The fourth National Strategy for the Development of Statistics (NSDS4) in brief

1. Introduction

The Fourth National Strategy for the Development of Statistics (NSDS4), spanning 2024 to 2029, is a strategic framework developed by the National Institute of Statistics of Rwanda (NISR) to strengthen Rwanda's National Statistical System (NSS).

It addresses the growing demand for high quality, timely, and accessible statistical data to support evidence-based policymaking and monitor national, regional, and global development agendas, including Rwanda's Vision 2050, the Second National Strategy for Transformation (NST2), EAC Vision 2050, AU Agenda 2063, and the UN Sustainable Development Goals (SDGs).

The strategy emphasizes the intensive use of Artificial Intelligence (AI) for advanced data analysis and innovative data dissemination to enhance efficiency and accessibility.

2. NSDS4 key components

2.1. Vision, Mission, and Core Values

The vision of NSDS4 is to establish the National Institute of Statistics of Rwanda as the leading producer and supplier of official statistics in the region and among the best globally, setting a benchmark for statistical excellence. Its mission focuses on modernizing and transforming the National Statistical System to efficiently respond to data demands while enhancing the use of official statistics through innovative technologies, such as Artificial Intelligence. The strategy is guided by core values that include integrity, collaboration, innovation, the highest professional standards, and value for money, ensuring ethical and impactful statistical practices across all activities.

2.2. Context and Rationale

1) Data Demand: Driven by national (NST2, Vision 2050), regional (EAC), and global (SDGs, AU Agenda 2063) agendas, requiring extensive, disaggregated, and timely

data.

2) Data Supply: Supported by Rwanda’s commitment to statistics as a public good, underpinned by laws (e.g., Statistics Act 2013) and policies like the Data Revolution Policy (2017) and National AI Policy, promoting AI, administrative records, and Big Data.

3) NSS Assessment: Highlights Rwanda’s strong statistical capacity (World Bank SPI score of 73.4 in 2023, top in Africa for Open Data Index) but notes challenges like limited sectoral statistical units and weak administrative data systems in MDAs.

2.3. Alignment and Innovations

o The NSDS4 is aligned with international frameworks like the Cape Town Global Action Plan (CTGAP 2.0) and regional strategies (SHaSA2, EAC Statistics Bill).

o The NSDS4 embraces the emerging data ecosystem, integrating non-traditional sources (Big Data, AI), with NISR as a data steward, using cutting-edge technologies for the production and dissemination of official statistics, and user engagement.

o The NSDS4 prioritizes capacity building in all domains that support the production, dissemination, and use of statistics.

2.4. Strategic Framework

The strategic framework of NSDS4 is built around four interconnected pillars, each with specific objectives and activities to advance Rwanda’s statistical capabilities.

o Pillar I: This pillar aims to streamline the production of timely and high-quality Data for evidence-based decision-making. It will focus on sustaining core data production at NISR and enriching data supply across the NSS.

Key objectives include maintaining essential data collection activities, such as the Agriculture Census to support NST2 agricultural goals, and enhancing administrative and sector-specific statistics by leveraging AI for robust data analysis. For example, the development of the Civil Registration and Vital Statistics (CRVS) system will utilize AI for data validation to ensure accuracy and reliability.

o Pillar II: Lead a National Data Revolution aims to enhance data accessibility and promote statistical literacy. This pillar emphasizes increasing data uptake and

impact through open data platforms and AI-driven dissemination tools, such as interactive dashboards and automated reports deployed on the Rwanda Open Data Portal.

Additionally, it includes conducting data literacy workshops for policymakers and media to foster greater understanding and use of statistical data.

o Pillar III: It focuses on building NSS Capability to strengthen the capacity of the NSS for data production, management, and analysis.

Objectives include training 100 NSS staff in AI, Big Data, and data science by 2029, as well as introducing AI-based methods for advanced analytics and predictive modeling, such as implementing predictive models for economic indicators to support proactive policymaking.

o Pillar IV: This pillar will strengthen the Enabling Environment that focuses on creating a sustainable statistical ecosystem. This includes building a skilled workforce through annual recruitment of 25 statisticians and AI-focused training, investing in infrastructure like AI-compatible data center servers, and mobilizing resources through strategic partnerships, such as securing World Bank funding for Sector Statistical Plans to enhance sectoral data coordination.

2.5. NSDS4 implementation

The NSDS4 Implementation will be coordinated by NISR, with NSS members collaborating through annual action plans, performance contracts (Imihigo), and governance structures like the NSDS Steering Committee, Sector Working Groups, National Association of Statisticians, etc.

Ministries, Departments, and Agencies (MDAs) will be requested to develop their Sector Statistical Plans to improve the quality and coordination of their statistics, especially sector administrative data. These plans will outline sector-specific data needs, production schedules, and dissemination strategies, aligning with NST2 and other national priorities to ensure robust, sector-driven statistical outputs.

NSDS4 projects are categorized as follows:

o Projects that will be implemented by NISR: These are mainly surveys and censuses that cover all sectors at the country level. They include for instance Agriculture Census, household surveys, enterprise surveys, seasonal agriculture survey,

National Accounts, and Price indices, with AI enhancing data processing and analysis. These surveys/censuses are conducted with different frequencies according to their different nature.

o Projects that will be implemented by Sectors in collaboration with NISR: These are mainly projects that aim at strengthening statistical system at the sector level. They include specific Surveys covering the whole country and requesting advanced skills and collaboration for their effectiveness and efficiency. They include for instance, the FinScope Survey (Finance), Comprehensive Food Security and Vulnerability and Nutrition Analysis Survey (CFSVA), and environmental studies (e.g., GHG inventory), etc.

o Projects that will be implemented solely by Sector: These are projects that will be mainly implemented by MDAs. However, they will be requested to get NISR approval (in case the project will be implemented at provincial level, or districts in different provinces as stipulated by the law governing statistical activities in Rwanda).

In addition, as the country is investing in digitalization, Public institutions are requested to invest in the development of systems that curate administrative data in their respective sectors. However, these institutions will always be encouraged to seek NISR advice to ensure that these systems are generating data that will be used to produce official statistics. (e.g., CRVS, WASH Management Information System), with AI improving data quality and dissemination.

2.6. Expected Outcomes

NSDS4 aims to achieve several key outcomes to enhance Rwanda’s statistical system. The first outcome is improved availability of timely, quality, and relevant statistics, with a target of maintaining a World Bank Statistical Performance Index (SPI) score above 73% by 2029, verified through the World Bank SPI dashboard.

The second outcome is increased user satisfaction with official statistics, aiming to achieve a satisfaction rate above 77% by 2028/29, driven by AI-enhanced accessibility and verified through user satisfaction survey reports.

Finally, NSDS4 seeks to strengthen the National Statistical System to support sustainable development, enabling evidence-based policymaking through AI innovations across all sectors, with progress tracked via NST2 and SDGs monitoring and evaluation reports.

2.7. NSDS4 Monitoring and Evaluation

o Monitoring and Evaluation (M&E): Uses a logical framework with indicators, baselines, and milestones. Daily monitoring by the Single Project Implementation Unit (SPIU), with mid-term and final evaluations.

o Estimated Budget: Outlined in Table 8, the budget allocates significant resources for NISR led activities (e.g., Agriculture Census, AI infrastructure) and sectoral projects (e.g., surveys, capacity building, Sector Statistical Plans). It reflects a comprehensive financial plan to support data production, technological advancements, and workforce development, ensuring sustainable statistical development across the NSS.

o Risks and Mitigation: Identifies risks (e.g., funding shortages) with mitigation strategies.

3. Conclusion

NSDS4 is a vital instrument for strengthening the coordination of the National Statistical System (NSS) and ensuring that data demands are effectively met. Over its five-year implementation period, NSDS4 will enhance the use of administrative data to complement data collected through surveys and censuses, thereby improving the supply of official statistics.

The strategy also promotes the integration of Big Data analytics and Artificial Intelligence (AI) in data collection, analysis, communication of insights, and user engagement across all sectors. To ensure the successs implementation of NSDS4, especially at sector level, Sector Statistical Plans will play a key role by increasing the availability of timely and high-quality data.

From its participatory design and strong collaboration among all stakeholders and development partners, and supported by a comprehensive budget, the NSDS4 implementation will significantly advance Rwanda’s capabilities in official statistics. This will contribute to informed decision-making, support national transformation, and align with global development goals.

Coordination and Technical Team

The development of NSDS4 was a highly consultative and inclusive process, led by a dedicated team at NISR under the guidance of Mr. Ivan Murenzi, Director General,

and Mr. Ndakize Michel, Acting Deputy Director General. Oversight was provided by Mr. Nkusi David, Head of Corporate Services, and Mr. Museruka David, SPIU Coordinator.

The technical groundwork was carried out by a skilled NISR team, including Mr. Nyirimanzi Jean Claude, Mrs. Kayitesi Claudette, Ms. Uwamahoro Sandrine, Mr. Mupende Emmanuel, Mrs. Ishimwe Caroline, Mr. Nzasingizimana Tharcisse, and Mr. Nzabamwita Fidèle, who played critical roles in shaping the strategy. Their expertise ensured a stakeholder-driven approach, with additional support from international consultants Prof. Ben Kiregyera and Dr. Ludovick Leon, enhancing alignment with global best practices.

Reference document (PDF)

- NSDS4 (2024_2029).pdf (pdf, 3.65 MB)
  LAST UPDATED: 8 May 2025

Related documents

Third National Strategy for the Development of Statistics (NSDS3)

Second National Strategy for the Development of Statistics (2014 -2018)

First National Strategy for the Development of Statistics (2009 -2014)

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