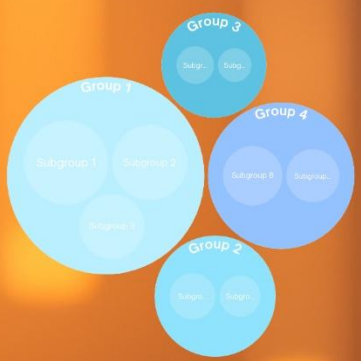
LIBERIA INSTITUTE OF STATISTICS AND GEO-INFORMATION SERVICES

National Strategy for Development of Statistics

Data for Transformation 2026-2030



Declaration: Redefining the Future of Statistics

The Liberia National Strategy for the Development of Statistics (NSDS III) is not a rejection of global norms—it is an elevation of standards. It is a re-engineering of processes and a redefinition of what a resilient, responsive, inclusive, and trusted national data system should be.

In a world where data is the lifeblood of progress, Liberia's NSDS III challenges the status quo. It moves beyond traditional approaches to embrace innovation, agility, and user-centricity, ensuring that our statistical system is not just compliant with international standards but a benchmark for excellence—driving the ARREST Agenda priorities through equitable, disaggregated insights.

We declare that the NSDS III is:

- A commitment to excellence: Elevating data quality, governance, and trust to meet the demands of a dynamic world.
- A catalyst for innovation: Leveraging technology, AI, and emerging data sources to transform how statistics are produced, communicated, and used.
- A pledge for inclusivity: Ensuring that no one is left behind by embedding equity, accessibility, and FAIR data principles into every aspect of our work—with a focus on gender, youth, persons living with disabilities, and vulnerable communities.
- A vision for resilience: Building a statistical system that is adaptive, sustainable, and capable of driving Liberia's development agenda—today and into the future.

The NSDS III is Liberia's statement to the world: we are not just following best practices—we are setting them. We are not just producing data—we are empowering decisions. And we are not just building a statistical system—we are redefining what it means to be data-driven.

For the people of Liberia, this is our promise. This is our new standard.

On behalf of the NSDS III Technical Working Group and in commitment to the people and development partners of Liberia,

Done at Monrovia, this 15th day of December 2025

David Gbakolo, Coordinator, NSDS III
Liberia Institute of Statistics and Geo-Information Services (**LISGIS**)

Foreword

The launch of Liberia's third-generation National Strategy for the Development of Statistics (NSDS III) 2026–2030 marks a pivotal and urgent moment in our nation's development trajectory. This is far more than a routine planning document; the NSDS III is defined as a Statistical Disruptor and National Change Agent, designed to fundamentally re-engineer how data and official statistics are produced, governed, communicated, and used to drive national transformation.

Our nation's ambitious goals especially the ARREST Agenda for Inclusive Development (2025–2029), the Sustainable Development Goals (SDGs), and the African Union's Agenda 2063 demand a National Statistical System (NSS) that is robust, modern, and responsive. The NSS has historically faced persistent challenges due to historical disruptions, infrastructural weaknesses, and limited capacity. The comprehensive assessment conducted as a foundation for this strategy revealed a critical need to bridge these gaps. For example, the assessment found overwhelming support for an Integrated and Collaborative Data Management System (ICDMS) yet revealed limited adoption of advanced tools like Artificial Intelligence (AI) and Mobile Data Collection across the system.

The NSDS III is the strategic response to these challenges, anchored in the Golden Triangle framework—addressing the interconnected pillars of People, Processes, and Technology.

We will prioritize human capital development through capacity-building in data science and AI, fostering a culture of data literacy and innovation. We are institutionalizing robust quality assurance, standardized methodologies, and stronger legal frameworks to ensure reliability and ethical management and championing a technological leap through the adoption of an Integrated and Collaborative Data Management System (ICDMS) and leveraging AI-driven analytics to modernize data collection and dissemination.

This strategy sets an ambitious direction, captured by its vision to become: A trusted, inclusive, interoperable, innovative, and responsive National Statistical System that produces, uses, and communicates high-quality official statistics to power sustainable national transformation.

The successful implementation of the NSDS III, supported by a robust Monitoring and Evaluation framework, will empower our National Statistical System to produce the high-quality, fit-for-purpose data and statistics needed to drive the ARREST Agenda, foster transparent governance, and unlock a future of evidence-based prosperity for Liberia.

We call upon all stakeholders Ministries, Agencies, Civil Society, Development Partners, Academia, and the Private Sector to embrace this strategy and commit to making it a living framework that guides Liberia's transition towards a technology-enabled NSS.

Hon. Richard Fortoma Ngafuan

Director General of LISGIS

Acknowledgements

The successful development of Liberia's third generation of the National Strategy for the Development of Statistics (NSDS III), 2026–2030 is the result of a profound collaborative effort, reflecting the shared national commitment to re-engineering Liberia's statistical system. The preparation of this strategy was guided by principles of national ownership, inclusivity, and alignment with international standards. Its realization was made possible by the dedication of numerous institutions and individuals.

We extend our deepest gratitude to the following entities for their pivotal roles:
The Government of Liberia: For providing the political will and high-level support necessary to champion statistical development as a cornerstone of national progress and the ARREST Agenda for Inclusive Development (2025–2029).

The Liberia Institute of Statistics and geo-Information Services (LISGIS): As the legally mandated central coordinating body of the National Statistical System (NSS), LISGIS provided the leadership and institutional coordination for the entire development process. Special acknowledgement goes to the Core Team of seven members (David J. Gbakolo, Debbie F. Garpou, Cecelia Bleh Yarwoah, Youngor F. Amara, Dr. Sarnoh Yousuff, Joseph Farkollie, and Robert Y. Kullei) from LISGIS who coordinated the process, ensuring its continuity and successful execution.

United Nations Population Fund (UNFPA), Liberia: UNFPA played a pivotal role by contracting a consultant who led the participatory development process. The organization also provided crucial technical and financial support, including organizing the online and in-person engagements.

The strategy's foundation lies in the comprehensive, evidence-informed NSS Assessment, which was made possible through widespread participation. We specifically acknowledge the NSDS III technical Working Group (TWG), which is composed of focal persons from 35 institution across the NSS. They actively contributed to the strategy's design, assessment, and validation, ensuring institutional relevance and strategic alignment.

We thank the ministries, agencies, commissions, and other public entities that participated in the assessment, which provided the quantitative and qualitative data used to ground the strategic choices.

The NSDS III is a testament to the collective belief that a well-functioning NSS is indispensable for evidence-based governance and sustainable national development. Our success in implementing the transformation agenda will rely on the continued collaboration, commitment, and sustained leadership demonstrated throughout the planning phase.

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Acronyms and Abbreviations

AI	Artificial Intelligence
BI	Business Intelligence
CAPI	Computer-Assisted Personal Interview
CSO	Civil Society Organization
CSPA	Common Statistical Production Architecture
EDRMS	Electronic Document and records Management Systems
GSBPM	Generic Statistical Business Process Model
GSIM	Generic Statistical Information Model
ICDMS	Integrated and Collaborative Data Management System
ICPD	International Conference on Population Development
ISAP	Initial Strategic Action Portfolio
KMS	Knowledge Management System
LISGIS	Liberia Institute of Statistics and Geo-Information Services
LNCSPA	Liberia National Common Statistical Production Architecture
IoT	Internet of Things
MDC	Mobile Data Collection
MFDP	Ministry of Finance and Development Planning
MTEF	Medium Term Expenditure Framework
NFC	Near Field Communication
NSDS	National Strategy for the Development of Statistics
NSS	National Statistical System
PMU	Project Management Unit
TWG	Technical Working Group
UNFPA	United Nations Population Fund

EXECUTIVE SUMMARY

Liberia stands at a pivotal moment in its development trajectory. The ambitious ARREST Agenda for Inclusive Development (2025–2029), together with the nation's commitments to the Sustainable Development Goals (SDGs) and the African Union's Agenda 2063, demands a robust, adaptive, and responsive National Statistical System (NSS). This third-generation National Strategy for the Development of Statistics (NSDS III) is designed to be the cornerstone of that transformation — not merely a plan, but a catalyst for systemic reform and statistical transformation.

Building on the foundations of its predecessors (NSDS I and NSDS II), the NSDS III is envisioned as both a Statistical Disruptor and Change Agent, actively guiding reform and system strengthening in response to a comprehensive assessment of the NSS. Its overarching aim is to rethink and re-engineer how official statistics are produced, governed, communicated, and used to drive development, innovation, and effective monitoring, evaluation, and learning.

Liberia's NSS comprises a network of institutions, legal frameworks, processes, and resources dedicated to the production, analysis, communication, secure storage, and management of official statistics, ensuring that these statistics are findable, accessible, interoperable, and reusable. The system has faced persistent challenges due to historical disruptions, limited capacity, and infrastructural weaknesses. NSDS III seeks to respond to these challenges by aligning Liberia's statistical priorities with national development objectives—specifically the ARREST Agenda for Inclusive Development—and global commitments including the Sustainable Development Goals (SDGs).

A comprehensive assessment of the NSS revealed a critical juncture: strong awareness of innovative data and statistical practices coexists with significant gaps in foundational capabilities. While there is overwhelming support (94.1%) for an integrated data management system and growing interest in non-traditional data sources, the assessment found that only about half of NSS institutions employ standardized methodologies (48.0%) or quality assurance processes (56.0%). The adoption of advanced tools — such as artificial intelligence (AI) (5.9%), mobile data collection (11.5%), and self-service analytics (35.3%) — remains limited, hindering the system's efficiency, responsiveness, and analytical depth.

Other deficiencies constraining the NSS's ability to produce high-quality data and, ultimately, reliable official statistics for effective policymaking and governance include the limited and inconsistent adoption of data modelling—reported by only 23.5% of NSS institutions—and the weak establishment of advanced data management roles across the system.

To respond to these gaps and position Liberia's NSS for the future, NSDS III adopts a forward-looking approach that emphasizes fit-for-purpose data infrastructure, advanced analytics, and innovative communication tools. This includes encouraging the gradual adoption of data systems that can easily work with different types of data, the use of integrated data structures such as knowledge graphs, improved data exchange mechanisms, and database systems that handle both traditional and newer types of data to strengthen data integration and quality. The strategy also promotes the development of predictive and geospatial analytics capabilities, automation of data quality processes, and conversational platforms that broaden access to official statistics. Together, these innovations lay the foundation for a more responsive, interoperable, and insight-driven NSS.

To bridge this gap, the NSDS III is anchored in the Golden Triangle framework, addressing the interconnected pillars of People, Processes, and Technology:

- **People:** Prioritizing human capital development through targeted recruitment and capacity-building across the full data value chain—including data modelling, data engineering, data governance, data science, AI, data visualization, and data storytelling—to strengthen the production, management, and communication of high-quality and fit-for-purpose data and official statistics. This pillar also fosters a culture of data literacy, analytical excellence, and innovation across the NSS to ensure that institutions can generate, interpret, and use evidence that drives national development.
- **Processes:** Institutionalizing robust quality assurance, standardized methodologies, and strengthened legal frameworks to ensure data reliability, comparability, and ethical management — including harmonized data collection instruments design, formal data-sharing agreements that clearly define usage responsibilities, permitted scope of use, and data rights, and the adoption of the FAIR Data Principles to enhance interoperability and responsible data communication across the NSS.
- **Technology:** Championing a technological leap forward through the adoption of Cloud Technology, an Integrated and Collaborative Data Management System (ICDMS), an Electronic Document and Records Management System (EDRMS), and interoperable platforms that automate data flows across the NSS. This pillar also promotes the use of Business Intelligence (BI) and visualization tools, AI-driven analytics, Knowledge Graphs and NoSQL databases such as graph databases. It further supports the integration of non-traditional data sources to strengthen and broaden the scope of data collection, processing, and communication, ultimately fostering self-learning capabilities—leading to the emergence of citizen data scientists—and enhancing the quality, accessibility, and use of data and official statistics.

Guided by principles of national ownership, inclusivity, and alignment with international standards, the development of this strategy was deeply consultative. It presents a clear vision and mission statements, strategic goals and objectives, and a costed, prioritized action plan supported by a sustainable financing framework.

The implementation of the NSDS III over the period 2026–2030 will require an estimated total investment of USD 324,829,823.00 million. This financing envelope reflects the scale of the transformational reforms envisaged across coordination, data production, capacity development, innovation, data use, and sustainable financing. The annual indicative resource requirements are USD 69,987,376.00 million in Year 1, USD 65,692,178 million in Year 2, USD 67,379,672.00 million in Year 3, USD 55,647,718.00 million in Year 4, and USD 66,122,879.00 million in Year 5, representing a phased investment profile designed to support priority reforms, strengthen institutional readiness, and ensure sustainable system-wide improvements throughout the five-year period.

The financing of NSDS III will be anchored in a blended model that combines national budget allocations, development partner support, sector contributions, and in-kind institutional inputs. The Government of Liberia is committed to integrating statistical investments into national planning and budgeting frameworks, while working closely with development partners to co-finance priority reforms. This approach promotes financial efficiency, coordination, accountability, and long-term sustainability across the NSS.

Financing of the strategy will be delivered through a centralized, activity-based mechanism managed by the Project Management Unit (PMU) of the Ministry of Finance, in full alignment with Liberia's Public Financial Management framework. Under this model, NSS institutions identify, design, and cost their activities, which are then technically validated by LISGIS and submitted to the PMU for financial appraisal and approval. Once approved, the PMU disburses funds directly to consultants, vendors, field teams, and service providers—ensuring strong fiduciary control and eliminating the need for institutional project accounts. This harmonized and transparent financing arrangement provides a coherent and accountable investment pathway for statistical transformation.

The NSDS III sets a high ambitious direction for the NSS:
Vision: A trusted, inclusive, interoperable, innovative, and responsive National Statistical System that produces, uses, and communicates high-quality official statistics to power sustainable national transformation"

Mission: "An agile, coordinated, user-centric national data ecosystem that builds capacity, drives innovation, produces, uses, and communicates high-quality official statistics to power inclusive and evidence-based national development"

This new framework elevates the system from simply meeting user needs (the focus of NSDS II) to establishing an integrated national data ecosystem that drives innovation and inclusive development.

To truly transform Liberia, the NSDS III supports the vision with six Strategic Goals (SGs), which together constitute a coherent roadmap for transformation. The six SGs are:

1. **SG1: Strengthen Statistical Coordination, Governance, and Trust across the NSS.** This addresses the need for strong institutions, visionary leadership, and coherent national systems to reinforce public confidence and ensure accountability.
2. **SG2: Re-engineer the National Data Production Ecosystem to Generate and Communicate Fit-for-Purpose Statistics that Drive Effective Policy and Innovation.** This goal focuses on moving from fragmented production to a dynamic, technology-enabled system by adopting innovative, digital, and automated data collection methods, and institutionalizing quality assurance standards.
3. **SG3: Strengthen Sustainable Human and Institutional Capacity for a Professional, Agile, and Future-Ready NSS.** This aims to build a skilled workforce capable of leveraging emerging technologies by institutionalizing capacity development systems, professional standards, and professionalization.
4. **SG4: Promote Inclusive Data Use and Embed FAIR Data Principles to Ensure Equitable Access, Interoperability, and Widespread Uptake of Official Statistics.** This ensures that data is **Findable, Accessible, Interoperable, and Reusable (FAIR)** to foster transparency and inclusion in data ecosystems, thereby amplifying the voices of marginalized groups
5. **SG5: Promote Innovation and Build a Resilient National Data Ecosystem that Leverages AI and Emerging Technologies to Support Digital Transformation, Collaboration, and Inclusive Development.** This positions AI, machine learning, and automation as key catalysts for resilience, focusing on strengthening innovation readiness, ethical governance, and strategic collaboration
6. **SG6: Secure Sustainable and Innovative Financing Models to Ensure Long-Term Resilience, Autonomy, and Continuous Transformation of the National Statistical System.** This critical goal addresses limited and irregular funding by securing diversified

financing, integrating statistical costs into national budgeting, and promoting financial efficiency and accountability.

A robust Monitoring, Evaluation, and Learning (MEL) framework is embedded within the strategy to track progress, ensure accountability, and facilitate adaptive management. By successfully implementing the NSDS III, Liberia will empower its NSS to produce high-quality and fit-for-purpose data and statistics that drive the ARREST Agenda, foster transparent governance, and unlock a future of evidence-based prosperity for all Liberians.

In conclusion, NSDS III will serve as a dynamic, living framework that guides Liberia's transition towards a world-class, technology-enabled NSS. It will foster evidence-driven governance and promote transparency, efficiency, and inclusivity in the country's developmental agenda, positioning Liberia to meet the increasing and diverse data demands of the 21st century.

Implementation of the NSDS III will require strong leadership, effective coordination, and a robust Monitoring, Evaluation, Learning Framework to ensure measurable progress and continuous learning across the NSS. By prioritizing these areas, NSDS III aims to position Liberia's NSS as a world-class, technologically advanced system that contributes effectively to national development and global commitments.

CHAPTER 1: INTRODUCTION, CONTEXT, AND STRATEGIC FOUNDATION

1.1 The Mandate for Change: The Imperative for NSDS III

Liberia's third-generation National Strategy for the Development of Statistics (NSDS III) represents a fundamental shift in how the nation approaches statistical development. Far more than a planning document, it is defined as a Statistical Disruptor and National Change Agent—designed to critically rethink and re-engineer how data and official statistics are produced, governed, communicated, and used to drive development and innovation, including inclusive growth under the ARREST Agenda, while enabling robust monitoring and evaluation across Liberia and beyond.

The NSDS III is underpinned by a powerful, multi-faceted mandate for change, calling for immediate and strategic modernization of the National Statistical System (NSS). This mandate is driven by three core imperatives:

- The ARREST Agenda for Inclusive Development (2025–2029): The launch of this national development plan creates a non-negotiable demand for an NSS capable of delivering fit-for-purpose data and official statistics for its implementation, monitoring, and evaluation.
- Persistent Gaps and Capacity Deficits: The current NSS lacks the capacity to fully meet the demands of the national agenda due to persistent gaps, positioning the NSDS III as a critical enabler of national development and transformation.
- Lessons from NSDS I and NSDS II: While NSDS I (2008–2013) laid the groundwork for post-war statistical recovery, the non-implementation of NSDS II (2017–2021, later extended to 2022–2026) due to institutional and resource constraints underscores the need for a re-engineered strategy that is both visionary and executable.

To achieve this systemic transformation, the NSDS III is anchored in the "Golden Triangle" framework—an integrated approach that evaluates People, Processes, and Technology to drive systemic change:

1. **People:** This involves assessing human resource capacity, skills, organizational culture, and leadership to build a workforce capable of delivering modern statistical solutions.
2. **Processes:** This requires evaluating statistical methods, legal frameworks, and quality assurance mechanisms to ensure robustness, standardization, and compliance with international best practices.
3. **Technology:** This entails analyzing IT infrastructure, data storage/processing capabilities, and tools for data collection, governance, and communication to enable innovation and efficiency.

1.2 Historical Context and Evolution of Liberia's Statistical and Spatial System

The evolution of Liberia's national statistical system began in the mid-20th century, moving from rudimentary administrative record-keeping to a formal structure designed to support modern governance. A significant milestone was the establishment of the Division of Statistics in 1957, which centralized official data activities and laid the technical foundation for national capacity. This institutional framework enabled Liberia to successfully conduct its first three scientific Population and Housing Censuses in 1962, 1974, and 1984, providing essential demographic and socio-economic baselines for national development planning. However, this foundational progress was severely undermined by the prolonged and devastating civil conflicts (1989 - 2003), which resulted in the near-total collapse of the national statistical infrastructure, the widespread destruction of invaluable data archives, and a profound loss of technical expertise, effectively halting all census and survey operations and creating a massive data gap.

1.2.1 Rebuilding from Conflict: The Role of NSDS I (2008–2013)

Liberia's statistical system suffered severe disruptions due to prolonged civil conflict, which destroyed infrastructure and institutional memory. The establishment of the Liberia Institute of Statistics and Geo-Information Services (LISGIS) in 2004 marked a pivotal step in rebuilding the country's statistical capacity. The NSDS I (2008–2013) was the first concerted effort to restore and strengthen the NSS, achieving notable progress such as:

- Completion of **key surveys and censuses** (e.g., Demographic and Health Survey, Core Welfare Indicators Questionnaire).
- **Strengthened coordination** among statistical agencies.
- **Capacity-building initiatives** to rebuild human and institutional resources. For instance, through the NSDS I, 100 middle-level statisticians and Geographic Information Systems (GIS) officers were trained under an "Induction Training Programme" offered by the University of Liberia (UoL), under the sponsorship of the European Union (EU) and the United Nations Development Programme (UNDP). Additionally, LISGIS sponsor three staff members to pursue Master's degrees at the Makerere University in Uganda.

Despite these gains, outdated procedures, limited resources, and fragmented coordination persisted–necessitating deeper reform.

1.2.2 Lessons from NSDS II (2017–2021): Addressing Gaps and Building Resilience

NSDS II was designed to consolidate and extend Liberia's statistical modernization. Initially covering the period 2017–2021 and later updated to span 2022–2026, its implementation was derailed by institutional constraints and external shocks—including the Ebola outbreak and COVID-19 pandemic. Despite these efforts, NSDS II was ultimately not implemented, exposing persistent challenges in coordination, resourcing, and institutional resilience across the NSS.

This experience underscores the urgent need for NSDS III—not merely as a successor, but a strategic reset: a re-engineered approach designed to overcome systemic barriers and ensure the long-term growth, credibility, and sustainability of the NSS.

1.3 The Strategic Imperative: Why NSDS III?

The NSDS III is a response to urgent, unmet needs in Liberia's NSS, as evidenced by the 2025 NSS Assessment Findings and the demands of the ARREST Agenda. The assessment revealed critical gaps in digital readiness, data production methods, and institutional capacity:

- Only **2.9%** of **NSS** institutions have **AI Strategy**
- Just **14.7%** are using **official Self-Service Data Analytics Tools**.
- Only **32.4%** currently deploy **Mobile Data Collection (MDC)** methodologies in their data production workflows.

These findings underscore the need for a transformative strategy that repositions the NSS as a driver of inclusive national development, data-driven governance, and global alignment. Specifically, the NSDS III aims to:

- **Re-engineer the NSS** by integrating fit-for-purpose technologies (e.g., AI, automation, digital tools), standardized processes, and innovative solutions to address persistent gaps in data governance, coordination, production, processing, and communication, and storage.
- **Strengthen institutional resilience** to ensure the NSS is adaptive, sustainable, and aligned with Liberia's national priorities, including the ARREST Agenda (2025–2029), Sustainable Development Goals (SDGs), and African Union (AU)'s Agenda 2063.
- **Transform the NSS** into a dynamic, evidence-driven institution capable of supporting data-driven governance, inclusive development, and global commitments.

1.4 Vision and Mission of NSDS III

Vision Statement
A trusted, inclusive, interoperable, innovative, and responsive National Statistical System that produces, uses, and communicates high-quality official statistics to power sustainable national transformation.

Mission Statement
An agile, coordinated, user-centric national data ecosystem that builds capacity, drives innovation, produces, uses, and communicates high-quality official statistics to power inclusive and evidence-based national development.

1.5 Strategic Goals and Objectives

The NSDS III is organized around six Strategic Goals (SGs), which collectively define a coherent roadmap for building an agile, trusted, and adaptive NSS. Each of these goals is supported by Strategic Objectives (SOs), which outline the specific actions and intentions required to achieve the broader transformation envisioned by the NSDS III.

The SGs represent thematic pillars that address critical areas such as coordination, data production, capacity development, inclusivity, innovation, and sustainable financing. Together,

they provide a structured and actionable framework for re-engineering and modernizing Liberia's NSS.

The six Strategic Goals are:

1. Strengthen Statistical Coordination, Governance, and Trust across the NSS
2. Re-engineer the National Data Production Ecosystem to Generate and Communicate Fit-for-Purpose Statistics
3. Strengthen Sustainable Human and Institutional Capacity for a Professional, Agile, and Future-Ready NSS
4. Promote Inclusive Data Use and Embed FAIR Data Principles
5. Promote Innovation and Build a Resilient National Data Ecosystem Leveraging AI and Emerging Technologies
6. Secure Sustainable and Innovative Financing Models for Long-Term Resilience and Transformation

1.6 Development Process

The NSDS III was developed through a participatory, evidence-informed process led by a consultant contracted by UNFPA Liberia, which also played a pivotal role in organizing both online and in-person engagements. The process was designed to ensure national ownership, institutional relevance, and strategic alignment with Liberia's national priorities.

A Core Team of seven members from LISGIS coordinated the process, working alongside a Technical Working Group (TWG) composed of focal persons from 34 institutions across the NSS. These institutions were formally invited to contribute to the strategy's design, assessment, and validation.

The development process began with a series of online meetings between the consultant, UNFPA Project Manager, and the Core Team. These led to the design and online administration of a comprehensive NSS Assessment Questionnaire, which focused on four key areas:

1. **Human Capital**—Evaluating workforce skills, capacity, and development
2. **Technology**—Assessing tools, systems, and infrastructure supporting data activities
3. **Processes and Methodology**—Reviewing workflows, methodologies, and operational efficiency
4. **Systems and Governance**—Understanding the integration, functionality, and effectiveness of the data ecosystem.

Emerging Technologies and Innovations such as the use of Non-Traditional Data Sources (NTDS) were also considered.

The consultant provided virtual training to the Core Team, who in turn facilitated in-person training for institutional focal persons—ensuring broad understanding and ownership of the assessment process.

Following data collection and analysis, a five-day in-person workshop was convened by the UNFPA, Liberia to validate the assessment findings. These findings—such as the limited adoption of AI strategies (2.9%), low use of Self-service Analytics Tools (14.7%), and modest deployment of Mobile Data Collection methodologies (32.4%)—provided a clear evidence base for the strategic priorities of NSDS III.

This collaborative and iterative process ensured that NSDS III is not only technically sound, but also nationally owned, strategically grounded, and institutionally actionable.

1.7 NSDS III Structure

This strategy document is organized into seven chapters, each building on the previous one to guide Liberia's statistical transformation:

- **Chapter 1: Introduction, Context, and Strategic Foundation** — outlines the rationale, historical context, and transformative intent of **NSDS III**.
- **Chapter 2**: **The National Statistical System (NSS) of Liberia** — describes the mandate, structure, actors, and coordination mechanisms of the **NSS**.
- **Chapter 3: Assessment of the Current Statistical System** — presents a diagnostic review of Liberia's **NSS**, highlighting strengths, gaps, and systemic challenges that inform the strategy's design and priorities.
- **Chapter 4: Strategic Framework and Objectives** — defines Vision, Mission, Strategic Goals, and Strategic Objectives that operationalize the strategy's vision.
- **Chapter 5: Implementation Plan Framework** — outlines the implementation phases, institutional arrangements, key programmes, priority activities, timelines, and high-level implementation matrix required to deliver the strategy.
- **Chapter 6: Initial Strategic Action Portfolio and Costed Activities** — presents the costed activities, financing needs, resources mobilization strategies, and financial governance mechanisms required to support **NSDS III** implementation.
- **Chapter 7: Monitoring, Evaluation, and Learning for Statistical Transformation** — outlines mechanisms for tracking progress, ensuring accountability, and sustaining long-term transformation of the **NSS**.

Together, these chapters form a coherent and actionable roadmap for re-engineering Liberia's NSS. The next chapter begins with a detailed assessment of the current statistical system—laying the foundation for the strategic choices that follow.

CHAPTER 2: THE NATIONAL STATISTICAL SYSTEM (NSS) OF LIBERIA

2.1 Introduction

The National Statistical System (NSS) of Liberia is the backbone of the country's data ecosystem. It is a comprehensive and coordinated network of organizations, skilled personnel, legal mandates, policies, and resources, including technological infrastructure, that work together to produce, govern, process, analyze, and communicate official statistics. Guided by shared frameworks and methodologies, the NSS enables evidence-based decision-making, fosters transparency, and supports national development priorities.

As Liberia's data ecosystem evolves, clarity in its official terminology and institutional framework is essential. The chapter traces the historical and legal development of the **NSS**, defines it composition, and clarifies the strategic nomenclature adopted under **NSDS III**.

2.2 Evolution of the NSS

Liberia's NSS has evolved through distinct phases, reflecting the country's journey of recovery and institutional development. Its modern form is rooted in the post-war era, defined by foundational legislation and crucial lessons learned from subsequent challenges.

2.2.1 Post-War Foundation and Legal Mandate (Pre-2008 to 2013)

The NSS was fundamentally reshaped by the legacy of civil conflict, which devastated statistical infrastructure and institutional memory. It was in direct response that the pivotal Statistics Act of 2004 established the Liberia Institute of Statistics and Geo-Information Services (LISGIS), creating a central coordinating body for the system. The Act legally defined this system as National Statistical and Spatial System (NSSS).

Building on this legal foundation, the first National Strategy for the Development of Statistics (NSDS I), 2008–2013 provided a structured framework for recovery, guiding efforts to restart essential activities such as the National Population and Housing Census, demographic surveys, and rebuilding human capacity. While this period successfully restored basic statistical functions, it left the system with foundational challenges in technological modernization, sustainable financing, and deep institutional coordination.

2.2.2 A Period of Institutional Challenge and Reflection (Post-2013)

The years following NSDS I tested the NSS's resilience. The non-implementation of a subsequent strategy, coupled with shocks such as the Ebola and COVID-19 pandemics, exposed vulnerabilities in institutional ownership, coordinated planning, and sustainable financing.

This period was not one of stagnation but of critical learning, underscoring that without a unified identity, robust coordination, sustainable resources, and adaptive capacity, the NSS could not fully meet the nation's evolving data demands. These lessons—particularly the need

for clear terminology and strong institutional leadership—directly inform the ambitious, system-wide transformation agenda of NSDS III.

2.3 Nomenclature: NSS vs. National Statistical and Spatial Data System

The history of Liberia's statistical system includes multiple official names, reflecting shifts in legal framing and strategic orientation. This variation in terminology led to conceptual ambiguity and inconsistent usage across institutions. The inclusion of "spatial" in the system's legal name has at times elevated one data modality above others, despite spatial data being an integral part of a modern statistical system's operational scope.

To resolve this ambiguity and enhance strategic focus, NSDS III formally reaffirms "National Statistical System (NSS)" as the official designation. This choice restores terminological coherence, affirms institutional continuity, and positions spatial data as a strategic enabler rather than a defining feature.

The approach of NSDS III is consistent with the NSDS Guidelines 3.0 developed by PARIS21, which champions adherence to international best practices while allowing for national contextualization. By formally adopting "NSS," Liberia strengthens its ability to engage in global statistical discourse, benchmark progress, and promote comparability — without diminishing the importance of spatial data or its integration into national planning.

2.4 Functional Architecture of the NSS

Liberia's **NSS** is best understood as a comprehensive and collaborative ecosystem in which institutions perform several overlapping functions, as defined and anchored by the **2004 LISGIS Act**. These functions are not siloed — they are interdependent, reinforcing the system's integrity, responsiveness, and strategic relevance.

2.4.1 Coordination, Governance, and Standard-Setting

This is the central leadership function, legally mandated to the LISGIS and therefore responsible for leading the **NSS**, setting professional standards, developing the coordinating framework, and ensuring the integrity and coherence of the entire system.

2.4.2. Data Production and Management

This function involves the collection, compilation, analysis, and stewardship of data. The primary producers include:

- **LISGIS**, which conducts national censuses and surveys
- Government Ministries, Agencies, and Commissions (**MACs**), which generate vital statistics from administrative records
- Other actors defined in the Act, such as NGOs and development partners, who contribute valuable data through thematic surveys and specialized studies

2.4.3. Data Use for Evidence-Based Decision-Making

This function gives the entire system its purpose. Crucially, the most important data users are also data producers. These include:

- **Policymakers and planners within MACs**, who use data for sectoral planning, budgeting, and monitoring
- **LISGIS**, which integrates administrative data to compile national accounts and other indicators

- **The broader community of users**, including the Legislature, academic institutions, civil society, the private sector, and the public

NSDS III is designed to strengthen the entire ecosystem, recognizing that improving the quality of data production is directly linked to enhancing the capacity for its use. This strategy affirms the collaborative, multi-functional nature of the NSS and positions it as a driver of national transformation.

2.5 Strategic Relevance of the NSS

The strategic relevance of the NSS is defined by its indispensable role in empowering evidence-based governance and driving sustainable national development. As the nation's core data ecosystem, a well-functioning NSS provides the credible information necessary to design, implement, and evaluate public policy.

The NSS is, therefore, strategically vital for:

- **Informing Policy and Planning:** Providing the evidence base for effective policy formulation, resource allocation, and development planning at both national and subnational levels.
- **Monitoring National Development Goals:** Enabling the country to track its progress against key national priorities, including the ARREST Agenda and the Sustainable Development Goals (SDGs).
- **Promoting Transparency and Public Trust:** Strengthening governance and accountability by ensuring that citizens, civil society, and the media have access to reliable and impartial official statistics.
- **Strengthening Resilience and Equity:** Identifying vulnerabilities and informing targeted interventions that build resilience to shocks and promote inclusive development for all Liberians.
- **Driving Innovation and Digital Transformation:** Serving as a platform for modernizing data systems, integrating new technologies like spatial data, and fostering a culture of data use across society.

Ultimately, the purpose of **NSDS III** is to strengthen these functions, positioning **LISGIS** and the entire **NSS** as strategic enablers of Liberia's institutional transformation, innovation, and inclusive growth.

CHAPTER 3: ASSESSMENT OF THE NSS — KEY FINDINGS AND INSIGHTS

3.1 Introduction and Purpose

Every system has an aspirational state a vision of what it seeks to become. Realizing that vision and achieving that state, however, requires a clear understanding of present realities and the pathways needed to re-engineer data activities toward the desired future. Liberia's NSS is no different.

As part of the development process for NSDS III, a comprehensive and structured assessment was undertaken to diagnose the current state of the NSS and identify opportunities for transformation. This diagnostic exercise forms the cornerstone of NSDS III, ensuring that the strategy is not only visionary but also firmly anchored in evidence. It provides the grounded, practical understanding required to reform the NSS and Liberia's statistical system to toward its envisioned role in national development.

Importantly, the assessment was not merely diagnostic it was strategic. It was designed to generate actionable insights into statistical capacity, governance practices, data systems, and technological readiness across the NSS. By highlighting both foundational gaps and opportunities for reform and innovation, the assessment provides a clear roadmap for modernization and alignment with emerging regional and other global standards.

The insights presented in this chapter form the foundation of NSDS III. They ensure that the proposed reforms are responsive to institutional conditions, national development goals under the ARREST Agenda and global commitments such as the SDGs.

The next section outlines the assessment approach, the institutions involved, and the rationale behind their inclusion providing the context for the thematic findings that follow. *The full list of participating institutions is included in Annex 1 for reference.*

3.2 Assessment Approach and Coverage

To move from strategic intent to actionable insight, the iterative development process of NSDS III included a comprehensive and structured assessment of the NSS, conducted through two primary data collection methodologies. This section outlines the approach used, the institutions covered, and the rationale behind their inclusion.

Assessment Methods

The assessment was carried out using two complementary methods:

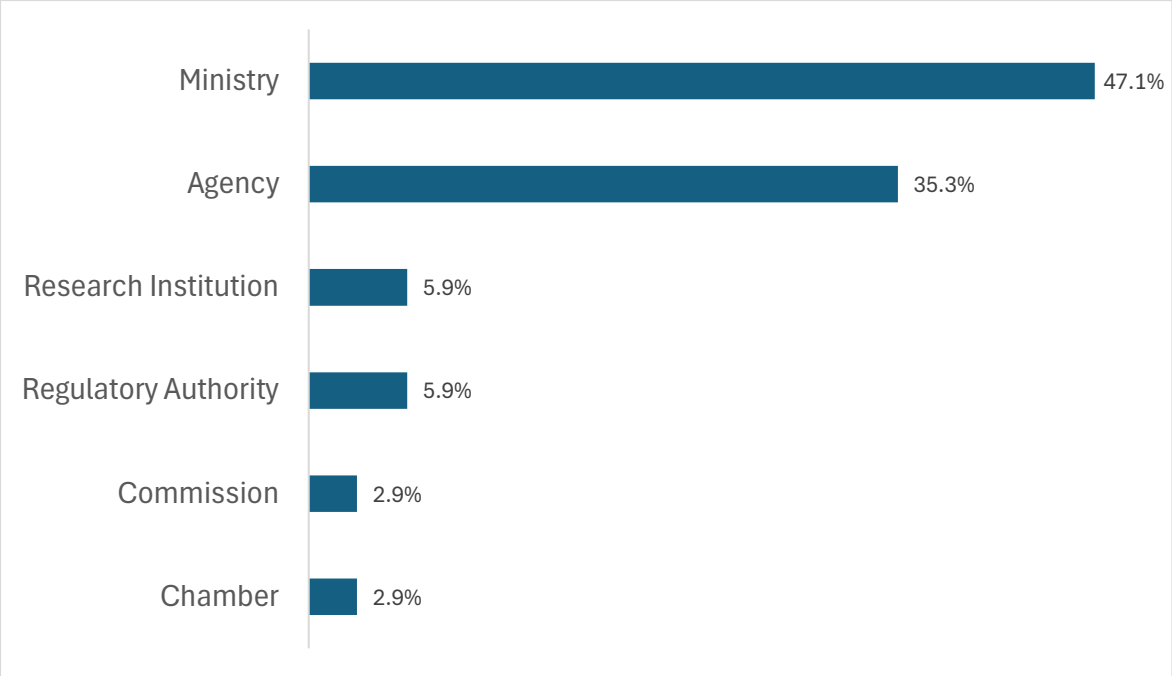
1. **Structured Online Questionnaire**: A comprehensive instrument was administered to capture both quantitative and qualitative data across four core domains—*Human Capital, Technology, Processes and Methodologies, and Systems and Governance. The tool also explored cross-cutting themes such as the adoption of advanced and emerging technologies, and the integration of non-traditional data sources (NTDS), including the potential use of social media data to enhance traditional official statistics such as national accounts*.
2. **Desk Review**: A desk review of key institutional documents was conducted, including foundational legal frameworks (e.g., **LISGIS Act 2004**), previous strategic plans (e.g.,

NSDS I and II), national development plans such as the **ARREST Agenda**, and operational guidelines like the African Charter on Statistics (**AFCS**). This validated questionnaire responses and enriched contextual understanding, ensuring the assessment reflected both stated capacities and documented practices.

Institutional Coverage

A total of **35 institutions** were invited to participate in the assessment. These institutions were selected through a purposive sampling approach, based on their mandates in statistical production, coordination, administration, regulation, and communication within the **NSS**. The selection aimed to capture a diverse cross-section of ministries, agencies, commissions, and other public entities actively engaged in data-related activities.

Figure 3-0-1: ***Composition of the NSS institutions who responded to the invitation by classification***



Of the **35** institutions invited, **34 responded, yielding a 97% response rate**. This high level of participation reflects the relevance of the assessment and the strong commitment of **NSS** stakeholders to statistical reform and modernization.

Representativeness and Strategic Relevance

While the assessment did not cover every institution within the **NSS**, the selection was strategically designed to reflect the operational backbone. The institutions assessed represent a broad spectrum of data producers, users, and coordinators, ensuring that the findings are grounded in institutional realities and system-wide perspectives. As such, the assessment prioritizes strategic relevance over statistical generalizability—providing a credible and actionable foundation for **NSDS III**.

3.3 Institutional Landscape, Mandates, and Coordination Models

Liberia's National Statistical System (NSS) consists of a diverse array of institutions with differing mandates, capacities, and levels of coordination. As a decentralized system, its

effectiveness depends not only on the clarity of institutional mandates but also on the strength of the coordination mechanisms that link sector institutions to LISGIS, the national statistical coordinator. Understanding this institutional landscape is essential for designing a strategy that is inclusive, coherent, and operationally grounded. The assessment therefore examined three foundational elements: the clarity of institutional mandates, their practical operationalization, and the models through which coordination and statistical production take place.

3.3.1 Legal and Institutional Mandates

Every government institution, by virtue of its establishing Act, policy framework, or administrative function, carries a mandate that encompasses data production, information management, or reporting. However, the assessment revealed striking gaps in institutional awareness and interpretation of institutional mandate activities across the **NSS**.

Notably, **23.5%** of responding institutions reported having no legal mandate for data-related activities—a finding that suggests contradiction highlighting an important governance issue. It most cases, this reflects limited staff awareness of the provisions within institutional Acts, weak internal communication of legal responsibilities, or the absence of and absence of mandates that are explicitly framed.

Among institutions that acknowledge having a mandate, **61.5%** were unsure of its specific nature and simply cited a **National Legal Mandate**.

These findings present a clear opportunity for sector-specific mandate clarification through internal directives, as well as **NSS-wide** sensitization efforts led by **LISGIS**.

Figure 3-0-2: Types of legal mandates for data activities

3.3.2 Coordination and Statistical Production Models

The effectiveness of statistical production within the **NSS** depends significantly on how data production activities are organized and coordinated within and across institutions. As a coordinated network, the **NSS** encompasses a diverse array of institutions, each employing internal models suited to their specific mandates and operational contexts. The assessment reveals the rich tapestry of these internal coordination methods while highlighting a strong

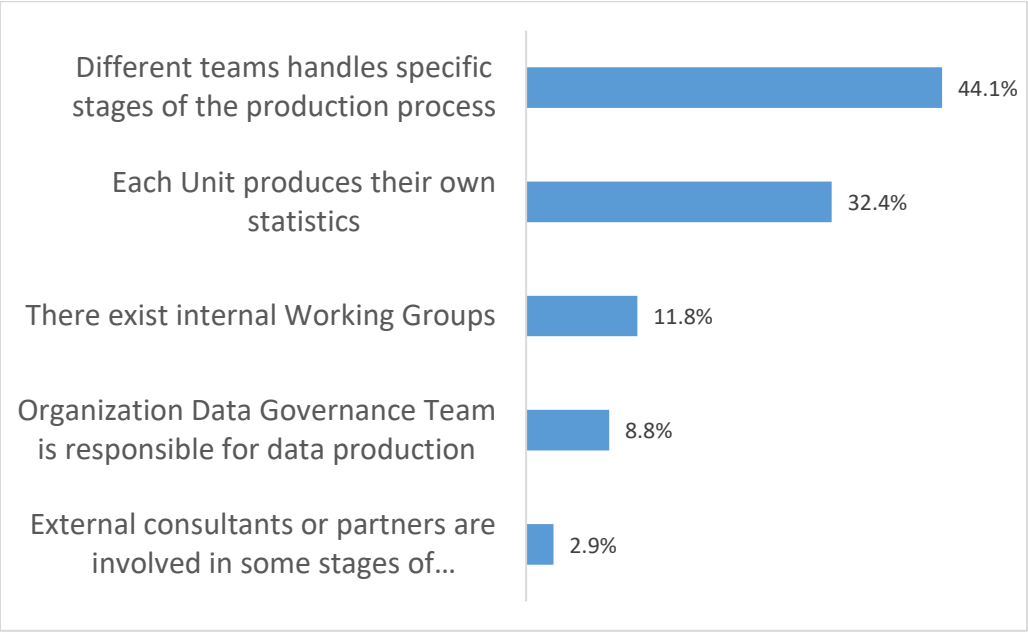
consensus on the need for enhanced *system-wide* coordination mechanisms to unify the network more effectively.

A. Diversity of Internal Coordination Models

The NSS demonstrates a variety of approaches to internal statistical coordination, reflecting the adaptive nature of its member institutions. The distribution of these models is as follows:

- **Process-Oriented Coordination (44.1%):** The most prevalent model, where "*different teams handle specific stages of the production process*," indicates a structured, assembly-line approach that can promote specialization within larger institutions.
- **Decentralized Unit-Level Production (32.4%):** A significant proportion of institutions operate under a model where "each unit produces their own statistics." This is a logical approach for organizations with highly specialized, semi-autonomous departments.
- **Structured Collaborative Models (20.6%):** A substantial minority employ formal collaborative structures, such as "Internal Working Groups" (**11.8%**) or an "Organizational Data Governance Team" (**8.8%**), representing a more centralized and integrated approach to internal data governance.

Figure 3.3: Coordination of Statistics Production



This diversity is a feature of a complex network, not a flaw. However, it underscores the importance of **LISGIS's** role in providing overarching standards and frameworks to ensure interoperability and consistency across these different internal models.

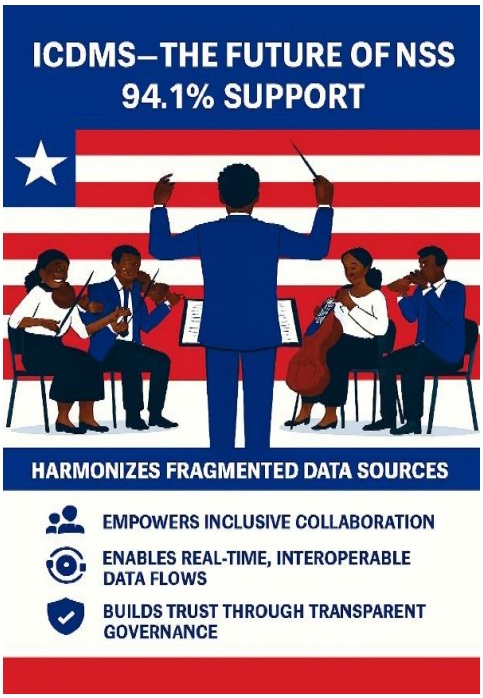
B. System-Wide Coordination: Strong Foundations, Emerging Consensus for Enhancement

While internal models vary, the NSS shows a strong foundational commitment to system-wide collaboration, with a clear desire to make these interactions more efficient and standardized.

- **Widespread Data Sharing:** A strong majority of institutions (**76.5%**) report currently sharing data with other NSS members. This commitment is even higher for the sharing of structured **datasets (84.6%)**, demonstrating that the core activity of a coordinated network is actively occurring.

- **Operational Necessity Drives Collaboration:** A telling finding is that half of the institutions that reported having **no clear legal mandate for data activities are nonetheless sharing data**. This indicates that collaboration is often driven by practical operational needs, highlighting the organic, demand-driven cooperation within the network.
- **Overwhelming Consensus for a Unified System:** The most powerful finding is the near-universal support for enhancing system-wide coordination. An overwhelming **94.1% of institutions support the adoption of an Integrated and Collaborative Data Management System (ICDMS)**, anticipating benefits in **Improved Data Quality, Enhanced Collaboration, and Interoperability**. This reflects a collective vision from within the NSS itself—a call for strengthened infrastructure to support improved data quality, collaboration, and interoperability.

Figure 3-4: ICDMS adoption



C. Synthesis: A Collaborative Network for Enhanced Integration
The Liberian **NSS** is a living, collaborative network. The high rates of data sharing demonstrate its vitality, and the diversity of internal models reflects its adaptability.

The clear call for an **ICDMS** reflects not a rejection of current practices, but a natural evolution—a collective desire to mature from *coordinated collaboration* to *seamless integrated collaboration*. **NSDS III** must answer this call by providing the unified technological and governance framework that enhances efficiency while preserving the institutional diversity that makes the network resilient.

3.4 Technology Infrastructure and Readiness

Technology is the umbilical cord of every nation, government, and business entity—enabling essential functions, driving growth, and connecting us in a global landscape. It is therefore a foundational enabler of any effective **NSS**.

The assessment reveals a system in transition: gradually building digital capabilities, yet still characterized by uneven adoption of tools, platforms, and technical standards across institutions. While some institutions are embracing emerging systems and experimenting with advanced technologies, others remain reliant rely on outdated or fragmented platforms. This disparity undermines efficiency, interoperability, data quality, and ability to deploy fit-for-purpose innovations in data and statistical activities.

Technology infrastructure within the **NSS** spans digital data collection tools, data management systems, electronic record-keeping, analytics platforms, communication technologies, and advanced capabilities such as **AI** and the use of non-traditional data sources (**NTDS**). The findings presented in this section provide a comprehensive picture of the digital readiness of the **NSS** and highlight where targeted investments and reforms are most needed under **NSDS III**.

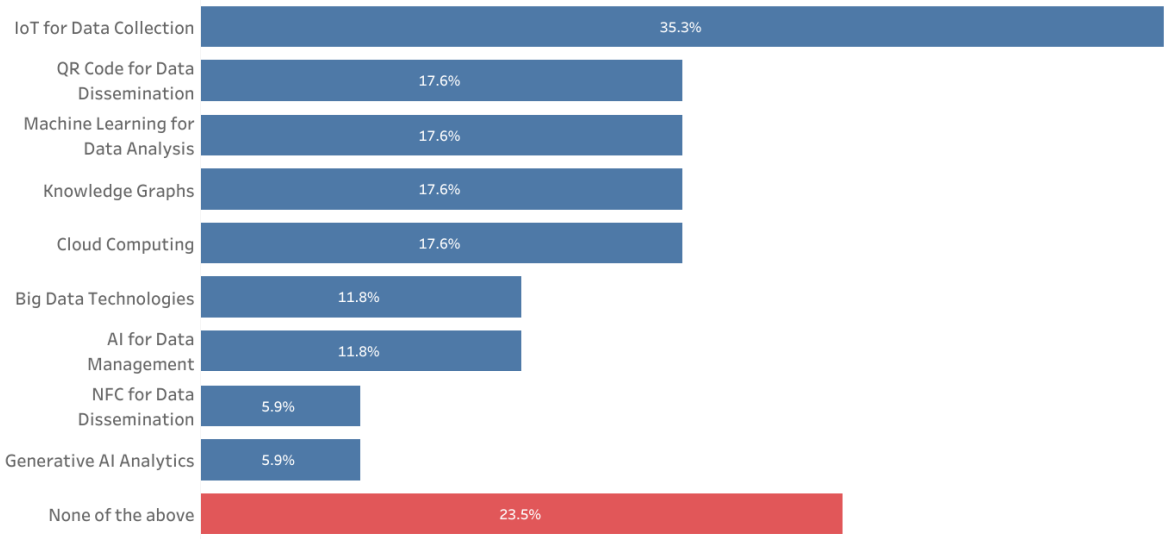
3.4.1 Data Management Strategy (DMS)

A Data Management Strategy (DMS) is a foundational indicator of technological maturity. Among the 50.0% of responding institutions that reported having DMS, only 20.0% have incorporated data modelling—a more advanced component of DMS—while 40.0% plan to implement it within 12 months. This suggests that while half of NSS institutions are building structured systems, many still lack foundational infrastructure for coherent data governance and lifecycle management. Without robust DMS frameworks, institutions struggle to harmonize metadata, ensure data traceability, and support cross-sectoral integration.

3.4.2 Advanced and Emerging Technologies

Adoption of advanced technologies remains limited and uneven. Only 17.6% of institutions report using tools such as Cloud Computing, Machine Learning, Knowledge Graphs, and QR Codes. Adoption of Big Data Technologies and AI for Data Management stands at 11.8%, while Generative AI Analytics and Near Field Communication (NFC) technologies are reported by just 5.9% of institutions.

Figure 3-5: Adoption of advanced and emerging technologies



This low uptake reflects both infrastructural constraints and capacity gaps, and underscores the need for strategic investment in digital literacy, infrastructure, and experimentation spaces.

3.4.3 Document and Records Management

Introduction

Document and Records Management (**DRM**) **is indispensable**—ensuring operational continuity, institutional memory, and accountability. From early handwritten registers to contemporary digital repositories, institutions have relied on structured ways to capture, store, retrieve, and preserve records. What has changed over time is how records are managed, especially with the shift from paper-based systems to electronic environments.

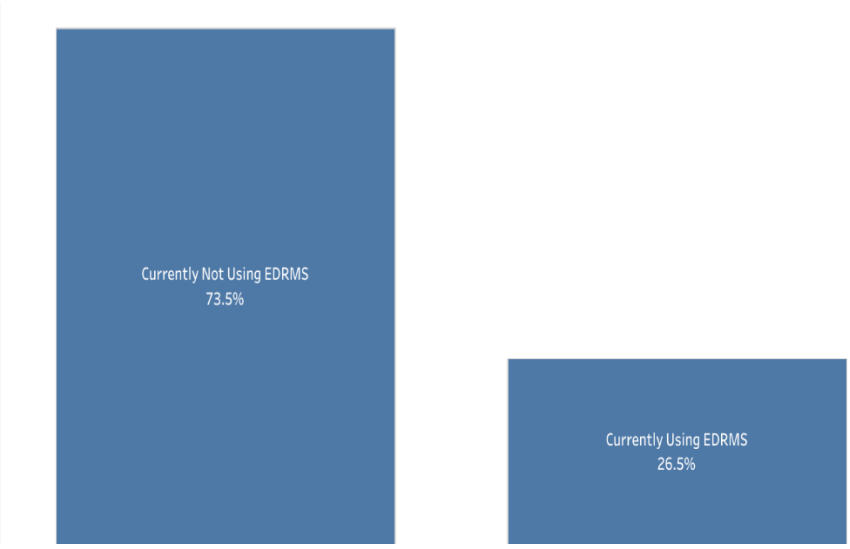
In the context of an **NSS**, **DRM** encompasses the policies, processes, technologies, and standards used to handle administrative documents, survey instruments, methodological documentation, data processing manuals, metadata, reports, and institutional records. As statistical work requires traceability, consistency, and compliance with both national and international standards, effective **DRM** ensures that institutional knowledge is safeguarded and accessible. Therefore, assessing the maturity of DRM practices is a critical indicator of the **NSS's** overall technological readiness and its capacity for evidence-based governance.

Broadly, **DRM** can be understood as a progression of approaches:

- **Paper-Based Records Management**: Reliance on physical files, archives, and manual filing systems. It is still widely used in many public institutions, but prone to fragmentation, loss, and inefficiencies.
- **Hybrid Records Management**: A mix of paper records and digital files stored on shared drives, email systems, or portable storage devices. Common during transitional phases but often results in duplication and inconsistent organization.
- **Electronic Document Management Systems (EDMS)**: Digital systems focused on storage, version control, indexing, and retrieval—useful for managing active documents and improving workflow efficiency.
- **Electronic Records Management Systems (ERMS**): Tools ensuring records meet legal, archival, and compliance requirements, with emphasis on long-term preservation, security, and audit trails.
- **Electronic Documents and Records Management Systems (EDRMS)**: Integrated systems combining **EDMS** and **ERMS** functionalities, providing end-to-end lifecycle management, access control, and organizational-wide interoperability.

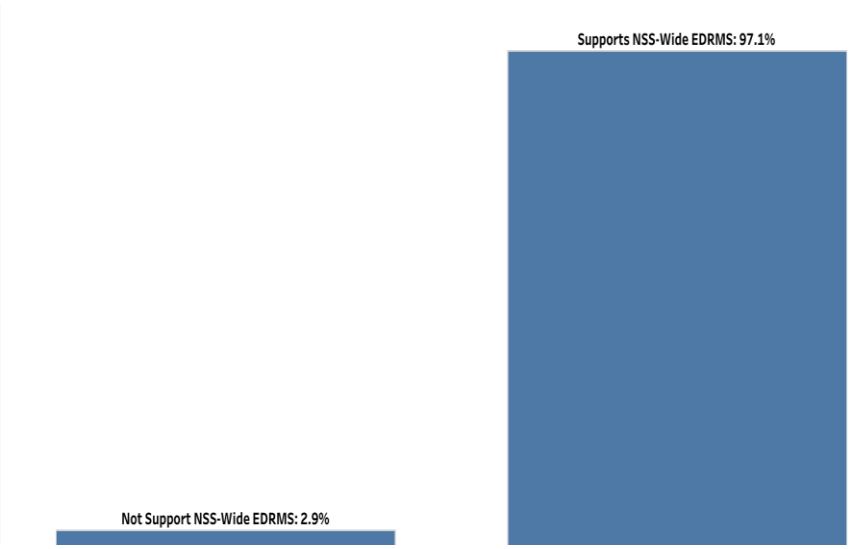
The **NSS's** approach to **DRM** remains predominantly pre-digital, characterized by heavy reliance on paper-based systems or **unstructured digital files**. Only **26.5%** of institutions reported using an **EDRMS**, confirming that structured digital records management is still limited. Among those not currently using **EDRMS**, **80.0%** cited lack of awareness as the main barrier. This indicates that the challenge is not only infrastructural but also informational—many institutions do not fully understand the role or benefits of **EDRMS**. Figure 5 below show the percentage of institutions currently using EDRMS.

Figure 3-6: *EDRMS prevalence*



Despite this, there is overwhelming consensus for reform: **97.1%** of institutions expressed support for an **NSS-wide EDRMS**, as shown by Figure 6 below. This provides a strong mandate for **NSDS III** to prioritize awareness-raising, capacity building, and coordinated investment in records management systems.

Figure 3-7: Support for NSS-wide EDRMS



NSDS III can leverage the near-universal support to establish a centralized, interoperable **EDRMS** framework. Such a system will ensure integrity, traceability, accountability, efficiency, and long-term preservation of data and metadata—safeguarding institutional memory and strengthening evidence-based governance across the **NSS**.

3.5 Strategic Planning and Institutional Alignment

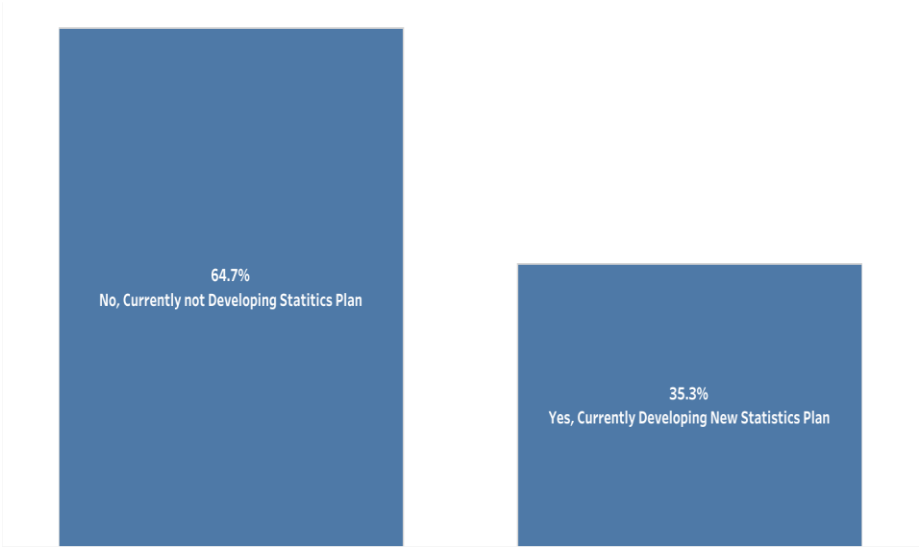
A forward-looking and cohesive **NSS** requires not only operational capacity but also strategic foresight and institutional alignment. Effective strategic planning provides the foundation for coordinated, predictable, and well-resourced statistical production, enabling institutions to move beyond ad-hoc activities and operate within clear frameworks that link their mandates and resources to national development goals and global reporting requirements. This section examines the extent of structured planning across the **NSS**, how these plans are formulated and supported, and the degree to which they align with national development priorities and emerging direction of **NSDS III**.

The assessment reveals a system with clear strategic intentions but uneven planning maturity, characterized by significant gaps in adoption, alignment, and stakeholder integration.

3.5.1 Adoption and Development of Statistics Plans

A critical finding is fragmented adoption of formal planning across the **NSS**. Only **50.0%** of institutions have a documented **Statistics Plan**, exposing a foundational gap that undermines system-wide coordinated and predictability. Among institutions without a plan, there are signs of progress, with **35.3%** currently preparing; however, the majority (**64.7%**) have no active development process, indicating a key area requiring targeted support and capacity building to elevate strategic practices across entire system.

Figure 3-8: *Status of institutional statistics plan*



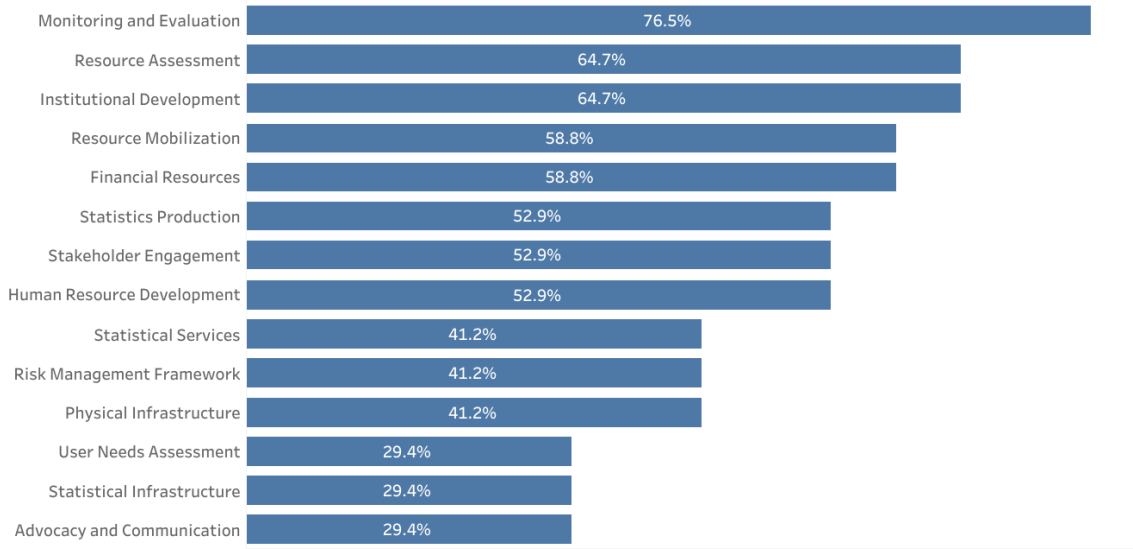
While this milestone demonstrates a foundational level of strategic engagement for half of the system, it also exposes a significant planning gap across the **NSS**. This inconsistency indicates that while institutions recognize the importance of planning, practices remain fragmented, undermining the potential for a harmonized and fully coordinated statistical system.

3.5.2 Strategic Focus and Influencing Framework

The assessment reveals that institutions with Statistics Plans place strong emphasis on internal institutional strengthening and accountability. The most prominent areas as Monitoring and Evaluation (76.5%), Resource Assessment (64.7%), and Institutional Development (64.7%), reflecting a system that priorities organizational capacity and compliance.

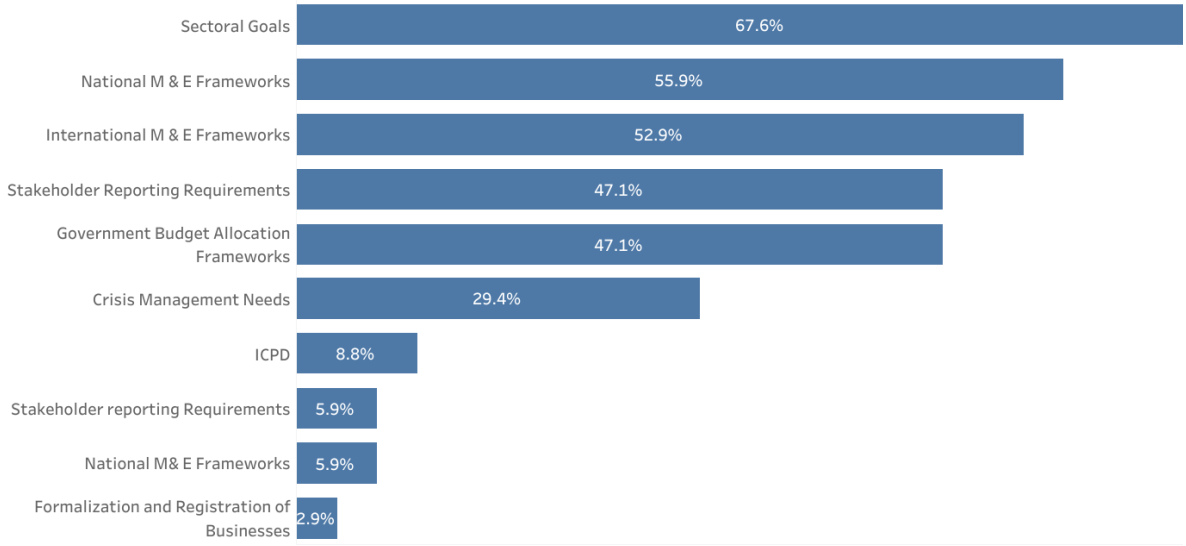
Yet this internal robustness often comes at the expense of external and user-centric elements. Foundational areas such as User Needs Assessment (29.4%) and Advocacy and Communication (29.4%) are critically underrepresented in existing plans. This imbalance suggests that while institutions are reinforcing internal processes, they are not adequately planning to understand or respond to the needs of the wider data user community.

Figure 3-9: Frameworks influencing data production



The development of these plans is primarily shaped by compliance frameworks. Legal Mandates (64.7%) and Institutional Policies (64.7%) are the strongest influences on data collection, while Sectoral Goals (67.6%) drive data priorities. International frameworks such as the SDGs (52.9%) exert some influence, but the official National Data Strategy (38.2%) has significantly less impact. This reveals a strategic disconnect institutions are responsive to global and compliance pressures, yet national coherence remains weak.

Figure 3-10: Frameworks influencing data priorities



3.5.3 Alignment Intentions and Readiness for NSDS III

Beyond the current content of existing plans, a critical indicator of future system coherence is whether institutions—particularly those yet to develop their **Statistics Plans**—intend to align their frameworks with the forthcoming **NSDS III**. The success of the national strategy depends on its ability to serve as the **central organizing framework** for statistical production across the NSS. Institutional readiness and willingness to align therefore provide a key measure of the system's future coordination trajectory.

The assessment reveals a **significant gap in forward-looking alignment**. A majority of institutions (**57.9%**) reported that they do **not** plan to align their upcoming **Statistics Plans** with **NSDS III**, while only **15.8%** indicated that such alignment is under development. This intention gap presents a systemic risk: without explicit alignment, future institutional planning cycles may reinforce fragmentation, undermine harmonization efforts, and limit the **NSS's** ability to function as a coordinated system.

This low level of planned alignment also points to broader underlying challenges. These may include **limited awareness of NSDS III**, **unclear mandates for statistical planning**, or **insufficient technical capacity** to translate national strategic priorities into sectoral plans. Addressing these readiness gaps is therefore essential. Without early and deliberate efforts to build institutional commitment and capacity for alignment, the implementation of **NSDS III** risks being constrained from the outset.

3.5.4 Stakeholder Engagement and Feedback Mechanisms

Stakeholder engagement is not just a principle of good governance it is a practical necessity for ensuring excellence throughout the entire data lifecycle, from production and communication to the effective use of high-quality data and official statistics. To be truly user-centric, the **NSS** must be built on a foundation of structured and purposeful dialogue with all its stakeholders. This engagement is the primary mechanism that ensures statistical products are fit-for-purpose, builds public trust, and drives their widespread use. Formal feedback mechanisms are critical for accountability and continuous improvement.

However, the assessment reveals that current stakeholder engagement practices are heavily skewed towards internal and established partners, creating a pronounced "producer-centric" bias. Engagement is strongest with **Internal Staff (82.4%)** and **Collaborative Partners (76.5%)**, but significantly weaker with essential external groups like the **Users of Our Statistical Products (41.2%)** and **Civil Society Organizations (CSOs) (32.4%)**. This imbalance restricts the system's ability to respond to evolving user needs, limits demand-driven production, and reduces the overall relevance and usability of outputs. It also constrains the adoption of innovative data practices—such as the use of Non-Traditional Data Sources (**NTDS**).

The challenge is further compounded by the limited existence of formalized feedback channels. Nearly one-quarter of institutions (**23.5%)** report having **no mechanism** for stakeholders to provide input into planning processes, while an additional **32.4%** are **unsure** whether such mechanisms exist. This combination of absence and uncertainty suggests that when feedback does occur, it may be informal, inconsistent, or undocumented. Without structured feedback loops, planning remains siloed, inward-looking, and disconnected from the needs of the broader data ecosystem.

These gaps represent a significant barrier to achieving a responsive, user-driven **NSS**. Strengthening engagement structures and institutionalizing feedback mechanisms will be essential to the successful implementation of the **NSDS III**. The strategy's success depends on inclusive planning, transparent communication, and the systematic integration of user needs into statistical production.

Section 3.5.5 Resource Allocation and Implementation Readiness

The effectiveness of any strategy depends not only on its design but also on the adequacy of the resources committed to its implementation—human, financial, and technological. Budget decisions reveal clear institutional priorities, but these priorities must be accompanied by corresponding investments in skills, systems, and governance structures to translate strategic intent operational reality. Without sufficient investment in both operational and developmental needs, even well-structured plans risk remaining aspirational rather than actionable. Assessing resource allocation therefore provides critical insights into how prepared institutions are to implement their plans and highlights potential gaps between strategic ambition and operational capacity.

The assessment reveals that resource allocation within existing statistics plans is heavily concentrated on internal capacity and core production activities. Priorities are clearly given to **Staff Development (79.4%), Data Collection and Processing Costs (70.6%),** and **Data Storage and Maintenance (67.6%).** While investment in these areas is essential, it is not balanced with corresponding investment in external-facing functions.

However, long-term sustainability measures are less consistently addressed. Only **52.9%** of institutions reported allocations for software and hardware upgrades, **50.0%** for salaries and benefits, and just **26.5%** for contingency funds. Strikingly, only **2.9%** reported allocations for institutional websites, and another 2.9% indicated no allocations at all. This underinvestment in modernization and resilience raises concerns about the system's ability to adapt to technological change, manage risks, and ensure continuity in the face of shocks.

Closing the gap between strategic ambition and operational reality will require a more balanced resource strategy that ensures the adequacy of funding for both immediate operational needs and the complementary technological and institutional foundations for long-term success.

3.6 Data Production and Quality

Data Production and Quality refers to the technical and operational processes through which institutions within the **NSS** generate data and official statistics. It encompasses the sources of data they rely on, the conceptual frameworks and data models that guide instrument design, the methods and technologies used to collect and process data and/or information, the application of quality assurance standards, metadata and documentation practices, storage and retention systems, and the mechanisms used to share and communicate data. Assessing these components provides insight into the robustness, reliability, and efficiency of the **NSS's** statistical value chain. Data production and quality therefore form the foundation of a credible and trusted **NSS**. The quality and reliability of these production processes ultimately determine the **NSS's** ability to serve diverse users—from policymakers and planners to researchers, development partners, and citizens—with statistics that are fit-for-purpose and support evidence-based decision-making aligned with the **ARREST Agenda for Development**.

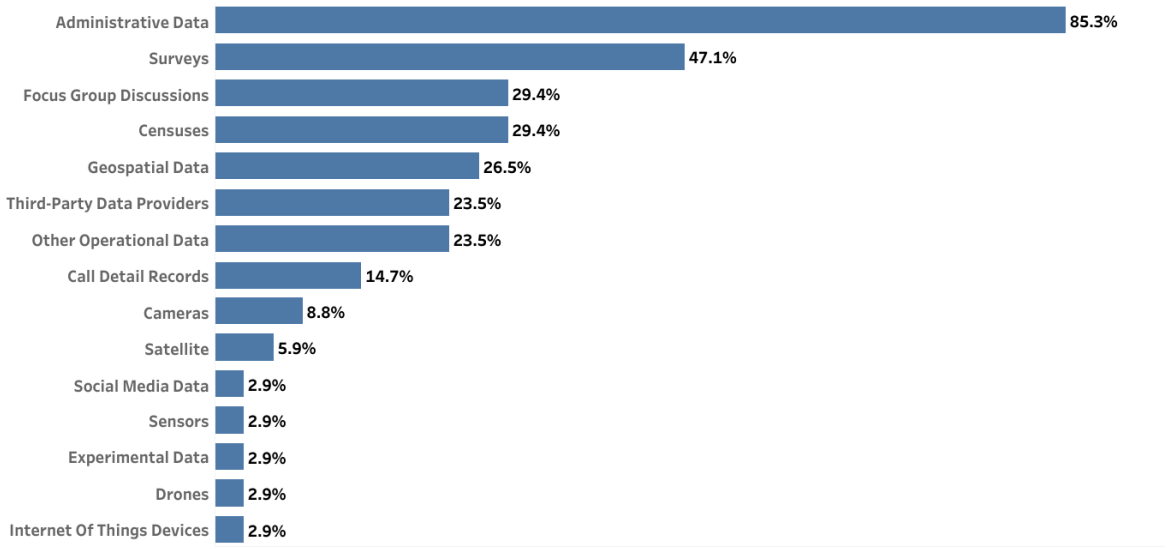
Building on upon the institutional coordination arrangements discussed in "*Section 3.3 Institutional Landscape, Mandates, and Coordination Models*," this section examines the technical processes, data sources, data modelling approaches, methodologies, and quality assurance mechanisms that underpin the production of data and official statistics across the **NSS**.

3.6.1 Data Sources and Production Models

The effectiveness, agility, and trustworthiness of a national statistical system are fundamentally shaped by the diversity of its data sources and the methodologies used to collect them. **Data sources** refer to the primary origins of data and/or information—ranging from traditional foundations like administrative records, censuses, and surveys, as well as emerging and non-traditional sources such as social media platforms, geospatial technologies, and sensor data. **Collection practices** describe the methods and technologies institutions employ to transform these sources into usable statistics, determining efficiency, timeliness, and credibility.

Primary Sources of Data Collection (Q85)
The assessment reveals that Liberia's **NSS** is heavily reliant on a limited set of traditional data sources. Administrative data (**85.3%**) and surveys (**47.1%**) dominate institutional practices, while censuses (**29.4%**) and focus group discussions (**29.4%**) play secondary roles. By contrast, innovative sources such as geospatial data (**26.5%**), third-party providers (**23.5%**), and satellite imagery (**5.9%**) remain underutilized. Cutting-edge sources like social media, sensors, IoT devices, drones, and experimental data are barely present (**2.9% each**).

Figure 3-11: *Primary sources of data collection*



Non-Traditional Data Sources (NTDS)

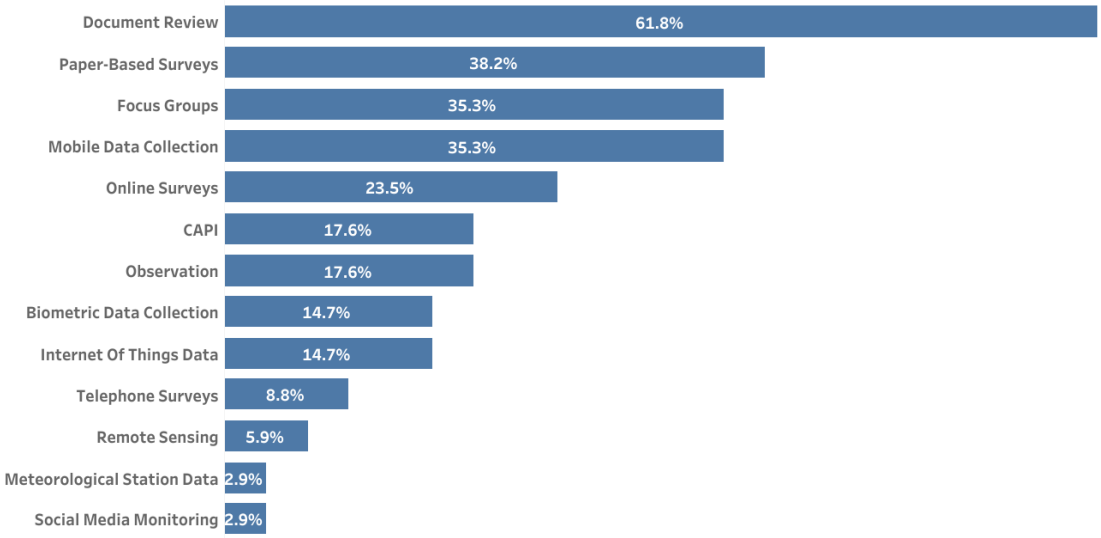
Beyond traditional sources, the assessment highlights the limited but growing use of **NTDS**. Currently, only 38.2% of institutions report using **NTDS**, such as social media data, citizen-generated inputs, IoT devices, and sensors. However, **85.7%** of institutions expressed interest in exploring **NTDS** within the next 12 months, signaling strong momentum toward diversification.

While **NTDS** adoption is still at an early stage, the high level of institutional interest suggests that **NSDS III** can catalyze this transition by providing frameworks for validation, interoperability, and ethical use. Harnessing **NTDS** will expand the NSS's ability to capture real-time, multidimensional realities and strengthen responsiveness to national priorities.

Current Data Collection Methodologies

Institutions report reliance on *document review* **(61.8%)**, *paper-based surveys* **(38.2%)**, and *focus groups* **(35.3%)** as their dominant methodologies. While *mobile data collection* (**35.3%**) and *online surveys* (**23.5%**) are emerging, they remain secondary. More advanced methods such as *CAPI* (**17.6%**), *biometric data collection* (**14.7%**), *IoT data* (**14.7%**), and *remote sensing* (**5.9%**) are used by only a minority of institutions.

Figure 3-12: Current data collection methodologies



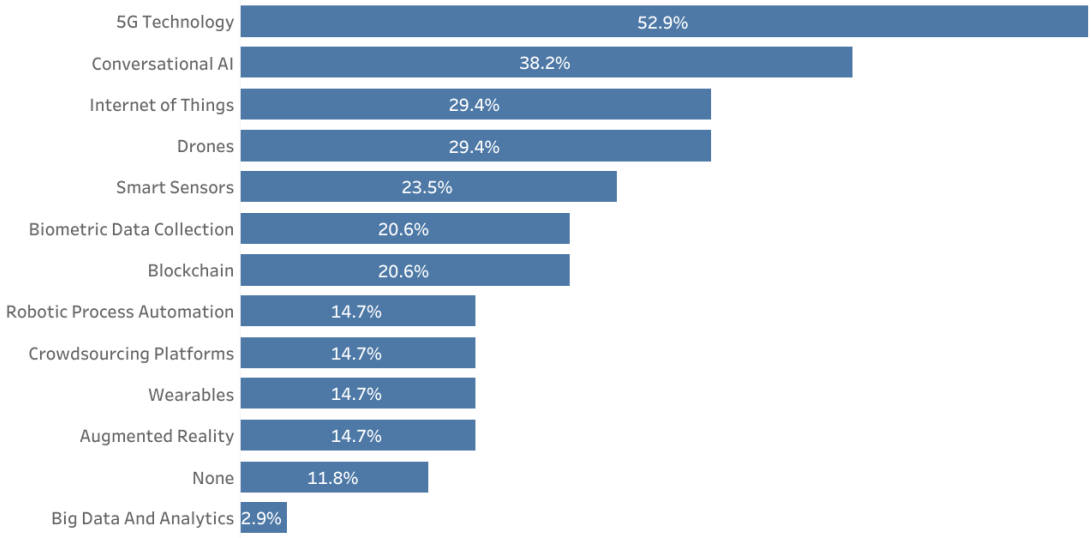
Innovative Data Collection Technologies Under Consideration

Some institutions are beginning to explore mobile applications for real-time data collection (**47.1%**), 5G technology (**35.3%**), and biometric data collection (**26.5%**). Other innovations under consideration include conversational **AI** (**20.6%**), remote sensing (**17.6%**), crowdsourcing platforms (**14.7%**), drones (**14.7%**), and IoT data (**14.7%**). However, uptake remains uneven and largely at the pilot stage.

Emerging Data Collection Technologies

Looking ahead, institutions expressed interest in 5G technology (**52.9%**), conversational AI (**38.2%**), **IoT** devices (**29.4%**), and drones (**29.4%**). Smart sensors (**23.5%**), blockchain (**20.6%**), and biometric data collection (**20.6%**) are also being considered. Yet, advanced technologies such as augmented reality (**14.7%**) and big data analytics (**2.9%**) remain marginal.

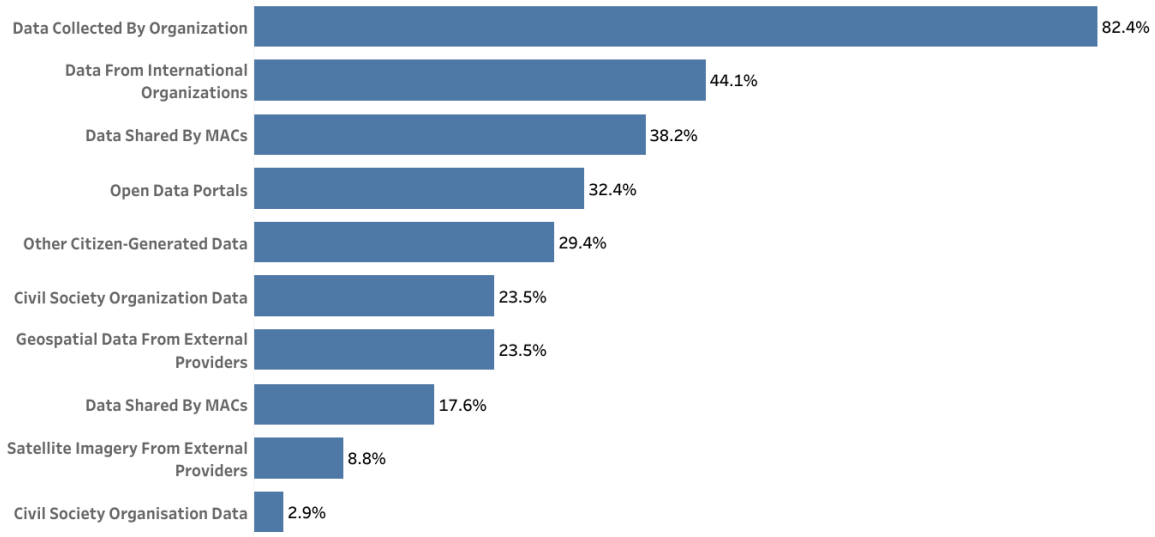
Figure 3-13: Emerging data collection technologies under consideration



Institutional Primary Sources

At the institutional level, data collected directly by organizations (82.4%) is the dominant primary source. Other sources include data from international organizations (44.1%), data shared by MACs (38.2%), and open data portals (32.4%). Citizen-generated data (29.4%) and civil society organization data (23.5%) are less frequently used, while geospatial data from external providers (23.5%) and satellite imagery (8.8%) remain niche.

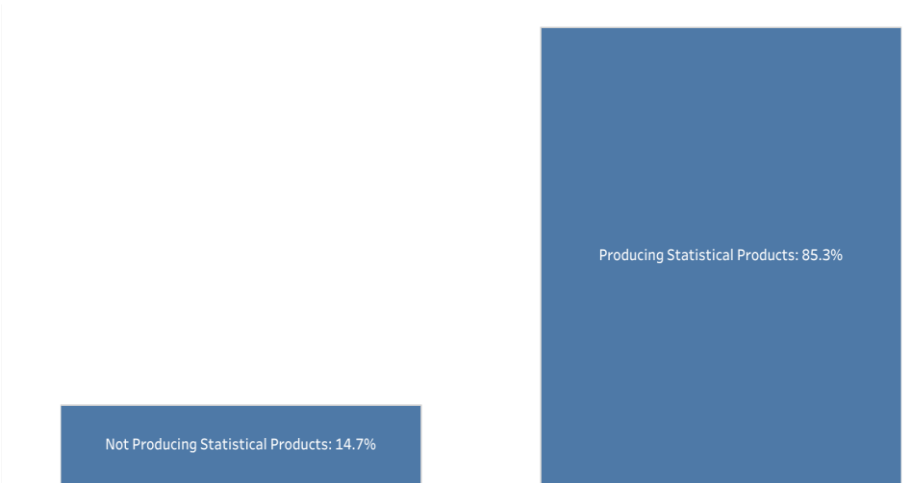
Figure 3-14: *Institutional primary sources of data*



Production of Statistical Products

Encouragingly, **85.3**% of institutions reported producing statistical products, indicating widespread engagement in statistical activities across the **NSS**. However, **14.7%** of institutions reported that they do not produce any statistical products. This response is less likely to reflect an absence of data generation or use, and more indicative of a limited understanding of what constitute a statistical product. In many cases, routine operational outputs—such as counts, summaries, indicators, and internally used figures—are not recognized as statistics. This finding highlights a clear need for targeted data literacy education to strengthen conceptual understanding of data, processing, and statistical products, and to help institutions better recognize and articulate their role in statistical production within the **NSS**.

Figure 3-15: Production of statistical products



3.7 Workforce Capacity, Skill Mix, and Composition in the NSS

Introduction

A capable, sustainable, and strategically managed workforce is a foundational pillar of an effective **NSS**. Anchored in the **"Golden Triangle" of People, Processes, and Technology**, **NSDS III** recognizes that the human dimension—encompassing staffing structures, competency alignment, and equitable access to talent—is central to the system's ability to produce, communicate, and use high-quality, fit-for-purpose data and official statistics.

This section assesses the current workforce situation across **NSS** institutions in Liberia, focusing on establishment posts for Statistics Units, staffing levels, the **mix of core and applied data professional skills**, and **workforce composition**. The findings highlight patterns, strengths, and imbalances that directly influence the **NSS's** operational effectiveness and its capacity to meet future demands under NSDS III.

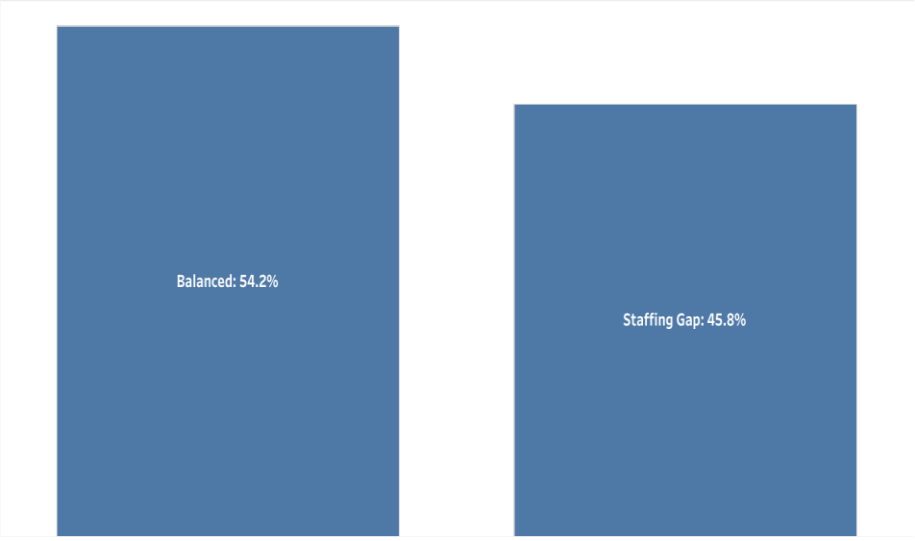
3.7.1 Establishment Posts, Staffing Levels, and Institutional Frameworks

The assessment shows that **24 out of 34 NSS** institutions (**70.6%**) have approved establishment posts for their Statistics Units, while the remaining **10** institutions (**29.4%**) operate without approved posts. This reflects progress in the formal institutionalization of statistical functions, while also highlighting gaps where statistical work lacks a formal staffing foundation.

Among institutions with approved posts, nearly half (**45.8%**) do not staff these posts in line with the approved establishment, with some reporting fewer staff than stipulated and others exceeding approved levels. This indicates a gap between formal staffing provisions and actual deployment, pointing to uneven implementation of workforce structures across the **NSS**.

Furthermore, among institutions with approved posts, only **20.8%** report having formal provisions or targets to promote balanced sex representation in staffing. This indicates that considerations of equitable access and talent pool optimization are not yet widely embedded in formal workforce planning frameworks.

Figure 3.7.1: Alignment between approved establishment posts and actual staffing levels



3.7.2 Skill Mix and Workforce Composition Across the NSS

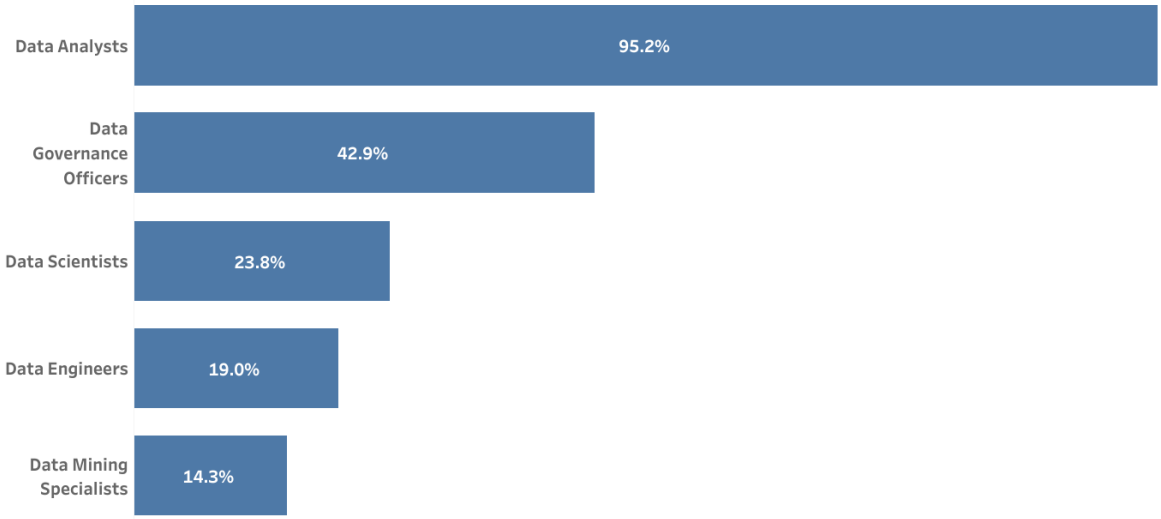
This subsection examines the distribution of professional roles within Statistics Units, with a focus on the balance between core and applied data professional positions. The analysis reflects reported staff designations and functional roles, rather than formal qualifications.

Core Data Professional Positions

The assessment reveals that **61.8% of NSS institutions** report at least one **core data professional position**, while **38.2%** report none. Among those with core data roles, **Data Analyst positions are the most prevalent (95.2%)**. Other roles are less widespread: **Data Governance Officers (42.9%), Data Scientists (23.8%), and Data Engineers (19.0%)**. The presence of these roles suggests growing recognition of advanced data functions, but their uneven distribution indicates they are not yet systematically embedded.

A demographic analysis of these roles reveals a pronounced imbalance, with women constituting only **16.7% (28 of 168)** of staff in core data positions. This underrepresentation in the most technical specializations suggests a significant challenge in **attracting and retaining qualified female talent into the data engineering, science, and governance roles** that are **technically foundational** to the robust and resilient **NSS** envisaged under **NSDS III**.

Figure 3.7.2a: Core data professional position types



Note: Figures reflect the presence of reported position titles within institutions, not the number of individuals or their professional qualifications.

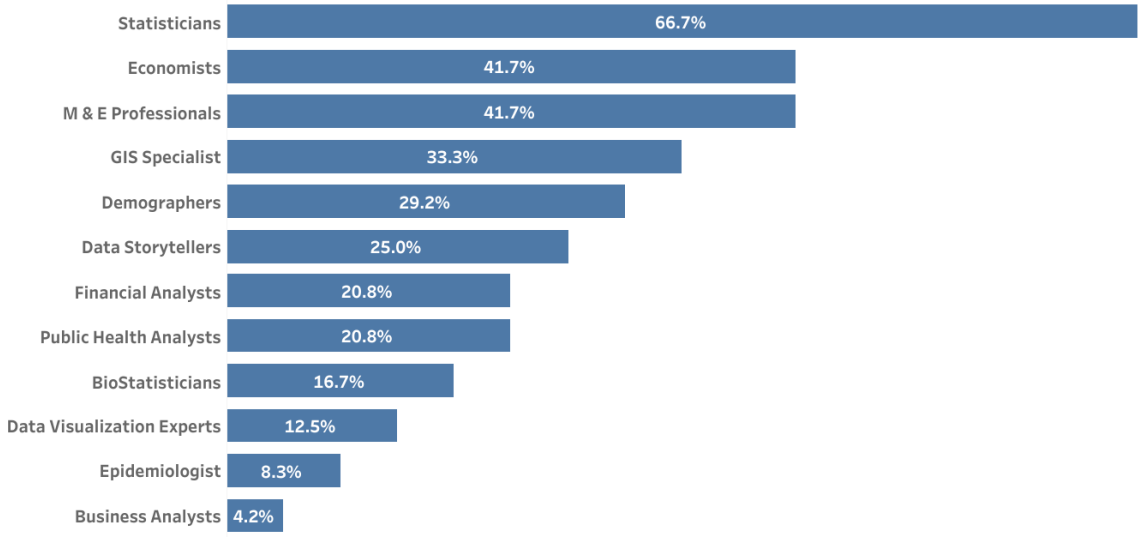
Applied Data Professional Positions

Applied data professional roles remain more widespread across **NSS** institutions. Statisticians (**66.7%**), **Economists** (**41.7%**), and **Monitoring and Evalaution Officers** (**41.7%**) are the most commonly reported roles and continue to form the backbone of sectoral data production, analysis, and reporting.

Emerging roles such as **Data Storytellers (25.0%)** and **Data Visualization Experts (12.5%)**, are reported by a smaller number of institutions. Thier presence points to early adoption of roles associated with data communication and use, though these functions are not yet mainstreamed across the **NSS**. While these posts are filled, the mismatch between titles and qualifications limits their effectiveness.

Female representation in these roles is higher than in core positions, at **27.8% (66 of 237)**, yet a substantial sex gap persists, indicating a broader pattern of underrepresentation across the statistical workforce.

***Figure 3.7.2b**: Applied data professional positions types*



3.7.3 Strategic Imperatives for Workforce Development

The assessment of establishment posts, skill mix, and workforce composition collectively highlights a set of interrelated priorities that are essential for building a robust and resilient **NSS** under **NSDS III.**

First, the findings indicate that institutionalization must be accompanied by more strategic talent management. While the prevalence of approved establishment posts represents progress, frequent misalignments between approved posts and actual staffing levels suggest the need for closer attention to workforce planning and deployment across the **NSS.**

Second, the assessment underscores the urgency of addressing gaps in core data skills, particularly in specialized roles such as Data Engineering and Data Science that are critical to building the foundational data infrastructure of the NSS. The limited availability of staff with these advanced technical competencies constrains the system's ability to adopt and sustain cutting-edge data practices. Current staffing patterns show that most individuals occupying these roles are male, reflecting the composition of the existing technical skills pool rather than differential access to opportunities. Strengthening capacity in these areas therefore requires sustained investment in skills development and professional training to expand the overall pool of qualified personnel, while maintaining rigorous competency standards.

Third, role clarity and competency alignment are prerequisites for workforce effectiveness. The emergence of specialized positions (**e.g., Data Storytellers, Governance Officers**) is encouraging, but their value depends on incumbents possessing both the requisite skills and authority to act. **NSDS III** must therefore move institutions beyond nominal titles, ensuring that each role is underpinned by clearly defined competencies, transparent career pathways, and structured professional development. In this way, specialized positions become engines of performance rather than symbolic designations.

CHAPTER 4: STRATEGIC FRAMEWORK AND OBJECTIVES

4.1 Introduction

The **NSDS III** is positioned not merely as a planning document, but as a **Statistical Disruptor and National Change Agent**. It is designed to support Liberia in rethinking and re-engineering how data and official statistics are produced, governed, communicated, and used. This strategic modernization aims to drive innovation, strengthen development outcomes, and enhance effective monitoring and evaluation across national and global priorities.

Building on the evidence and insights from the **NSS** Assessment, this chapter presents the shared strategic **Vision, Mission, Purpose, Guiding Principles, Core Values, Conceptual Framework**, and six interlinked **Strategic Goals** with their accompanying **Strategic Objectives**. Together these elements define the transformation agenda of Liberia's **NSS** for the next five years.

The strategic framework seeks to transform the **NSS** into a dynamic, evidence-driven ecosystem capable of supporting digital transformation, inclusive growth, and effective decision-making. Its ultimate success will be measured by the degree to which it aligns with and enables the delivery of Liberia's key development priorities, including the **ARREST Agenda for Inclusive Development (2025–2029)**, the Sustainable Development Goals (SDGs), and the African Union (AU)'s Agenda 2063.

The Strategic Goals and Objectives outlined in this chapter provide a concrete and actionable roadmap for building an agile, innovative, and resilient **NSS** that delivers high-quality, inclusive, and user-centered data and official statistics for national development.

4.2 Purpose of NSDS III

The **NSDS III** serves as a comprehensive framework for rebuilding Liberia's statistical capacity and strengthening coordination across institutions responsible for statistical activities. It responds directly to the lessons of **NSDS I and II** and the findings of the **NSS Assessment**, which revealed persistent challenges in data quality, institutional coherence, financing, and the use of statistics for decision-making.

The purpose of **NSDS III** is therefore multifaceted:

- **Communicate Essential Information**: Produce and communicate the high-quality data required for the effective implementation, monitoring, and evaluation of national and international development agendas.
- **Enhance Capacity and Coordination**: Improve coordination and harmonization of statistical activities across the **NSS**.
- **Improve Quality**: Ensure that national statistics are fit-for-purpose meeting professional standards and user needs.
- **Meet Global Commitments**: Equip Liberia with the tools to honor its national and international obligations, including the Sustainable Development Goals (SDGs) and the African Union's Agenda 2063.
- **Strengthen the NSS**: Integrate all statistical activities into a well-coordinated, harmonized, and efficient national system that is resilient, inclusive, and innovation-ready.

Ultimately, **NSDS III** seeks to reposition the NSS as a strategic enabler of inclusive development, institutional resilience, and digital transformation capable of powering Liberia's ARREST Agenda and contributing meaningfully to global data ecosystems.

4.3 Guiding Principles

The design and implementation of the **NSDS III** are anchored in the following core principles, which define the culture and standards for the transformation of the **NSS**.

- **National Ownership and Leadership:** Led by **LISGIS**, the strategy reflects Liberia's development priorities and governance structures. Its success depends on high-level political support, strong commitment from all **NSS** institutions, and leadership that champions statistical development as a cornerstone of national progress.
- **Inclusivity, Equity, and Collaborative Partnership:** The **NSS** must serve all Liberians, ensuring that data reflects diverse realities and supports inclusive policies. This will be achieved through a consultative approach that actively engages all data producers and users—including government, development partners, the private sector, academia, and civil society.
- **Professional Independence, Integrity, and Transparency:** Statistical production must be free from political interference, grounded in ethical standards and methodological rigor. All processes will be conducted with the highest levels of transparency to build and maintain public trust.
- **Adherence to International Standards and Comparability:** The **NSS** must align with international standards, including the **United Nations Fundamental Principles of Official Statistics**, to ensure credibility, comparability, and the production of high-quality, trustworthy data.
- **User-Centricity and Demand-Driven Production:** The **NSS** will be responsive and accountable to the needs of its users. Data and official statistics will be disseminated in accessible, timely, and usable formats to support evidence-based decision-making at all levels.
- **Innovation, Digital Transformation, and Future-Proofing:** The **NSS** must embrace emerging but fit-for-purpose technologies, including AI, geospatial tools, and new data sources. This proactive adoption ensures the system remains efficient, relevant, and resilient in the face of future data demands.
- **Sustainability and Resource Optimization:** The **NSS** will pursue efficient, cost-effective, and sustainable financing models. This includes optimizing the use of existing resources, reducing duplication, and securing diversified funding to ensure the long-term viability of the statistical system.

4.4 Core Values

The dynamic nature of data demands an institutional culture that treats data as the foundation for everything it does. The transformation envisioned by **NSDS III** is therefore built upon the following core values, which define the ethical character and professional conduct of **NSS**.

Integrity and Trustworthiness: We are the custodians of the nation's data. We uphold truthfulness, objectivity, impartiality, and confidentiality in all statistical operations — earning and maintaining the public's absolute confidence.

Professional Excellence and Accountability: We adhere to the highest standards of methodological rigor, ethical practice, and continuous learning. We hold ourselves accountable

for the quality of our work, the use of resources, and the delivery of timely, relevant, and accurate statistics.

Transparency and Service: We operate in an open and accessible manner, proactively communicating our methods and findings. We are dedicated to serving the nation by making data understandable and usable for all — from policymakers to citizens.

Collaboration: We achieve more together. We foster cooperative relationships across NSS institutions and with external partners, breaking down silos to build a unified and effective national system.

Equity and Inclusivity: We promote fairness and inclusiveness in both our workplace and our data. We are committed to ensuring that our statistics reflect the full diversity of Liberia and are used to advance equitable development — leaving no one behind.

4.5 Vision Statement

A trusted, inclusive, interoperable, innovative, and responsive National Statistical System that produces, uses, and communicates high-quality official statistics to power sustainable national transformation.

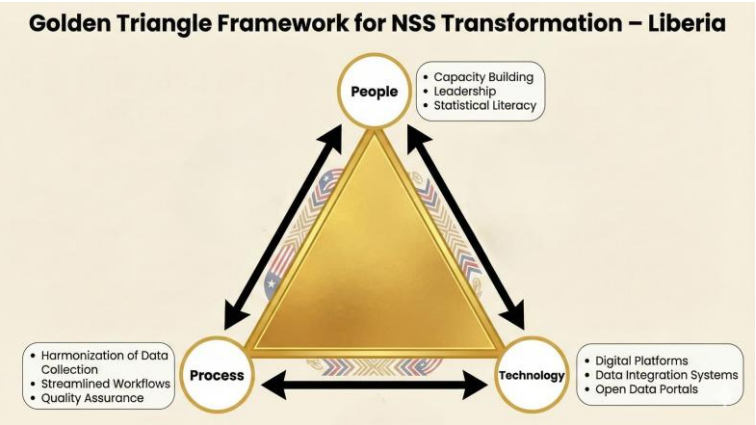
4.6 Mission Statement

An agile, coordinated, user-centric national data ecosystem that builds capacity, drives innovation, produces, uses, and communicates high-quality official statistics to power inclusive and evidence-based national development.

4.7 Conceptual Framework for Transformation

The transformation of the **NSS** under the **NSDS III** is anchored in the **Golden Triangle framework** a holistic model that identifies **People, Processes, and Technology** as the three interdependent levers for sustainable change. This framework recognizes that lasting impact requires technical upgrades; it demands a fundamental re-imagination of institutional culture, workflows, and capabilities.

Figure 4-4: The Golden Triangle



People: The **NSS** is powered by individuals — statisticians, demographers, monitoring and evaluation professionals, data analysts, economists, public health analysts, data producers, and

users — whose skills, leadership, and commitment determine the system's effectiveness. **NSDS III** places human capacity at the center of transformation, emphasizing professional development, leadership ownership, and a culture of innovation and accountability. This includes building a future-ready workforce, institutionalizing career pathways, and fostering collaborative learning networks.

Processes: Institutional workflows, governance mechanisms, and coordination structures form the operational backbone of the **NSS**. **NSDS III** seeks to re-engineer these processes to promote coherence, efficiency, and responsiveness — from data collection and quality assurance to communication and stakeholder engagement. Strengthening internal systems, harmonizing standards, and embedding ethical governance are key to ensuring institutional resilience and public trust.

Technology: Digital infrastructure, automation tools, geospatial systems, and emerging technologies such as **AI**, graph databases, knowledge graphs, wearable devices, big data, and cloud platforms are catalysts for modernization. **NSDS III** champions the strategic adoption of fit-for-purpose technology to enhance data production, management, communication, and interoperability, enabling real-time decision-making while ensuring ethical standards and inclusive access. This includes expanding the use of non-traditional data sources, piloting smart tools, and building secure, interoperable platforms across the **NSS**.

Together, these three dimensions form a resilient and adaptive architecture for the **NSS** one that is capable of delivering high-quality, fit-for-purpose data and official statistics to power inclusive national development.

4.8 Strategic Goals and Objectives

The transformation of the **NSS** is structured around six interconnected **Strategic Goals (SGs)**, each with corresponding Strategic Objectives (SOs). Together, they operationalize the vision and mission. These goals are explicitly formulated as a direct response to critical gaps and urgent needs identified in the NSS Assessment.

Each Strategic Goal represents a thematic pillar of transformation—ranging from institutional coordination and data governance to capacity development, innovation, inclusivity, and sustainable financing. Together, they define a coherent roadmap for building a **data-driven, agile, and adaptive National Statistical System (NSS)** capable of supporting evidence-based policymaking and inclusive national development.

NSDS III's Strategic Goals for the LNSS

1. **Strategic Goal 1 (SG1):** Strengthen Statistical Coordination, Governance, and Trust across the NSS
2. **Strategic Goal 2 (SG2):** Re-engineer the National Data Production Ecosystem to Generate and Communicate Fit-for-Purpose Statistics that Drive Effective Policy and Innovation
3. **Strategic Goal 3 (SG3):** Strengthen Sustainable Human and Institutional Capacity for a Professional, Agile, and Future-Ready NSS
4. **Strategic Goal 4 (SG4):** Promote Inclusive Data Use and Embed FAIR Data Principles to Ensure Equitable Access, Interoperability, and Widespread Uptake of Official Statistics Through Effective Stakeholder Engagement

5. **Strategic Goal 5 (SG5):** Promote Innovation and Build a Resilient National Data Ecosystem that Leverages AI and Emerging Technologies to Support Digital Transformation, Collaboration, and Inclusive Development
6. **Strategic Goal 6 (SG6):** Secure Sustainable and Innovative Financing Models to Ensure Long-Term Resilience, Autonomy, and Continuous Transformation of the NSS

Strategic Goal 1 (SG1): Strengthen Statistical Coordination, Governance, and Trust across the NSS

Goal Rationale

*A coordinated and trusted **NSS** depends on strong institutions, visionary leadership, effective governance mechanisms, and credible engagement with data users. Strengthening coordination and governance therefore begins with building internal institutional capacity and leadership ownership, followed by establishing coherent national systems that ensure accountability, interoperability, and public trust.*

Strategic Objectives (SOs)

SO-1: Strengthen leadership commitment and ownership of the national statistical coordination agenda across all NSS institutions.

***Strategic Intent**:* Ensure that senior management champions statistical reform and provides the mandate, resources, and institutional direction needed to drive coordination, governance, and innovation.

SO-2: Strengthen institutional management systems and internal processes to enhance accountability, efficiency, and performance within the NSS.

***Strategic Intent**:* Improve internal processes, quality assurance, and monitoring systems to support effective implementation of statistical priorities and national coordination efforts.

SO-3: Strengthen institutional coordination and coherence across the National Statistical System through effective governance and collaboration mechanisms.

***Strategic Intent**:* Promote synergized and harmonized statistical activities across all NSS entities to ensure alignment with national development priorities.

SO-4: Enhance data governance, integrity, and compliance by establishing clear policies, standards, and accountability across all data-producing entities.

***Strategic Intent**:* Ensure adherence to harmonized policies and standards that safeguard data quality, ethics, and accountability.

SO-5: Build and sustain public confidence in official statistics through transparency, ethical data practices, and consistent engagement with users and stakeholders.

***Strategic Intent**:* Reinforce credibility and user trust by promoting open, ethical, and user-responsive statistical processes.

SO-6: Promote integrated, evidence-based decision-making by improving data communication, interoperability, and cross-sectoral collaboration across the NSS.

***Strategic Intent**:* Enable seamless data exchange and integrated analytics that support informed policy formulation and monitoring.

Strategic Goal 2 (SG2): Re-engineer the National Data Production Ecosystem to Generate and Communicate Fit-for-Purpose Statistics that Drive Effective Policy and Innovation

Goal Rationale
*Liberia's **NSS** requires a transformation from traditional, fragmented data production to a dynamic, technology-enabled, and user-focused ecosystem. The **NSDS III** aims to modernize the full data lifecycle—from design to communication and archiving—ensuring that data and official statistics are of **high quality** and **fit-for-purpose** to inform evidence-based policymaking, innovation, and accountability. This goal responds directly to assessment findings that revealed weak methodological standards, limited automation, low use of digital data collection, and inconsistent quality assurance practices across institutions.*

Strategic Objectives (SOs)
SO-1: Modernize statistical production processes by adopting innovative, digital, and automated data collection, processing, and archiving technologies.
***Strategic Intent**:* Transform data production workflows through the use of mobile, web-based, and other digital tools to enhance efficiency, reduce errors, and ensure high-quality data and official statistics.

SO-2: Institutionalize quality assurance and methodological standards across all NSS entities to ensure consistency, reliability, and comparability of official statistics.

***Strategic Intent**:* Establish a harmonized quality assurance framework and standard operating procedures that uphold the principles of accuracy, completeness, coherence, and integrity across the data lifecycle.

SO-3: Strengthen data architecture, modeling, and metadata management to promote structured, interoperable, and scalable data systems.

***Strategic Intent**:* Enhance the design, documentation, and storage of data through robust modeling and metadata practices that enable integration and discoverability across institutions.

SO-4: Foster user-centered statistical communication through data visualization, open access, and interactive communication platforms.

***Strategic Intent**:* Improve user engagement and accessibility by developing visual and multi-channel platforms that make data communication more transparent, dynamic, and impactful.

SO-5: Integrate non-traditional and emerging data sources into the national statistical production system.
***Strategic Intent**:* Broaden the scope and relevance of official statistics by leveraging geospatial, administrative, and big data sources while ensuring compliance with national quality and ethical standards.

SO-6: Strengthen coordination between data producers and users to ensure that statistical outputs are policy-relevant and demand-driven.

***Strategic Intent**:* Institutionalize continuous dialogue and collaboration between data producers, policymakers, academia, and the private sector to ensure relevance and usability.

Strategic Goal 3 (SG3): Strengthen Sustainable Human and Institutional Capacity for a Professional, Agile, and Future-Ready NSS

Goal Rationale
*A data-driven, agile, and adaptive **NSS** depends on skilled professionals, empowered institutions, and a culture of continuous learning. The assessment of Liberia's **NSS** revealed limited availability of specialized data professionals—such as data scientists, engineers, and statisticians—and weak institutional systems for professional growth, leadership development, and succession planning. The **NSDS III** therefore places human and institutional capacity at the center of transformation, ensuring that statistical institutions are staffed, motivated, and capable of leveraging emerging technologies and data sources.*

Strategic Objectives (SOs)
SO-1: Strengthen national capacity development systems to ensure a skilled, professional, and future-ready NSS workforce.

***Strategic Intent**:* Institutionalize continuous, competency-based learning and professional development to equip statisticians and data professionals with emerging technical and leadership skills.

SO-2: Enhance institutional structures and human resource systems to support efficiency, accountability, and career growth within the NSS.

***Strategic Intent**:* Ensure that NSS institutions are equipped with appropriate staffing frameworks, incentives, and organizational systems that promote performance and innovation.

SO-3: Institutionalize professional standards and career pathways for core and applied data professionals and foster collaborative Learning Networks.

***Strategic Intent**:* Promote professionalism, recognition, and collaboration among data and statistical careers through standardized qualifications and performance-based advancement mechanisms, and knowledge sharing networks.

SO-4: Foster a culture of innovation, leadership, and accountability across NSS institutions.

***Strategic Intent**:* Build a results-oriented and forward-thinking institutional culture that encourages creativity, inclusivity, and responsible leadership.

Strategic Goal 4 (SG4): Promote Inclusive Data Use and Embed FAIR Data Principles to Ensure Equitable Access, Interoperability, and Widespread Uptake of Official Statistics Through Effective Stakeholder Engagement

Goal Rationale
*Equitable access to quality data is essential for inclusion, transparency, and accountability. Liberia's **NSDS III** seeks to ensure that official statistics are not only produced efficiently but also used widely by policymakers, civil society, media, academia, and the private sector. Embedding FAIR (Findable, Accessible, Interoperable, and Reusable) data principles will*

enhance trust, transparency, and inclusivity in data use. This goal aims to build a culture where data is openly available, effectively communicated, and used to drive equitable national development.

Strategic Objectives (SOs)
SO-1: Strengthen national data access and communication frameworks to ensure equitable and inclusive use of official statistics.

Strategic Intent: Guarantee that all stakeholders have equitable access to fit-for-purpose data and statistics.

SO-2: Institutionalize FAIR data principles across the NSS to enhance data findability, accessibility, interoperability, and reusability.
Strategic Intent: Ensure that data management systems across institutions adhere to global standards that promote openness, consistency, and integration.

SO-3: Promote inclusive and participatory data ecosystems that amplify the voices and needs of marginalized and underrepresented groups.

Strategic Intent*:* Strengthen inclusivity by embedding gender, disability, and regional equity perspectives into statistical production and communication.

SO-4: Enhance data literacy and user engagement to promote an evidence-based culture across all levels of decision-making.

Strategic Intent*:* Build national capacity for data interpretation, visualization, and storytelling, enabling diverse users to transform data into actionable insights.

SO-5: Strengthen partnerships and collaboration with media, academia, and civil society to promote data communication and public awareness.

Strategic Intent*:* Foster a culture of transparency and accountability by encouraging public dialogue and communication based on official statistics.

Strategic Goal 5 (SG5): Promote Innovation and Build a Resilient National Data Ecosystem that Leverages AI and Emerging Technologies to Support Digital Transformation, Collaboration, and Inclusive Development

Goal Rationale
Emerging technologies such as Artificial Intelligence (AI), machine learning, and automation are reshaping how data is collected, analyzed, and used. Liberia's ***NSDS III*** *positions innovation and technology as catalysts for a resilient, integrated, and future-oriented data ecosystem. This goal seeks to enhance innovation readiness, accelerate the adoption of emerging technologies, and foster collaboration across government and private sectors to support digital transformation and inclusive growth.*

Strategic Objectives (SOs)
SO-1: Strengthen national innovation and technology adoption capacity within the NSS.

Strategic Intent: Enhance readiness for digital transformation by building institutional competencies and technical infrastructure for the use of AI, automation, and emerging technologies.

SO-2: Institutionalize frameworks and policies that promote safe, ethical, and inclusive use of AI and emerging technologies for official statistics.

Strategic Intent*:* Ensure that technology adoption aligns with ethical standards, privacy principles, and national priorities.

SO-3: Expand the use of non-traditional data sources and advanced analytics to enhance predictive, real-time, and responsive decision-making.

Strategic Intent*:* Strengthen the use of social media, geospatial, administrative, and big data sources to enrich official statistics and improve analytical capacity.

SO-4: Foster innovation partnerships between government, academia, private sector, and technology communities to accelerate data ecosystem growth.

Strategic Intent*:* Promote cross-sector collaboration to co-create innovative data solutions, pilot technologies, and share expertise across the **NSS**.

SO-5: Strengthen the resilience and interoperability of the national data infrastructure.

Strategic Intent*:* Ensure data systems are secure, integrated, and capable of supporting sustained innovation and collaboration across sectors.

Strategic Goal 6 (SG6): Secure Sustainable and Innovative Financing Models to Ensure Long-Term Resilience, Autonomy, and Continuous Transformation of the NSS

Goal Rationale
*Effective statistical systems require stable, predictable, and innovative financing. The assessment of Liberia's **NSS** revealed limited and irregular funding, dependence on external support, and lack of coordinated financial planning for statistical activities. **NSDS III** seeks to establish sustainable financing models that ensure long-term resilience, autonomy, and innovation. This goal emphasizes domestic resource mobilization, value-for-money principles, and strategic partnerships to sustain the transformation of the **NSS**.*

Strategic Objectives (SOs)
SO-1: Establish sustainable and diversified financing mechanisms for the NSS.

Strategic Intent: Secure predictable, multi-source funding from government, development partners, and private sector to support statistical operations and modernization.

SO-2: Integrate statistical financing into national development and budgeting frameworks.

***Strategic Intent**:* Institutionalize statistics as a budgeted component of national and sectoral development plans to ensure consistent resource allocation and accountability.

SO-3: Strengthen financial governance, efficiency, and value-for-money in statistical operations.

***Strategic Intent**:* Promote cost-effective data production through shared infrastructure, digital tools, and coordinated investments that reduce duplication and waste.

SO-4: Foster partnerships and innovative financing models, including public–private collaborations, to support continuous transformation of the NSS

***Strategic Intent**:* Mobilize additional resources and technical support through innovative financing approaches that sustain reform and drive digital innovation.

SO-5: Build institutional capacity for resource planning, mobilization, and financial accountability.

***Strategic Intent**:* Strengthen financial management capabilities within NSS institutions to enhance transparency, accountability, and sustainability of funding.

CHAPTER 5: IMPLEMENTATION PLAN FRAMEWORK

5.1 Introduction

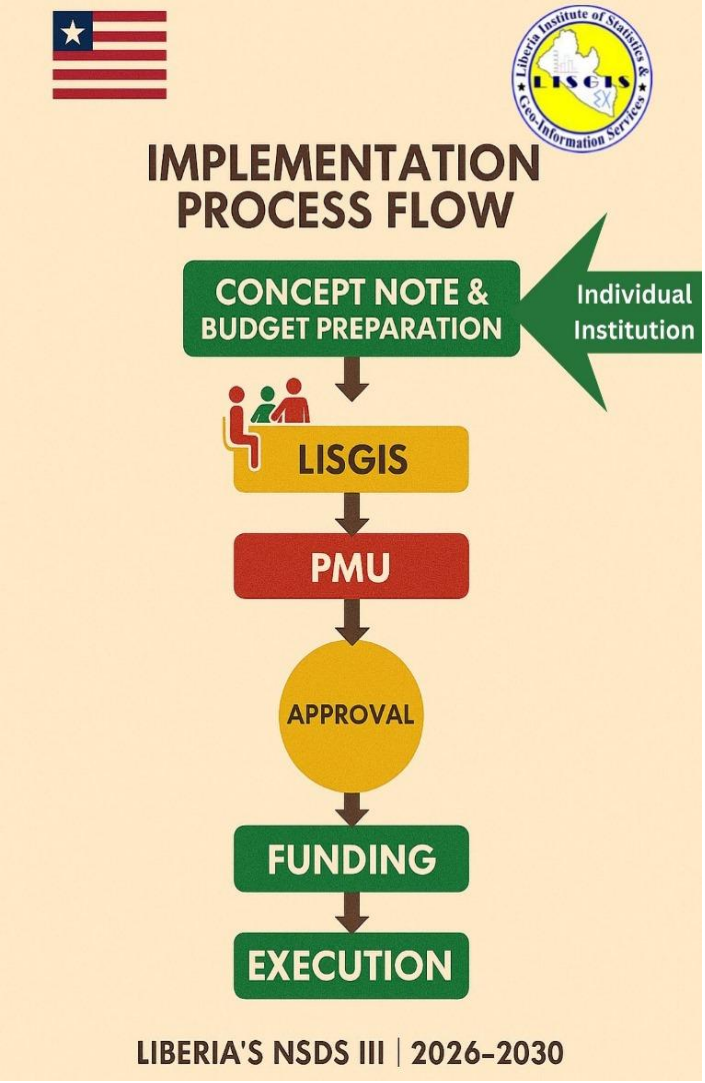
This chapter presents the institutional, operational, financial, and monitoring arrangements for implementing **Liberia's NSDS III, 2026–2030**. The implementation framework is designed to reflect the decentralized nature of Liberia's **NSS**, where each institution implements activities aligned to its mandate, while **LISGIS** serves as the national coordinating authority for official statistics.

Implementation of NSDS III shall be results-oriented, institution-led, and fully aligned with national development priorities and the Public Financial Management framework of the Government of Liberia.

5.2 Institutional Framework for Implementation

Implementation of NSDS III shall be undertaken by the full range of **NSS** institutions, including Ministries, Agencies, Commissions, academic institutions, and other authorized data-producing entities.

***Figure 5-1**: Implementation process flow*



5.2.1 Implementing Institutions

- Each institution is responsible for designing, costing, and executing activities aligned with relevant Strategic Goals and Strategic Objectives.
- Institutions may implement activities under one or more Strategic Goals, depending on institutional mandate and capacity.
- No institution is compelled to implement activities under all Strategic Goals.

5.2.2 Coordinating Institution (LISGIS)

LISGIS shall:

- Provide overall technical coordination of **NSDS III** implementation;
- Validate Concept Notes and technical designs of institutional activities;
- Ensure methodological consistency and statistical standards across the **NSS**;
- Consolidate implementation progress reports; and
- Serve as secretariat to the **National Statistics Council (NSC)**.

5.2.3 Oversight Authority (National Statistics Council)

The **NSC** shall provide:

- Strategic oversight and policy direction for the **NSDS III**;
- High-level advocacy and political support for statistical development;
- Endorsement of major reforms and system-wide initiatives.

5.3 Activity Identification and Institutional Planning Approach

NSDS III adopts a **bottom-up, institution-driven planning model**, where:

- Each institution identifies activities it will implement under specific Strategic Objectives;
- Activities are aligned strictly with the institution's legal mandate and technical capacity;
- An institution may implement:
  - Multiple activities under one Strategic Objective;
  - No activities under certain Strategic Goals where there is no relevance.

This flexible design ensures **realism, ownership, and institutional accountability** in NSDS III implementation.

5.4 Concept Note and Budget Preparation

For every proposed NSDS III activity, the implementing institution shall prepare a **Concept Note and Detailed Budget** in collaboration with LISGIS. Each Concept Note shall include:

- Description of the activity;
- Strategic Objective addressed;
- Expected outputs and outcomes;
- Implementation timeline;
- Procurement and staffing arrangements;
- Risk assessment and mitigation measures;
- Detailed budget breakdown.

LISGIS shall provide **technical guidance and quality assurance** to ensure alignment with national statistical standards and **NSDS III** priorities.

5.5 Financial Appraisal, Approval, and Funding Authorization

All NSDS III activities shall be submitted to the Project Management Unit (PMU) of the Ministry of Finance for financial appraisal and approval after technical clearance by LISGIS.

The PMU shall:

- Review budgets for compliance with Public Financial Management (PFM) regulations;
- Verify procurement plans and financial controls;
- Approve eligible activities for funding;
- Formally authorize the release of funds.

The PMU is the **sole authority for financial approval and disbursement under NSDS III**.

5.6 Disbursement Modalities

Upon PMU approval, funds shall be released using **existing official institutional bank accounts**. No dedicated NSDS III project accounts shall be established. Disbursement modalities shall apply:

5.6.2 Direct Payment to Consultants and Vendors

For consultancy services and external procurements:

- Implementing institutions shall submit all required documentation to the PMU (contracts, invoices, approved deliverables, timesheets, and reports);
- The PMU shall make **direct payment to consultants or vendors** after verification;
- Funds shall not pass through institutional accounts in such cases.

5.7 Procurement Arrangements

All procurement under NSDS III shall comply with Public Procurement and Concessions Commission (PPCC) regulations and as well the those of the development partners

Procurement responsibilities shall remain with implementing institutions, with:

- Technical validation by **LISGIS**;
- Financial and contractual validation by the PMU.

5.8 Phasing and Rollout of NSDS III

NSDS III shall be implemented over a five-year period (2026–2030) using a **flexible, institution-specific phasing approach**, rather than a rigid, centrally sequenced model.
Key features of the phasing approach include:

- Each institution determines the start and end year of its activities;
- Activities may begin in any year of the plan period;
- Activities may be short-term, medium-term, or continuous across multiple years;
- Timing depends on institutional readiness, funding availability, and technical priorities.

This adaptive phasing model ensures:

- Realistic implementation across institutions with different capacities;
- Efficient use of resources;
- Alignment with sectoral planning and budget cycles.

5.9 Results Framework and Performance Measurement

Each **NSDS III** activity shall be linked to:

- A clearly defined Strategic Goal and Strategic Objective;
- Output and outcome indicators;
- Baselines and annual targets.

Performance shall be tracked using:

- Institutional implementation reports;
- Consolidated NSS performance dashboards maintained by LISGIS;
- Annual NSDS III performance review reports.

5.10 Risk Management and Mitigation Measures

Key implementation risks include:

- Delays in funding releases;
- Institutional capacity constraints;
- Weak inter-institutional coordination;
- Staff turnover;
- ICT and infrastructure limitations.

Mitigation measures shall include:

- Strengthened PMU–LISGIS coordination;
- Continuous capacity development;
- Phased activity implementation;
- Institutional contingency planning;
- Development partner harmonization.

5.11 Sustainability and Institutionalization of Reforms

Sustainability of NSDS III reforms shall be ensured through:

- Integration of NSDS activities into institutional Medium-Term Expenditure Frameworks;
- Long-term human resource development strategies;
- Strengthening of administrative data systems;
- Adoption of permanent data governance and coordination frameworks;
- Increased domestic financing of official statistics.

5.12 Communication and Change Management

A coordinated NSDS III communication strategy shall be implemented to:

- Build ownership among political and technical leadership;
- Enhance public trust in official statistics;
- Promote data use for decision-making;
- Support change management across the NSS.

5.13 Implementation Accountability Framework

Implementation accountability shall rest on three pillars:

- **Institutions** – execution and reporting of activities;
- **LISGIS** – technical coordination and performance consolidation;
- **PMU (Ministry of Finance)** – financial approval, fiduciary control, and disbursement;
- **National Statistics Council** – strategic oversight and system-level accountability.

CHAPTER 6: INITIAL STRATEGIC ACTION PORTFOLIO AND COSTED ACTIVITIES

6.1 Introduction

This chapter presents the **Initial Strategic Action Portfolio and Costed Activities** for implementing the National Strategy for the Development of Statistics **NSDS III**. The portfolio is a curated set of priority activities designed to launch the transformation of the **NSS** by building essential capacity, demonstrating quick wins, and establishing the systems necessary for long-term development.

The initial portfolio reflects a set of priority activities identified and costed by each **NSS** institution, with implementation timelines varying across the five-year period—primarily focusing on Years 1–3 for early momentum. This makes it a realistic, investable starting point for **NSDS III** implementation, rather than a rigid, pre-determined schedule for all five years. It provides a coherent, finance-ready pipeline of activities that can be advanced immediately by the **NSS**, once the **NSDS III** is approved by the **LISGIS Board** and subject subsequently to activity-level financing approval through the **PMU** of the **MFDP**. This pipeline operationalizes the high-level Implementation Plan from **Chapter 5** while advancing the Strategic Objectives outline in **Chapter 4**.

The portfolio will be reviewed and updated annually to reflect emerging priorities, institutional readiness, funding availability, and lessons learnt. Subsequent activities may be added over time, ensuring the NSDS III remains flexible, adaptive, and responsive to Liberia's evolving policy and development context.

The Initial Portfolio has been developed through a **bottom-up, institution-driven process** that ensures realism, institutional ownership, and strategic alignment across the **NSS** and with national priorities like the **ARREST Agenda**. Each **NSS** institution identified activities aligned with relevant Strategic Objectives under **NSDS III**, consistent with its legal mandate, operational responsibilities, and readiness to implement. Some institutions proposed multiple activities under various Strategic Goals; others focused on only a few priority actions.

The activities were compiled and aligned by **LISGIS** with relevant **NSDS III** Strategic Objectives, based on submissions from the **NSS** institutions. Final implementation will require the development of detailed project proposals—including full technical specifications, procurement plans, and final budgets—which will be subject to standard approval processes by the relevant authorities.

Financing and disbursement for portfolio activities shall follow the PMU-management payment model established in Chapter 5, featuring centralized control such as:

- No funds transferred to implementing institutions
- PMU approval of budgets, contracts, and financial commitments
- Direct PMU payments to consultants, vendors, field staff, and all other service providers

This approach guarantees strong fiduciary oversight, auditability, and compliance with national and Development Partner requirements, positioning the chapter as both a priority investment pipeline for the early phase of NSDS III and a reference framework for resource mobilization.

6.2 Portfolio Selection and Costing Methodology

The Initial Strategic Action Portfolio (**ISAP**) was developed through a fully institution-driven process. Each **NSS** institution identified the activities it intends to implement under **NSDS III**, determined their proposed timelines, and estimated the associated costs. No central prioritization or sequencing was imposed. Instead, each institution applied its own operational logic, statutory mandate, and internal planning considerations, ensuring the portfolio reflects genuine **NSS-wide** commitment.

How Activities Were Selected

Activities were not selected based on externally imposed filters or predefined prioritisation criteria. Rather, institutions determined their activities by examining:

1. **Mandate and Core Responsibilities**
   Institutions proposed activities aligned with their statutory roles, data functions, and obligations within their respective sectors.
2. **Institutional Needs and Operational Realities**
   The timing of activities—whether annual, one-off, or scheduled for later years—reflects each institution's internal considerations, such as staffing, system maturity, ongoing reforms, and operational cycles, not resource availability constraints.
3. **Sequencing and Dependencies**
   Some activities naturally begin in later years because they depend on the completion of foundational work, policy developments, system upgrades, or other sector-specific processes.
4. **Continuous and Recurring Requirements**
   Essential functions—such as capacity building, data quality assurance, and user engagement—appear across multiple years because they represent core, recurring institutional responsibilities.

LISGIS's Coordinating and Consolidating Role

LISGIS compiled the activities submitted by **NSS institutions** and organized them into the unified portfolio presented in this chapter.

Costing Approach

Cost estimates were prepared by the institutions themselves, drawing on past experience, operational benchmarks, and standard unit costs, and were reviewed by **LISGIS** for consistency and coherence across the **NSS**.

Resulting Portfolio

The outcome is a **comprehensive, mandate-driven, and institution-owned portfolio** that reflects the full spectrum of activities required to launch **NSDS III** implementation. Varying timelines across institutions and activities correspond to real operational conditions, rather than centrally imposed constraints.

6.3 Summary of Portfolio Costs

The **ISAP** consists of all activities submitted and costed by **NSS** institutions for implementation under the **NSDS III**. These activities vary by duration, intensity, and complexity, resulting in a portfolio that spans routine annual actions, multi-year initiatives, and one-off foundational reforms.

To support financial planning and decision-making by the **LISGIS Board**, the **MFDP**, and **Development Partners**, this section presents a consolidated, multi-year view of the portfolio's indicative costs. The summary tables aggregate costs by **Strategic Goals** and **implementation year**, providing a clear picture of the total investment profile and its phasing over the **NSDS III** period. The costing reflects:

- Institution-generated budgets based on their proposed or identified activities
- Standard cost assumptions reviewed with LISGIS consistency.
- Costing of direct implementation components (e.g., technical assistance, training, equipment, workshops, and data activities)
- The **PMU's** direct-payment financing model, where funds are managed centrally and disbursed against verified deliverables, with no direct transfers to institutions.

6.3.1 Summary of Portfolio Costs by Strategic Goal and Year

This table presents the total indicative investment required for the Initial Action Portfolio, disaggregated by **Strategic Goal** and by year for the period **2026-2030**. It provides a high-level financial roadmap, illustrating the distribution and phasing of costs across the six transformation pillars to enable strategic oversight, medium-term budget planning, and engagement with financing partners. **See Table 6.1 below.**

Table 6.1: Consolidated Indicative Costs by Strategic Goal and Year (2026–2030) in US Dollars

Strategic Goal Code	Strategic Goal Description	Year 1	Year 2	Year 3	Year 4	Year 5	Total (USD)
SG1	Strengthen Statistical Coordination, Governance, and Trust across the NSS	10,919,820.00	12,278,802.00	13,506,682.00	14,857,350.00	15,987,708.00	67,550,362.00
SG2	Re-engineer the National Data Production Ecosystem to Generate and Communicate Fit-for-Purpose Statistics that Drive Effective Policy and Innovation	36,029,816.00	27,570,532.00	25,707,585.00	10,589,316.00	23,454,532.00	123,351,781.00
SG3	Strengthen Sustainable Human and Institutional Capacity for a Professional, Agile, and Future-Ready NSS	20,360,800.00	22,324,280.00	24,329,833.00	26,762,816.00	22,324,280.00	116,102,009.00
SG4	Promote Inclusive Data Use and Embed FAIR Data Principles to Ensure Equitable Access, Interoperability, and Widespread Uptake of Official Statistics Through Effective Stakeholder Engagement	1,381,140.00	1,519,254.00	1,671,179.00	1,838,297.00	2,022,127.00	8,431,997.00
SG5	Promote Innovation and Build a Resilient National Data Ecosystem that Leverages AI and Emerging Technologies to Support Digital Transformation, Collaboration, and Inclusive Development	910,300.00	1,001,330.00	1,066,615.00	1,202,077.00	1,322,284.00	5,502,606.00
SG6	Secure Sustainable and Innovative Financing Models to Ensure Long-Term Resilience, Autonomy, and Continuous Transformation of the NSS	385,500.00	997,980.00	1,097,778	397,862.00	1,011,948.00	3,891,068.00
Total		69,987,376.00	65,692,178.00	67,379,672.00	55,647,718.00	66,122,879.00	324,829,823.00

The annual totals shown in Table 6.1 represent the consolidated indicative portfolio costs across all Strategic Goals per year.

6.4 Detailed Costed Action Portfolio

This section presents the complete set of activities submitted by **NSS** institutions that constitute the Initial Strategic Action Portfolio. These detailed listings provide the implementation-level view of the institution-driven priorities summarized in **Section 6.3.1**. The portfolio reflects the full spectrum of efforts required for data and statistical transformation across the **NSS**, including foundational reforms, capacity building, improvements in data production, communication, and use, infrastructure investments, methodological upgrades, governance mechanisms, and cross-cutting support activities.

The activities are presented in the detailed tables below (**Sections 6.4.1 to 6.4.6**), organized by Strategic Goal. Each table specifies the corresponding Strategic Objective, Activity Description, Implementing Institution, Timeframe, and Indicative Cost—providing the level of detail required for effective execution, coordination, and monitoring.

6.5 Linkage to Annual Planning, Budgeting, and Monitoring

The Initial Strategic Action Portfolio presented in this chapter provides the operational and financial foundation for launching the **NSDS III**. Together, the consolidated portfolio costs and the detailed activity listings enable clear planning, budgeting, and coordination across the National Statistical System. Institutions will incorporate **NSDS III** activities into their Annual Work Plans for implementation, ensuring that the Strategy is embedded within routine operational processes rather than implemented in isolation. The activities reflect institution-driven priorities aligned with the strategic direction of the **NSDS III** and financed through the centralized PMU-managed mechanism.

With the investment portfolio defined, the next critical step is to ensure that implementation is systematically tracked, lessons are captured, and performance is transparently assessed.

CHAPTER 7: MONITORING, EVALUATION, AND LEARNING FOR STATISTICAL TRANSFORMATION

7.1 Introduction: MEL Powered by a Transformative Data Infrastructure

The **NSDS III** is designed to act as a **Statistical Disruptor and National Change Agent**, moving beyond mere activity implementation toward fundamentally transforming how data is produced, governed, communicated, and used to drive national development. Achieving this transformation requires a Monitoring, Evaluation, and Learning (**MEL**) framework that is equally transformative—shifting from periodic reporting to a real-time, data-driven steering tool for the **NSS**.

- The **NSS** assessment revealed strong institutional support for digital transformation: **94.1%** of institutions support the design and implementation of an **NSS-wide ICDMS**
- **97.1%** support **EDRMS**
- **58.8%** of institutions include capacity development in Knowledge Management System (**KMS**) within their Data Management Strategy (**DMS**), signaling readiness for institutional learning, knowledge retention, and long-term sustainability of data-driven transformation.

By embedding **MEL** directly within the re-engineered **NSS** digital ecosystem—comprising the **ICDMS, KMS,** and **EDRMS**—the **NSDS III** ensures that performance management is **integrated**, **not imposed**. Instead, **MEL** becomes an organic function of a responsive and robust **NSS**, driving accountability, transparency, and adaptive management across all institutions.

This chapter presents a **MEL** framework **intentionally designed to be powered by**:

- **ICDMS**—A platform for tracking activities, monitoring indicators, reviewing dashboards, and capturing progress in near real-time
- **EDRMS**—A secure digital system for storing deliverables, reports, contracts, evidence, and official documents
- **KMS**—A platform for capturing lessons, guidance, templates, tools, and institutional knowledge.

Together, these systems become the single source of truth for **NSDS III** implementation—consolidating activity tracking, performance indicators, financial execution data, and institutional reporting into a unified platform.

Through this integration:

- **Monitoring** becomes real-time and evidence-driven
- **Evaluation** becomes rigorously supported by verified digital records
- **Learning** becomes continuous, structured, and institutionalized
- **Management of unstructured data** is simplified and streamline
- Decision-making becomes faster, transparent, and data-informed

The **MEL** Framework reflects both the institutional readiness for digital transformation and the **NSDS III's** commitment to building a coordinated, trusted, and future-ready **NSS**.

7.2 Objectives of the MEL Framework

The **MEL** Framework for **NSDS III** designed to:

- Track implementation progress systematically
- Strengthen accountability across the **NSS**
- Support evidence-based decision-making at all levels
- Enable continuous learning and adaptive management
- Promote a culture of results, institutional learning, and knowledge retention

7.3 MEL Principles for Statistical Transformation

The design of the MEL Framework is guided by the following principles:

- **Results Orientation**—ensuring that **MEL** drives measurable improvements in statistical performance and service delivery
- **Transparency and Accountability**—promoting openness in reporting, decision-making, and resource use across the **NSS**
- **Timeliness and Reliability**—ensuring that data and performance insights are produced consistently and on time
- **Coordination Across Institutions**—strengthening collaboration and coherence across the **NSS**
- **Digital-First MEL**—leveraging the **ICDMS, KMS, EDRMS** and emerging technologies such as **AI-powered, fit-for-purpose platforms**
- **Institutional Memory and Knowledge Retention**—ensuring that knowledge is harnessed, preserved, and readily accessible across the **NSS**, guided by **FAIR Data Principles** to strengthen findability, accessibility, interoperability, and reusability across digital platforms
- **Continuous Learning and Adaptation**—embedding learning loops that enable the **NSS** to evolve, innovate, and respond to emerging needs

7.4 MEL Architecture and Institutional Roles

The **MEL** architecture is built on an integrated digital ecosystem that enables real-time monitoring, institutional learning, and evidence-driven decision-making across the NSS. Each system plays a distinct but complementary role:

- **ICDMS**—supporting data capture, activity reporting, dashboards, and performance monitoring
- **KMS**—enabling the documentation of lessons, good practices, tools, templates, and technical guidance
- **EDRMS**—managing deliverables, reports, contracts, evidence, and official documents to strengthen traceability and compliance

Together, these systems enable seamless workflows across the **MEL** cycle—from data entry and validation to reporting, review, and learning—while reinforcing interoperability and institutional memory.

Key Institutional Roles:

- **LISGIS/NSDS Secretariat**—provides **MEL** coordination, technical guidance and system-wide oversight
- **NSS Institutions**—generate evidence, report progress and ensure data quality within their mandates
- **PMU**—verifies financial compliance and links performance reporting to resource use
- **National Statistics Council**—offers strategic oversight and ensures alignment with national priorities
- **Sector Ministries**—align sector data systems with **NSS** standards (including metadata, classifications, interoperability, and FAIR principles) and provide sector-specific reporting through administrative data, performance indicators, evidence submissions, and participation in joint review processes
- **Development Partners**—support alignment, capacity strengthening, and joint review processes

7.5 Performance Measurement Framework

The Performance Measurement Framework defines how progress on NSDS III will be tracked, assessed, and reported. It includes:

- **Input, output, outcome, and system-level indicators** that capture both implementation progress and institutional transformation
- **Alignment with NSDS III Strategic Objectives** to ensure coherence between activities, results, and long-term outcomes
- **Quarterly, bi-annual, and annual reporting cycles** that support real-time monitoring, adaptive management, and strategic reviews
- **Full integration with ICDMS, KMS,** and **EDRMS**, enabling automated reporting, evidence verification, and institutional learning

7.6 Monitoring Processes and Tools

Monitoring under the NSDS III will be conducted through a structured, digitally enabled process that ensures timely reporting, evidence verification, and real-time performance insights. Key monitoring processes include:

- **Quarterly reporting through the ICDMS**, capturing activity progress, indicator updates, and implementation status
- **Automated dashboards and alerts**, providing real-time visibility on performance trends, bottlenecks, and overdue actions
- **Financial execution updates from the PMU**, linking resource utilization to implementation progress
- **Verification of deliverables stored in the EDRMS**, ensuring that outputs, reports, and evidence are traceable and compliant
- **Annual NSDS III Performance Report**, consolidating system-wide progress and informing strategic decision-making
- **Mid-year reviews**, enabling course correction, adaptive management, and alignment with emerging priorities

7.7 Evaluation Strategy

Evaluations will assess the effectiveness, relevance, and impact of **NSDS III** implementation. The evaluation plan includes:

- **Mid-Term Evaluation (Year 3)** to assess progress, identify bottlenecks, and inform course correction
- **End-Term Evaluation (Year 5)** to assess overall performance, outcomes, and sustainability
- **Thematic evaluations** to examine priority areas such as data governance, digital transformation, capacity development, and sector performance

Evaluators will draw on the full digital MEL ecosystem, including:

- **ICDMS MEL datasets** for performance and implementation data
- **EDRMS evidence repositories** for verified outputs, deliverables, and documentation
- **KMS knowledge summaries** capturing lessons, good practices, and institutional insights

7.8 Learning and Adaptive Management

Learning and adaptation are embedded throughout the MEL cycle to ensure that evidence informs decision-making and continuous improvement. Key mechanisms include:

- **Annual NSS Learning Forum**, convening institutions to reflect on progress, challenges, and innovations
- **Quarterly learning reflections captured in the KMS**, documenting insights and emerging lessons
- **Peer-learning exchanges**, enabling cross-institutional collaboration and knowledge sharing
- **Learning briefs stored in the KMS**, synthesizing lessons and good practices for wider use
- **Real-time learning loops driven by ICDMS dashboards**, enabling rapid identification of issues and timely corrective action

7.9 Risks to MEL Implementation and Mitigation Measures

Effective **MEL** implementation may face several risks. Anticipating these risks and applying proactive mitigation measures is essential for sustaining performance monitoring, evaluation, and learning across the **NSS**.

Key risks and mitigation measures include:

Low Reporting Compliance

Mitigation: enforce reporting schedules through ICDMS alerts, strengthen institutional accountability, and provide targeted support to low-performing institutions.

Delays in ICDMS, KMS, and EDRMS Rollout

Mitigation: adopt phased deployment, ensure vendor and technical partner coordination, and provide interim reporting templates during transition periods.

Capacity Gaps Across NSS Institutions

Mitigation: implement continuous capacity-building programs, peer-learning exchanges, and on-the-job coaching linked to digital MEL tools.

Data Quality Issues
Mitigation: apply standardized data quality assurance protocols, strengthen validation processes within **ICDMS**, and conduct periodic data quality assessments.

7.10 Reporting to Stakeholders

Reporting ensures that **MEL** findings inform decision-making, strengthen accountability, and promote transparency **across** the NSS. Key stakeholders include the LISGIS Board, the Ministry of Finance and Development Planning, the Cabinet, development partners, and the public. Reporting will be supported by the digital **MEL** ecosystem, including:

- **ICDMS dashboards** for real-time performance insights
- **EDRMS evidence repositories** for verified outputs and documentation
- **KMS knowledge products** summarizing lessons, good practices, and learning insights

These tools enable timely, accurate, and accessible reporting to all stakeholders, reinforcing trust and supporting evidence-driven governance.