Source: Annual administrative reports.

5. Outcome target 5: Increased percentage of students scoring above 70% in STEM subjects in Grade VI, VIII and XII

Statistical indicator: Proportion of students in Grade VI, VIII and XII scoring at least 70% in STEM subjects. Source: Annual administrative reports.

6. Outcome target 6: Difference in the learning outcomes between the high and low achievers reduced (mean gap)

Statistical indicator: Mean score gap between the 1st decile (10% best) performers and the 10th decile (10% worst) performers disaggregated by rural/urban, household income, etc. Source: Administrative reports published every three years.

7. Outcome target 7: Decrease learning outcomes between rural and urban students/schools in English, Math and Dzonkha (mean gap)

Statistical indicator: Mean score gap in English and mathematics between rural and urban students. Source: Administrative reports published every three years.

8. Outcome target 8: Employment of RUB graduates within one year of graduation

Statistical indicator: Proportion of RUB graduates in employment one year after graduation. Source: Annual administrative reports.

9. Outcome target 9: Employment of KGUMSB graduates within one year of graduation

Statistical indicator: Proportion of employment of KGUMSB graduates within one year of graduation. Source: Annual administrative reports.

10. Outcome target 10: Employment of JSWSL graduates within one year of graduation

Statistical indicator: Proportion of JSWSL graduates in employment within

one year of graduation. Source: Annual administrative reports.

11. Outcome target 11: Employment of TVET graduates within one year of graduation

Statistical indicator: Proportion of TVET graduates in employment within one year of graduation. Source: Annual administrative reports.

12. Outcome target 12: Increased proportion of the workforce with tertiary qualifications

Statistical indicator: Proportion of the workforce with tertiary educational attainment. Source: Annual administrative reports.

13. Outcome target 13: Increased proportion of the workforce with vocational skills

Statistical indicator: Proportion of the workforce with TVET educational attainment. Source: Annual administrative reports.

14. Outcome target 14: GNH Education score improved (Variables: Schooling, Literacy, Value, Knowledge)

Statistical indicator: GNH Education score (Variables: Schooling, Literacy, Value, Knowledge). This index could be dropped as it does not add much to the indicators above. In addition, the GNH survey should be conducted at higher frequency to be useful for monitoring the implementation of the Plan.

Output objective 1: The Education System has a Strengthened Quantity of competent and Motivated Professionals

1. Output target 1: Proportion of trained ECCD facilitators

Statistical indicator: Proportion of newly recruited ECCD facilitators with a relevant diploma. Source: Annual administrative reports.

2. Output target 2: Percentage of RUB faculties meeting required level of qualifications

Statistical indicator: Proportion of newly recruited RUB professors with a relevant master's degree or PhD. Source: Annual administrative reports.

3. Output target 3: Percentage of RIM faculties meeting required level of qualifications

Statistical indicator: Proportion of newly recruited RIM professors with a relevant master's degree or PhD. Source: Annual administrative reports.

4. Output target 4: Percentage of JSW Law faculties meeting required level of qualifications

Statistical indicator: Proportion of newly recruited JSWL professors with a relevant master's or PhD. Source: Annual administrative reports.

5. Output target 5: Percentage of KGUMSB faculties meeting required level of qualifications

Statistical indicator: Proportion of newly recruited KGUMSB professors with a relevant master's or PhD. Source: Annual administrative reports.

6. Output target 6: Percentage of teachers meeting proficient level as per BPST

Statistical indicator: Proportion of school teachers who are proficient as per BPST. Source: ad hoc reports. This report should be produced on a regular basis.

7. Output target 7: Job satisfaction of school teachers

Statistical indicator: Proportion of schoolteachers satisfied with their jobs. Source: Annual administrative reports.

8. Output target 8: Job satisfaction of KGUMSB faculties

Statistical indicator: Proportion of KGUMSB professors satisfied with their job. Source: Annual administrative reports.

9. Output target 9: Job satisfaction of RIM faculties

Statistical indicator: Proportion of RIM professors satisfied with their job. Source: Annual administrative reports.

10. Output target 10: Job satisfaction of JSWSL faculties

Statistical indicator: Proportion of JSWSL professors satisfied with their job. Source: Annual administrative reports.

11. Output target 11: Job satisfaction of RUB faculties

Statistical indicator: Proportion of RUB professors satisfied with their job. Source: Annual administrative reports.

12. Output target 12: Job satisfaction of TVET faculties

Statistical indicator: Proportion of TVET professors satisfied with their job. Source: Annual administrative reports.

13. Output target 13: School teachers meeting required ICT skills standards

Statistical indicator: Proportion of school teachers meeting required ICT skills standards. Source: Annual administrative reports.

14. Output target 14: RIM faculties meeting required ICT skills standards

Statistical indicator: Proportion of RIM professors meeting required ICT skills standards. Source: Annual administrative reports.

15. Output target 15: KGUMSB faculties meeting required ICT skills standards

Statistical indicator: Proportion of KGUMSB professors meeting required ICT skills standards. Source: Annual administrative reports.

16. Output target 16: TVET faculties meeting required ICT skills standards

Statistical indicator: Proportion of TVET professors meeting required ICT skills standards. Source: Annual administrative reports.

17. Output target 17: Proportion of TVET Trainers meeting competency proficiency as per TVET CBF

Statistical indicator: Proportion of TVET Trainers meeting competency proficiency as per TVET CBF. Source: Annual administrative reports.

18. Output target 18: Professional development of school educators annually

Statistical indicator: Proportion of teachers having attended professional development courses. Source: Annual administrative reports.

19. Output target 19: Professional development of RIM faculty annually

Statistical indicator: Proportion of RIM professors having attended professional development courses. Source: Annual administrative reports.

20. Output target 20: Professional development of RUB faculty annually

Statistical indicator: Proportion of RUB professors having attended professional development courses. Source: Annual administrative reports.

21. Output target 21: Professional development of KGUMSB faculty annually

Statistical indicator: Proportion of KGUMSB professors having attended professional development courses. Source: Annual administrative reports.

22. Output target 22: Number of medals won by Bhutanese athletes

Statistical indicator: Number of medals won by Bhutanese athletes in regional or international sports competitions. Annual BOC report.

Output Objective 2: More Educational Institutions have Inclusive, Safe and Enabling Environment Maximizing Use of Technology

1. Output target 1: Number of central schools remodelled towards international standards

Statistical indicator: Proportion of central schools whose infrastructure complies with national school standards. Source: Annual administrative reports.

2. Output target 2: School education adopting blended learning

Statistical indicator: Proportion of schools having adopted blended learning. Source: Annual administrative reports.

3. Output target 3: Courses adopting blended learning in RUB

Statistical indicator: Proportion of courses at RUB for which blended learning is adopted. Source: Annual administrative reports.

4. Output target 4: Courses adopting blended learning in KGUMSB

Statistical indicator: Proportion of courses at KGUMSB for which blending learning is adopted. Source: Annual administrative reports.

5. Output target 5: Courses adopting blended learning in JSWSL

Statistical indicator: Proportion of courses at JSWL for which blended learning is adopted. Source: Annual administrative reports.

6. Output target 6: Courses adopting blended learning in RIM

Statistical indicator: Proportion of courses at RIM for which blended learning is adopted. Source: Annual administrative reports.

7. Output target 7: KGUMSB courses that are executed simulation-based education in the curriculum

Statistical indicator: Proportion of KGUSMB courses for which simulation-based education is adopted. Simulation-based education is defined as any educational activity that uses simulators (regardless of whether they are classified as low, medium or high fidelity) to replicate clinical scenarios. Source: Annual administrative reports.

8. Output target 8: Quality of school infrastructure and facilities enhanced as per the standard requirement

Statistical indicator: Proportion of school with quality infrastructure and facilities as per national school standards. Possible duplication with output target 1.

9. Output target 9: Quality of TVET infrastructure and facilities enhanced as per the standard requirement

Statistical indicator: Proportion of TVET institutes with quality infrastructure and facilities as per the standard requirement. Source: Annual administrative reports.

10. Output target 10: TVET Graduates feedback on TVET infrastructure

Statistical indicator: Proportion of positive feedback of TVET graduates on TVET infrastructure. Annual TVET survey.

11. Output target 11: Computer Student Ratio in schools

Statistical indicator: Computers to students ratio in schools. Source: Annual administrative reports.

12. Output target 12: Proportion of schools with internet access in all the classrooms and administrative blocks

Statistical indicator: Proportion of schools with internet access in all classrooms and administrative blocks. Source: Annual administrative reports.

13. Output target 13: Number of schools offering SEN inclusive programmes

Statistical indicator: Proportion of schools offering SEN inclusive programmes. Source: Annual administrative reports.

14. Output target 14: Proportion of schools meeting Student Toilet Ratio

Statistical indicator: Proportion of schools meeting the required students to toilets ratio. Source: Annual administrative reports.

15. Output target 15: Enhance access to TVET programmes post National Gyalsung Programme (NGP)

Statistical indicator: Proportion of students who graduated from NGP and enroll in a TVET programme

16. Output target 16: Enhance access to TEI programmes post NGP

Statistical indicator: Proportion of students who graduated from NGP and enroll in tertiary education

17. Output target 17: Enhance gender equality in TVET education and training

Statistical indicator: Proportion of girls attending TVET programmes over the total number of TVET students

18. Output target 18: Schools with standard smart classrooms

Statistical indicator: Proportion of schools with standard smart classrooms. Source: Annual administrative reports.

19. Output target 19: TVET institutes with standard smart classrooms

Statistical indicator: Proportion of TVET institutes with standard smart classrooms. Source: Annual administrative reports.

20. Output target 20: KGUMSB with standard smart classrooms

Statistical indicator: Proportion of KGUMSB with standard smart classrooms. Source: Annual administrative reports.

Output objective 3: The curricula and assessment system are more dynamic and relevant for a developed Bhutan at all levels of the education system

1. Output target 1: Average test scores enhanced in STEM subjects in grades VI, X and XII

Statistical indicator: Average test scores in STEM subjects in grades VI, X and XII

2. Output target 2: Alignment of curriculum and assessment to international standards/accreditation

Statistical indicator: Suggest dropping, as this involves an activity.

3. Output target 3: Number of RUB courses jointly certified with international institutions

Statistical indicator: Number of RUB courses jointly certified with international institutions

4. Output target 4: Number of KGUSMB courses jointly certified with international institutions

Statistical indicator: Number of KGUSMB courses jointly certified with international institutions

5. Output target 5: Number of RIM courses jointly certified with international institutions

Statistical indicator: Number of RIM courses jointly certified with international institutions

6. Output target 6: Number of JSWSL courses jointly certified with international institutions

Statistical indicator: Number of JSWSL courses jointly certified with international institutions

7. Output target 7: TVET courses diversified/introduced for the 21st century economy

Statistical indicator: Number of new TVET courses introduced for the 21st century economy

8. Output target 8: RUB courses diversified/introduced for the 21st century economy

Statistical indicator: Number of new RUB courses introduced for the 21st century economy

9. Output target 9: KGUMSB courses diversified/introduced for the 21st century economy

Statistical indicator: Number of new KGUMSB courses introduced for the 21st century economy

10. Output target 10: Employers satisfaction with TVET graduates

Statistical indicator: Proportion of employers who recruited TVET graduates over a period and are satisfied

11. Output target 11: Employers satisfaction with TEIs/RUB graduates

Statistical indicator: Proportion of employers who recruited TEIs/RUB graduates over a period and are satisfied

Output objective 4: Improved health & wellbeing of learners and education professionals

1. Output target 1: Prevalence of malnutrition among students

Statistical indicator: Prevalence of malnutrition among students

2. Output target 2: Percentage of schools with access to functioning clean and safe drinking water (WHO Standards)

Statistical indicator: Proportion of schools with access to functioning clean and safe drinking water (as per WHO standards)

3. Output target 3: Number of community service projects (cumulative) organized by school scouts

Suggest dropping target and indicator, as this concerns an activity.

4. Output target 4: KGUMSB students' satisfaction with campus life

Statistical indicator: Proportion of KGUMSB students satisfied with campus life

5. Output target 5: RUB students' satisfaction with campus life

Statistical indicator: Proportion of RUB students satisfied with campus life

6. Output target 6: RIM students' satisfaction with campus life

Statistical indicator: Proportion of RIM students satisfied with campus life

7. Output target 7: JSWSL students' satisfaction with campus life

Statistical indicator: Proportion of JSWSL students satisfied with campus life

Output Objective 5: Education governance and system transformation

1. Output target 1: Number of international students enrolled in schools

Statistical indicator: Suggest dropping. The objective to attract international students may more realistically be focused on tertiary education level.

2. Output target 2: Number of international students enrolled in RIM

Statistical indicator: Number of international students enrolled in RIM

3. Output target 3: Number of international students enrolled in KGUMSB

Statistical indicator: Number of International students enrolled in KGUMSB

4. Output target 4: Number of International students enrolled in TVET institutes

Statistical indicator: Number of International students enrolled in TVET institutes

5. Output target 5: Number of international School established in the country

Statistical indicator: Number of international schools established in the country

6. Output target 6: Integrated real-time data and information on education and training in schools

Statistical indicator: Suggest dropping. Real time data on education and training are not needed and not relevant for the internationalization of the education system and students.

7. Output target 7: Integrated real-time data and information on education and training in KGUSMB

Statistical indicator: Suggest dropping. Real time data on education and training are not needed and not relevant for the internationalization of the education system and students.

8. Output target 8: Number of HE institutions accredited

Statistical indicator: Number of higher education institutions accredited

9. Output target 9: Number of HE programmes accredited

Statistical indicator: Number of higher education programmes accredited

Output objective 6: More research outputs generated by higher education institutions contributing to policy and innovation

1. Output target 1: High-impact research output generated by KGUMSB

Statistical indicator: Suggest dropping; difficult to measure.

2. Output target 2: High-impact research output generated by RIM

Statistical indicator: Suggest dropping; difficult to measure.

3. Output target 3: High-impact research output generated by JSWSL

Statistical indicator: Suggest dropping; difficult to measure.

4. Output target 4: High-impact research output generated by RUB

Statistical indicator: Suggest dropping; difficult to measure.

5. Output target 5: Number of consultancy/collaborative research and extension works carried out by RIM

Statistical indicator: Suggest dropping; difficult to measure.

6. Output target 6: Number of consultancy/collaborative research and extension works carried out by KGUMSB

Statistical indicator: Suggest dropping; difficult to measure.

7. Output target 7: Number of consultancy/collaborative research and extension works carried out by JSW Law

Statistical indicator: Suggest dropping; difficult to measure.

Output Objective 7: All Bhutanese have increased opportunities for lifelong learning and skills development

1. Output target 1: Adult literacy rate (male/female)

Outcome target and statistical indicator: Adult literacy rate (aged 15 and above), disaggregated by male/female. The data source of this indicator is the Bhutan Living Standards Survey, conducted by NSB every five years. To be useful for monitoring the implementation of the Plan, the periodicity of the survey should be changed.

2. Output target 2: Participation in adult education and training programmes (CLCs): (male/female)

Statistical indicator: Proportion of adults participating in education and training programmes (CLCs) by male/female

3. Output target 3: Professional qualification certification including training and development courses provided by RIM

Statistical indicator: Number of RIM courses providing certificates of professional qualification

4. Output target 4: Professional qualification certification including training and development courses provided by KGUMSB

Statistical indicator: Number of KGUMSB courses providing certificates of professional qualification

5. Output target 5: Number of in-service/pre-service students taking up undergraduate/post-graduate programmes in KGUMSB

Statistical indicator: Proportion of in-service/pre-service students taking up undergraduate/post-graduate programmes in KGUMSB

6. Output target 6: Number of in-service/pre-service students taking up undergraduate/post-graduate programmes in RIM

Statistical indicator: Proportion of in-service/pre-service students taking up undergraduate/post-graduate programmes in RIM

7. Output target 7: Number of in-service/preservice students taking up undergraduate/post-graduate programmes in JSWSL

Statistical indicator: Proportion of in-service/pre-service students taking up undergraduate/post-graduate programmes in JSWSL

8. Output target 8: No. of specialized CPD/CME programmes developed by KGUMSB

Statistical indicator: Number of specialized CPD/CME programmes in the KGUMSB curricula

9. Output target 9: Number of healthcare providers certified in national resuscitation courses (KGUMSB)

Statistical indicator: Number of healthcare providers certified in national resuscitation courses (KGUMSB)

Outcome objective 3: By 2029, Bhutan has an Operational Shock-Responsive, Inclusive, and Comprehensive Social Protection System

1. Outcome target 1: By 2029, a comprehensive social security system is functioning

Statistical indicator: Proportion of population covered by social protection floors/systems, by sex, distinguishing children, unemployed persons, older persons, persons with disabilities, pregnant women, newborns, work-injury victims and the poor and the vulnerable (SDG indicator 1.3.1)

2. Outcome target 2: By 2029, social security mechanisms mainstreamed in government programmes

Statistical indicator: Proportion of total government spending on essential services (education, health and social protection) (SDG indicator 1.a.2)

3. Outcome target 3: GNH Time Use score improved (Variables: Work, Sleep)

Statistical indicator: GNH Time Use score. The data source of this indicator is the GNH survey conducted by CBS every five years (the next surveys are planned for 2028 and 2033). To be useful for monitoring the implementation of the Plan, the periodicity of the survey should be changed. As an alternative, GNH Time Use score could be replaced by: Proportion of people that are satisfied with their work-life balance, a related question on which could be included in the Labour Force Survey annually.

4. Outcome target 4: GNH psychological wellbeing improved (Variables: Life satisfaction, Positive emotions, Negative emotions, Spirituality)

Statistical indicator: GNH Psychological wellbeing. The data source of this indicator is the GNH survey conducted by CBS every five years (the next surveys are planned for 2028 and 2033). To be useful for monitoring the implementation of the Plan, the periodicity of the survey should be changed.

Output objective 1: A strengthened enabling environment for comprehensive social protection is in place

1. Output target 1: Timeline by which social protection policy is drafted

Suggest dropping target and indicator, as this is an activity.

Output Objective 2: Essential Social protection programmes and mechanisms are strengthened & developed

1. Output target 1: Percentage of pension and provident coverage increased

Statistical indicator: Proportion of workers retired from the private sector covered by pension schemes

2. Output target 2: Life insurance premium and sum increased

Statistical indicator: Proportion of life insurance premium of annual salary

3. Output target 3: Prevalence of violence against women and girl reduced

Statistical indicator 1: Proportion of ever-partnered women and girls aged 15 years and older subjected to physical, sexual or psychological

violence by a current or former intimate partner in the previous 12 months, by form of violence and by age (SDG indicator 5.2.1)

Statistical indicator 2: Proportion of women and girls aged 15 years and older subjected to sexual violence by persons other than an intimate partner in the previous 12 months, by age and place of occurrence (SDG indicator 5.2.2)

4. Output target 4: Prevalence of violence against children reduced

Statistical indicator 1: Proportion of children aged 1–17 years who experienced any physical punishment and/or psychological aggression by caregivers in the past month (SDG indicator 16.2.1)

Statistical indicator 2: Proportion of young women and men aged 18–29 years who experienced sexual violence by age 18 (SDG indicator 16.2.3)

5. Output target 5: Percentage of vulnerable people receiving targeted social protection benefits

Statistical indicator: Proportion of vulnerable people receiving targeted social protection benefits

Output objective 3: Sustainable population maintained

1. Output target 1: Timeline by which the Third Child Incentive Scheme is implemented

Suggest dropping target and indicator, as this is an activity.

3.4 Security results matrix

The Plan focuses on strengthening, by 2029, Bhutan's security, community vitality, and cultural vibrancy, while ensuring disaster preparedness and resilience. It states that Bhutan enjoys peace and political stability, but safeguarding its sovereignty and addressing modern security concerns are paramount. Challenges include limited connectivity, cybersecurity threats, and the vulnerability of key infrastructure such as roads, power grids, and communication systems. Natural and man-made hazards, low food self-sufficiency, reliance on pharmaceutical imports, and seasonal power shortages exacerbate these vulnerabilities. Social issues such as rising crime rates, drug-related offenses, increasing divorce rates, and cultural disconnection also pose significant challenges.

The Plan's key deliverables aim to safeguard and strengthen Bhutan's sovereignty, territorial integrity, security, unity, wellbeing, resilience, and

economic prosperity. This includes two main outcomes of mitigating and managing safety and security threats and disaster risks, and strengthening Bhutan's identity, culture, and values.

The security outcome includes five key deliverables: effective border management, maintaining law and order, securing critical infrastructure, disaster-resilient institutions and communities, and ensuring the supply of critical energy and food items.

The cultural and community vitality outcome includes enhancing Bhutan's global credibility, sustaining Bhutanese identity and culture, creating an enabling environment for culture-based economic opportunities, and managing cultural heritage.

National programmes supporting these outcomes include the Sociocultural Resilience and Community Vitality Programme, which aims to promote Bhutan's unique identity and culture, improve security, and foster international cooperation. This involves upgrading border management infrastructure, instituting disaster preparedness plans, modernizing law enforcement, and preserving cultural heritage. The Digital Transformation Programme seeks to enhance Bhutan's cybersecurity and create a secure digital environment, strengthening digital infrastructure and cybersecurity capabilities. By addressing these security and sociocultural challenges, Bhutan aims to ensure the safety, wellbeing, and resilience of its citizens, while preserving its cultural heritage and values.

The security results matrix comprises 11 outcome targets supported by 48 output targets.

Outcome objective 1: Safety and security threats and disaster risks to the country, its economy, infrastructure, institutions and people are mitigated and managed

1. Outcome target 1: By 2029, Bhutan ranked among the Top 10-15 countries on Global Peace Index

Statistical indicator: Global Peace Index. The Global Peace Index (GPI), produced by the Institute for Economics and Peace, a global think-thank, measures the relative position of nations' peacefulness on an annual basis. It synthesizes three domains of peacefulness: Ongoing domestic and international conflict (six indicators); Level of harmony or discord within a nation (11 indicators); Level of militarisation (six indicators). The GPI is developed in consultation with an international panel of peace experts with data collected by the EIU.

This index has the advantage of ranking Bhutan's performance at international level, but has the disadvantage that is rather complex, summarizing many diverse dimensions, and is not produced based on national data.

An alternative statistical indicator, which may be more relevant for national policy making as it focuses on domestic violence and public security, is the Number of victims of intentional homicide per 100,000 population, by sex, age and type of homicide (crime, inter-personal and political) (SDG indicator 16.1.1). Bhutan's data for this indicator are available in the global SDG database.

2. Outcome target 2: By 2029, ensure internal and external air, surface and internet connectivity.

Multiple indicators would be needed to monitor this broad target:

Statistical indicator 1: Proportion of population covered by a mobile network, by type of technology (SDG indicator 9.c.1)

Statistical indicator 2: Proportion of individuals using the Internet (SDG indicator 17.8.1)

Statistical indicator 3: Annual growth rate in the number of domestic and international air passengers

Statistical indicator 4: Annual growth rate in the number of railway passengers

3. Outcome target 3: By 2029, crime rate per 10,000 population reduced

Two indicators, one for crime against persons, the other for crime against property, are needed to monitor progress towards this target. The source is administrative data produced annually by the Royal Bhutan Police (RBP).

Statistical indicator 1: Number of victims of crime against person per 100,000 population, by sex and age (SDG indicator 16.1.3). Bhutan's data for this indicator are NOT available in the global SDG database.

Statistical indicator 2: Number of victims of crime against property per 100,000 population, by sex and age

4. Outcome target 4: By 2029, percentage of people who feel safe walking alone at night in the city or the neighbourhoods they live in increased

Statistical indicator: Proportion of population that feel safe walking alone

around the area they live after dark (SDG indicator 16.1.4). Bhutan's date for this indicator are NOT available in the global SDG database. The current data source is the GNH survey conducted by CBS every five years (the next surveys are planned for 2028 and 2033). To monitor the implementation of the Plan, the periodicity of the survey should be changed. In case the GNH survey cannot be conducted at higher frequency, data on this indicator can be collected through any multipurpose household survey.

5. Outcome target 5: Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population

Statistical indicator: Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population (SDG indicator 1.5.1). Bhutan's data for this indicator are available in the global SDG database. The source is administrative data produced annually basis by DLGDM.

6. Outcome target 6: Ensure essential food, medical items, and other essentials including energy are accessible, affordable, and available at all times

Three indicators are needed to monitor the availability dimension of this target. Affordability and accessibility are not monitored. The sources are administrative data available annually from MoAF, MoH, MoENR:

Statistical indicator 1: Average number of months of public stock of essential food items

Statistical indicator 2: Average number of months of public stock of essential medical items

Statistical indicator 3: Average number of months of public stock of essential energy

Output objective 1: Effective and efficient border management

1. Output target 1: Number of land port and airport entry with automated immigration clearance

The target points to an activity, not an output result, which aims at making immigration clearance procedures more efficient. The output objective, instead, seems more focused on making sure all cross-border movements of people are officially monitored. Potential output statistical indicator: Proportion of people illegally entering the country of the total entrants. It is doubtful, however, that these statistics can reliably be

produced a regularly. By definition, illegal migrants are not captured by official sources. Suggest dropping target and indicator.

2. Output target 2: All immigration permits embedded with QR code

The target points to an activity, not an output. Suggest dropping target and indicator.

Output objective 2: Law, order, and safety maintained

1. Output target 1: Crime rate against person and property reduced to 10 and 9 respectively

Suggest dropping, already covered by indicator 3 under outcome 1.

2. Output target 2: Prisoners' enrolment in reformatory programme to be maintained

Statistical indicator: Percentage of prisoners enrolled in educational programmes.

Administrative data from RBP compiled annually.

3. Output target 3: Response time to fire accident reduced for police stations of four thromdes

Statistical indicator: Response time to fire accident. Administrative data RBP compiled annually.

4. Output target 4: Annual fatalities of MVA reduced from 88 to 79 (reduced by 10%)

Statistical indicator: Annual number of deaths from motor vehicle accidents. Recommend to elevate to outcome level. Data disaggregated by gender, age, type of road. Data frequency: Annual. Data source is RBP.

Output objective 3: Protection of critical infrastructure strengthened

1. Output target 1: Percentage of critical infrastructure identified and secured

Statistical indicator: Proportion of critical infrastructure secured.

Output objective 4: Build disaster resilient communities

1. Output target 1: Percentage of dzongkhags and critical agencies (notified) that adopt and implement local disaster risk reduction strategies/plans

Statistical indicator: Proportion of local governments and agencies that adopt and implement disaster risk reduction strategies in line with national disaster risk reduction strategies (SDG indicator 1.5.4). Data for Bhutan for this indicator are available in the global SDG database. The source is administrative data produced annually by DLGDM.

2. Output target 2: Percentage of incident command system instituted with functioning coordination mechanism at all administrative levels (dzongkhag, thromdes, and gewogs)

Suggest deleting, already covered by KPI 1 (see above).

3. Output target 3: No. of dzongkhags and key agencies with trained disaster response team.

Suggest deleting, already covered by KPI 1 (see above).

4. Output target 4: Percentage of communities trained on disaster mitigation, preparedness and response at least every two years

Suggest deleting, already covered by KPI 1 (see above).

5. Output target 5: Critical energy, essential food items, and medical supplies ensured at all times

Essential food and medical stocks sufficient for six months maintained at all times

Suggest deleting, as already covered by KPI 6 under outcome 1.

Percentage reduction in energy import in lean season

Suggest deleting.

Outcome objective 2: Bhutan's Identity, Culture and Values Are Strengthened, and Its Position in the International Community Is Enhanced

1. Outcome target 1: By 2029, Percentage of Bhutanese with sense of belonging to community increased

Statistical indicator: Percentage of Bhutanese with sense of belonging to community. For this and the following outcome targets (except for

outcome target 3) the data source of the statistical indicators is the GNH survey conducted by CBS every five years (the next surveys are planned for 2028 and 2033). To be useful for monitoring the Plan, the periodicity of the survey should be changed. In case the GNH survey cannot be conducted at higher frequency, relevant questions can be introduced in any ongoing multipurpose household survey with a three-year frequency.

2. Outcome target 2: By 2029, Percentage of people perceiving the importance of Bhutanese values, etiquette and conduct maintained

Statistical indicator: Percentage of people perceiving the importance of Bhutanese values, etiquette and conduct. See above.

3. Outcome target 3: Bhutan's strategic contributions to international agenda enhanced

Statistical indicator: Level of strategic contributions to the international agenda (A. UN Peacekeeping; B. Climate Change; C. SDG) (Level 0 – No engagement; Level 1 – Representation; Level 2 – Active Engagement; Level 3 – Leadership). Data are produced by MoFAET annually. Subjective indicator subject to potential conflict of interest. Scores on the different strategic contributions can be combined through arithmetic mean. Separate indicators for the different contributions?

4. Outcome target 4: GNH Community Vitality score improved

Statistical indicator: GNH Community Vitality score (Variables: Donation, Community relationship, Family, Safety). See above.

5. Outcome target 5: GNH Cultural Diversity score improved

Statistical indicator: GNH Cultural Diversity score (Variables: Zorig Chusum skills, Speak native language, Cultural participation, Driglam Namzha). See above.

Output objective 1: Enhance Bhutan's Global Credibility

1. Output target 1: Level of strengthened engagement with existing and new partners

Statistical indicator: Level of engagement with existing and new partners. (Level-0 – No engagement; Level 1 – Maintain existing avenues of engagement; Level 2 – New avenues of engagement explored). Data are produced by MoFAET annually. Subjective indicator subject to potential conflict of interest.

2. Output target 2: No. of International Treaties and Conventions that Bhutan signed/ratified

Statistical indicator: Number of NEW international treaties and conventions that Bhutan signed /r atified. Data source MOFAET and frequency six months.

3. Output target 3: % of reporting obligations fulfilled on time

Statistical indicator: Degree of compliance with reporting obligations to regional / international bodies. Which reporting obligations? Is statistical reporting to international organizations included? Suggest transforming into the percentage of reporting (quantitative indicator) in four to five classes of compliance (qualitative indicator). Data are produced by MoFAET annually. Subjective indicator subject to potential conflict of interest.

4. Output target 4: % of payment of RGoB membership contributions fulfilled on time

Statistical indicator: Percentage of payment of RGoB membership contributions to regional / international bodies fulfilled on time. Data are produced by MoFAET on an annual basis.

5. Output target 5: Level of strategic contributions to international agenda (A. United Nations peacekeeping; B. Climate change; C. SDG)

Suggest dropping target and indicator, as already covered by outcome target 3.

Output objective 2: Ensure the Interest and wellbeing of Bhutanese, and engage them, especially youth and those abroad, in promoting Bhutanese identity, values and culture

1. Output target 1: Percentage of eligible consular services provided or attended

Statistical indicator: Turnaround time for eligible consular services

2. Output target 2: TAT for issuance of Passports by Embassies and Missions abroad (once all processes are completed)

Statistical indicator: Turnaround time for issuance of passports

3. Output target 3: Percentage planned construction of chancery buildings/offices initiated (4 constructions- RBE/Dhaka, Canberra, Bangkok and RBC/ Kolkata and Guwahati)

Suggest dropping, as this is an activity.

4. Output target 4: Dzongkha competency and usage rating

Suggest dropping, as already covered by adult literacy rate.

5. Output target 5: Percentage of children aged 5 to 12 years accessing the digital materials on Dzongkha and Culture annually beginning 2023

Statistical indicator: Proportion of children aged 5 to 12 years accessing digital materials on Dzongkha and culture annually

6. Output target 6: Percentage of eligible youth attending Gyalsung programme

Statistical indicator: Proportion of eligible youth attending Gyalsung programme

7. Output target 7: Average number of days spent attending social and cultural events (age qualification) 13 years and above

Statistical indicator: Average number of days spent attending social and cultural events by those 13 years of age and above

8. Output target 8: Percentage of invited Bhutanese attending events organized by EMCs

Statistical indicator: Proportion of invited Bhutanese living abroad attending events organized by embassies, missions and consulates

9. Output target 9: Percentage of people satisfied with their family relationship

Statistical indicator: Proportion of people satisfied with their family relationship

Output Objective 3: Enabling Environment Created for Bhutanese to Take Up Economic Opportunities to Preserve and Promote Culture

1. Output target 1: New jobs created in Cultural products and services

Statistical indicator: Proportion of total number of persons employed in the cultural sector

2. Output target 2: Number of heritage sites operating as revenue and employment generating centers

Statistical indicator: Total per capita expenditure on the preservation, protection and conservation of all cultural and natural heritage, by source of funding (public, private), type of heritage (cultural, natural) and level of government (national, regional, and local/municipal) (SDG indicator 11.4.1)

3. Output target 3: Number of new culture-based products created

Suggest dropping.

Output Objective 4: Cultural heritage managed and sustained for continuity and relevance to society

1. Output target 1: Number of heritage sites conserved

Statistical indicator: Number of heritage sites conserved

2. Output target 2: Number of heritage sites registered

Statistical indicator: Number of heritage sites registered

3. Output target 3: Number of heritage sites designated as Important/ Special importance

Statistical indicator: Number of heritage sites designated as Important/ Special importance

4. Output target 4: Number of cultural assets verified and authenticated

Statistical indicator: Number of cultural assets verified and authenticated

5. Output target 5: Number of monastic sites conserved (Number of infrastructure development activities facilitating the conservation of monastic sites under Central Monastic Body)

Statistical indicator: Number of monastic sites conserved

6. Output target 6: Number of cultural and religious events digitized to facilitate promotion of cultural and spiritual events

Suggest dropping.

7. Output target 7: Skill and wellbeing programmes conducted

Suggest dropping.

3.5 Governance results matrix

The Plan aims to achieve a transformed and trusted governance ecosystem in Bhutan, driving accelerated economic growth and improving lives by 2029. Good governance is fundamental to Bhutan's sustainable development and its goal of becoming a high-income GNH economy. Despite progress, institutional capacities for inclusive, dynamic, and results-oriented governance need strengthening. Key issues include policy overlaps, data ecosystem gaps, low digital literacy, and weak cybersecurity. Public service delivery is hampered by high civil servant attrition, macroeconomic instabilities, and corruption, impacting public perception and confidence.

The governance cluster focuses on two main outcomes: transforming the public sector into a dynamic, results-oriented agent of transformation, and strengthening state institutions to ensure inclusive, effective, and accessible justice and transparent rule of law. Key deliverables for public sector transformation include dynamic and responsive government policies, a motivated and agile public sector, use of data for evidence-based policy and service delivery, and a strengthened digital ecosystem. For state institutions, key deliverables include an effective, citizen-centric justice sector and enhanced parliamentary and oversight functions.

Two national programmes are expected to drive these outcomes. The Transformational Governance Programme aims to create a responsive, transparent, and inclusive governance framework. This involves comprehensive policy development, breaking down silos, leveraging cross-sector collaboration, and embracing technology for resource optimization. Strategies include building an agile public sector, strengthening state institutions, mainstreaming cross-cutting issues, improving the data ecosystem, and promoting digital technology for efficient governance. The Digital Transformation Programme aims to position Bhutan as a digitally empowered and resilient society, with strategies for inclusive digital governance, a thriving digital economy, a vibrant digital society, and investment in key enablers such as digital infrastructure, cybersecurity, and skilled workforce development. These programmes collectively support the implementation of the 13th FYP, ensuring effective and inclusive governance in Bhutan.

The Governance Results Matrix overall comprises 11 Outcome targets under two Outcome objectives. These Outcome objectives and targets are supported by 47 output targets.

Outcome objective 1: Bhutan's public sector is more dynamic, results-oriented agent of transformation, demonstrating effectiveness, accountability and robust management of the economy.

1.   **Outcome target 1: All public sector agencies achieve 95% and above in their annual performance targets**

This seems to be an output target (to replace output target 5), rather than an outcome target.

Statistical indicator: Proportion of public sector agencies achieving at least 95% of their annual performance targets. The data source for this indicator are the annual performance reports of the public sector agencies.

2.   **Outcome target 2: By 2029, Bhutan's ranking on the GovTech maturity index improved**

Statistical indicator: GovTech maturity index score

This composite index is produced by the World Bank every two years. The 2022 version of the GTMI is the simple average of the normalized scores on four components: 1. CGSI: Core Government Systems Index (17 indicators) captures the key aspects of a whole-of-government approach, including government cloud, interoperability framework and other platforms. 2. PSDI: Public Service Delivery Index (nine indicators) measures the maturity of online public service portals, with a focus on citizen centric design and universal accessibility. 3. DCEI: Digital Citizen Engagement Index (six indicators) measures aspects of public participation platforms, citizen feedback mechanisms, open data, and open government portals. 4. GTEI: GovTech Enablers Index (16 indicators) captures strategy, institutions, laws, and regulations, as well as digital skills, and innovation policies and programmes, to foster GovTech.

Latest value for Bhutan (March 2023): -0,595 which means that Bhutan belongs to the group B countries.

3. Outcome target 3: Annual Average GDP growth of at least 8%

Suggest dropping target and indicator, already covered by the economic cluster.

4. Outcome target 4: Citizens' satisfaction on public services increased

Statistical indicator: Proportion of population satisfied with their last public services experience (SDG indicator 16.6.2). Data for this indicator

are not available in the global SDG database. Despite a baseline and target values being provided, no information is available on the data source. A regular household survey (or a module in an existing household survey) could be conducted by NSB every three years.

5. Outcome target 5: Share of domestic revenue spent on recurrent expenditure reduced

Statistical indicator 1: Proportion of total government expenditure recurring (excluding expenditure for SOEs staff from numerator and denominator). Data source is annual government finance statistics.

Statistical indicator 2: Proportion of government expenditure used to subsidize SOEs services not sold at market prices. Data source are the balance sheets, along with the income and cash flow statements of the SOEs. These data should be available with the ministry supervising SOEs.

Statistical indicator 3: Revenue from goods and services of SOEs sold at market prices, over cost of staff. Data source is the balance sheets, along with the income and cash flow statements, of the SOEs. These data should be available with the ministry supervising SOEs.

6. Outcome Target 6: GNH Good Governance score improved

Statistical indicator: GNH Good Governance score. The data source of this indicator is the GNH survey conducted by CBS every five years (the next surveys are planned for 2028 and 2033). To be useful for monitoring the Plan, the periodicity of the survey should be changed (to be conducted every three years).

Output objective 1: Public policies are more dynamic, responsive and results oriented.

1. Output target 1: By 2029, Tax to GDP ratio improved

Statistical indicator: Total government revenue as a proportion of GDP, by source (SDG indicator 17.1.1). The data sources are the government finance statistics compiled annually.

2. Output target 2: By 2029, 13th FYP resource gap (over and above fiscal projection) achieved 100%

Statistical indicator: Budget deficit of the 13th FYP. The data sources are the government finance statistics compiled annually.

3. Output target 3: By 2029, domestic credit to priority sector as a percentage of total credit increased

Statistical indicator: Proportion of domestic credit to priority sector in total credit. The priority sectors are identified in the economic results matrix. The data source is the annual budget report of the RMA.

4. Output Target 4: Beginning 2024, lending rates reduced by 2-3 % points

Suggest dropping target and indicator, as this appears to be at odds with the independence of RMA.

5. Output Target 5: By 2025, ensure zero incidences of non-implementation, non- enforcement, and non-compliance of policies.

This appears to be an outcome target (to replace outcome target 1), rather than an output target.

Statistical indicator: Percentage implementation and enforcement of public policies. This requires the establishment of a system of policy monitoring, in other words a system to effectively and systematically collect, analyze, and use data related to the process and outcomes of policy development and implementation. Is this system already in place? If not, is it feasible to establish it?

Output objective 2: Public sector is more effective, agile, and results oriented.

1. Output target 1: By 2024, a multi-year rolling planning and budgeting operationalized.

Statistical indicator: Proportion of public sector agencies that operationalize a multi-year rolling plan and budget. The data sources is the government finance statistics compiled annually.

2. Output target 2: Beginning 2024, strong systems and structures that promote meritocracy, accountability, integrity, efficiency and effectiveness in the civil service instituted

Statistical indicator: Proportion of public sector agencies that adopt programmes promoting meritocracy and accountability. Suggest dropping, as this relates to activities. The corresponding results are already covered by output target 4.

3. Output target 3: Beginning 2024, civil service agencies repurposed and restructured for greater accountability and efficiency

Suggest dropping, as this relates to activities, which also not appear to be measurable.

4. Output target 4: Beginning 2024, skilled, agile and highly performing civil service ensured.

Statistical indicator: Proportion of high performing staff in public sector agencies

5. Output target 5: Beginning 2024, world class professional and strategic leaders spearheading future-ready civil service organisations ensured

Suggest dropping as this neither appears to be measurable nor feasible.

6. Output target 6: Attrition rate reduced by half (16.33%, 2023)

Suggest elevating to outcome statistical indicator: Proportion of staff turnover in the public sector

7. Output target 7: By 2024, procurement process simplified (Reduce supply risks, prevent unauthorized spending and align procurement workflow with business objectives, goals and strategies)

Statistical indicator: Proportion of public sector agencies that adopt controlled procurement processes. In fact, reducing supply risks, preventing unauthorized spending and aligning procurement workflow with business objectives, goals and strategies is the opposite of simplifying procurement processes).

8. Output target 8: Audit coverage increased

Statistical indicator: Proportion of public sector agencies that are audited

Output objective 3: Data and statistics are available and used for foresight-oriented policy, planning and service delivery

1. Output target 1: Beginning 2026, the quality of administrative data of the priority sectors strengthened

Statistical indicator: Number of priority sectors for which a quality assessment of administrative data is conducted. NSB has been given the responsibility for this indicator.

2. Output target 2: Beginning 2025, data and statistics with increased frequency and disaggregation published

Statistical indicator: Labour Force Survey, national accounts, and agricultural and livestock statistics, from annual to quarterly. GDP by district (20)

3. Output target 3: By 2029, a comprehensive, predictive data and analytics system operationalized at the national level

Statistical indicator: Statistics Act enacted and data governance framework established and implemented

4. Output target 1: By 2025, civil registration and vital statistics (CRVS) system meeting international standard operationalised/increased

Statistical indicator: High quality annual population and demographic statistics are compiled based on CRVS system

Output objective 4: The digital ecosystem is strengthened to drive transformation.

1. Output target 1: By 2029, digital ecosystem for fintech established [50% of transactions are cashless with 99.9% of uptime in payment gateway (domestic and international transactions)]

Statistical indicator: Proportion of total cashless transactions conducted

Output target 2: Public satisfaction rating of > 4.5 by 2029

Statistical indicator: Public satisfaction rating of digital services 2. Output Target 3: By 2029, GDP output target from Digital Technology increased

Statistical indicator: Share of value added of the digital economy in total GDP. Narrow definition of the digital economy: all industries that directly participate in producing or are crucially reliant on digital inputs (digitally enabling infrastructure (ICT sector), e-commerce activity and digital media activities). For the list of sectors to be included see aside.

3. Output target 4: Operating cost of internet services reduced by 10% by 2029

Statistical indicator: Percentage reduction of operating costs of internet services

4. Output target 5: 5000 quality jobs by 2029

Suggest dropping. Definition of quality jobs missing. Difficult to measure

through the Labour Force Survey.

5. Output target 6: Data Economy established by 2029 (Health, Climate & Agriculture)

Suggest dropping, as there appears to be no agreed definition of the data economy.

6. Output target 7: 400,000+ citizens know how to productively and safely use digital services by 2029

Statistical indicator: Number of citizens that know how to productively and safely use digital services

7. Output target 8: Improve cyber security maturity level from Level 1: start-up to level 4: strategic by 2029

Statistical indicator: Maturity level of cyber security. Data source: Oxford University.

8. Output target 9: Citizen satisfaction rating for online services improved Statistical indicator: Citizen satisfaction rating for online services

Outcome objective 2: State institutions ensure inclusive, effective and accessible justice, transparent rule of law and public oversight

1. Outcome target 1: By 2029, Corruption Perception Index score improved.

Statistical indicator 1: Corruption Perception Index score. The indicator is produced annually by Transparency International and allows to benchmark Bhutan's performance at the international level.

As an alternative or in addition to the previous indicator, the following two SDG indicators could be produced by NSB using, for example, the National Integrity Survey with the appropriate periodicity.

Statistical indicator 2: Proportion of persons who had at least one contact with a public official and who paid a bribe to a public official, or were asked for a bribe by those public officials, during the previous 12 months (SDG indicator 16.5.1)

Statistical indicator 3: Proportion of businesses that had at least one contact with a public official and that paid a bribe to a public official, or were asked for a bribe by those public officials during the previous 12 months (SDG indicator 16.5.2)

2. Outcome target 2: By 2029, Rule of Law score improved

Statistical indicator: Rule of Law score. The indicator is produced every three years by the World Bank and allows to benchmark Bhutan's performance at the international level.

As an alternative or in addition to the previous indicator, the following two SDG indicators could be produced nationally, using the victimization survey for the first indicator and administrative data for the second indicator:

Statistical indicator 1: Proportion of victims of (a) physical, (b) psychological and/or (c) sexual violence in the previous 12 months who reported their victimization to competent authorities or other officially recognized conflict resolution mechanisms (SDG 16.3.1)

Statistical indicator 2: Unsentenced detainees as a proportion of overall prison population (SDG 16.3.2)

3. Outcome target 3: By 2029, Voice and Accountability score improved

Statistical indicator: Voice and Accountability score. The indicator is produced every three years by the World Bank and allows to benchmark Bhutan's performance at the international level.

As an alternative or in addition to the previous indicator, the following SDG indicator could be produced by NSB using, for example, the National Integrity Survey with the appropriate periodicity.

Statistical indicator: Proportion of population who believe decision-making is inclusive and responsive, by sex, age, disability and population group (SDG 16.7.2)

4. Outcome target 4: By 2029, National Integrity Score improved

Statistical indicator: National Integrity score. The indicator is produced every three years by the NSB using the National Integrity Survey. Suggest verifying whether the periodicity is aligned with the monitoring needs of the Plan.

5. Outcome target 5: By 2029, Public satisfaction in justice services improved

Statistical indicator: Public satisfaction in justice services. The indicator is produced by NSB using the Bhutan Living Standards Survey, which is conducted every five years (three years according to the matrix). The

Bhutan Living Standards Survey would need to be carried out at a higher frequency to be useful for monitoring the implementation of the Plan.

Output objective 1: Justice sector is more effective and citizen-centric

1. Output target 1: By 2029, pending judgement enforcement rate reduced by half from 62.6%

Statistical indicator: Proportion of judicial verdicts enforced by OAG within 1 year

2. Output target 2: By 2028, Annual clearance rate of registered cases improved

Statistical indicator: Proportion of cases registered with the judiciary on which a verdict is taken within a year

3. Output target 3: By 2028, Percentage of cases heard using e-litigation platform increased

Statistical indicator: Proportion of cases heard using the e-litigation platform

4. Output target 4: By 2029, Number of administrative complaints reduced

Statistical indicator: Number of administrative complaints against the judiciary system per year

Output objective 2: Parliamentarians and oversight bodies have enhanced ability to effectively discharge their functions

1. Output target 1: By 2029, audit report issues resolved (recommendations implemented) within one year from the date of issue of report increased

Statistical indicator: Proportion of recommendations from audit reports implemented within one year from their issuance date

2. Output target 2: Beginning 2024, inconsistent or conflicting laws harmonized

Statistical indicator: Number of inconsistent laws harmonized

3. Output target 3: Percentage of voter turnout maintained (NC 52%, NA 66-70% and LG 55%).

Statistical indicator: Proportion of voter turnout in general and local elections

4. Output target 4: By 2029, ACC's performance score improved in all indicators

Statistical indicator: ACC's performance score

5. Output target 5: By 2029, proactive research and intelligence-based investigation increased.

Suggest dropping, as this appears to be difficult to measure.

6. Output target 6: By 2026, 10 major sectors have identified and mitigated corruption risks

Statistical indicator 1: Proportion of persons who had at least one contact with a public official and who paid a bribe to a public official, or were asked for a bribe by those public officials, during the previous 12 months (SDG 16.5.1)

Statistical indicator 2: Proportion of businesses that had at least one contact with a public official and that paid a bribe to a public official, or were asked for a bribe by those public officials during the previous 12 months (SDG 16.5.2)

The data for these two SDG indicators could be produced by NSB using, for example, the National Integrity Survey with the appropriate periodicity.

Annex 1: SDG indicators with data available for Bhutan in the global database

1.1.1; 1.2.1; 1.2.2; 1.3.1; 1.4.1; 1.5.1; 1.5.2; 1.5.3; 1.5.4; 1.a.1; 1.a.2 2.2.1; 2.2.2; 2.2.3; 2.5.1; 2.5.2; 2.a.1; 2.a.2; 2.c.1 3.1.1; 3.1.2; 3.2.1; 3.2.2; 3.3.1 4.1.2; 4.2.1; 4.2.2; 4.3.1; 4.4.1; 4.5.1

5.2.1; 5.3.1; 5.4.1; 5.5.1; 5.5.2; 5.6.2; 5.b.1; 5.c.1 6.1.1; 6.2.1; 6.3.1; 6.4.1; 6.4.2; 6.5.1; 6.5.2; 6.6.1 7.1.1; 7.1.2; 7.2.1; 7.3.1; 7.a.1; 7.b.1 8.1.1; 8.10.1; 8.10.2; 8.2.1; 8.4.2

9.1.2; 9.2.1; 9.2.2; 9.3.2; 9.a.1; 9.c.1 10.1.1; 10.2.1; 10.4.1; 10.5.1; 10.6.1; 10.7.4; 10.a.1; 10.b.10 11.1.1; 11.2.1; 11.3.1; 11.5.1; 11.5.2; 11.5.3; 11.6.1; 11.6.2; 11.7.1; 11.a.1; 11.b.1; 11.b.2 12.1.1; 12.2.2 13.1.1; 13.1.2; 13.1.3; 13.2.2 15.1.1; 15.1.2; 15.2.1; 15.3.1; 15.4.1; 15.4.2 16.1.1; 16.2.2; 16.3.2; 16.5.2; 16.6.1; 16.7.1; 16.8.1; 16.9.1; 16.a.1

Source: United Nations Department of Economic and Social Affairs, SDG Global Database, https://unstats.un.org/sdgs/dataportal