Republic of Rwanda

NATIONAL INSTITUTE OF STATISTICS OF RWANDA

The Third National Strategy for the Development of Statistics of Rwanda

NSDS3

2019/20-2023/24

National Institute of Statistics of Rwanda

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September 2019

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Foreword

Statistics are essential to inform decision-making, design policy and optimize service delivery. Stakeholders from across government, development partners, the private sector, civil society, academia and the general public recognize the value of timely, relevant, accurate and reliable data flows to support national development. Moreover, the role of statistical development in fostering effective systems for planning, monitoring and evaluation cannot be over-emphasised.

The National Institute of Statistics of Rwanda (NISR) is responsible for the development of statistics in the country. This encompasses the production and dissemination of official surveys, censuses and administrative statistics, as well as coordination of the National Statistical System (NSS). Members of the NSS, Ministries, Departments and Agencies (MDAs) across government produce and use a variety of statistics for their work under NISR's supervisory mandate.

During implementation of NSDS1 and NSDS2, NISR established strong patterns of data production and dissemination, improving alignment between data supply and policy-driven demand. In addition to increasing the range and frequency of official statistical products, initiatives to facilitate data access, build statistical capacity, and strengthen partnerships laid the groundwork to expand engagement with the NSS and coordination for future strategies.

With this vision in mind, the third National Strategy for the Development of Statistics (NSDS3 2019/10-2023/24) is aligned with national development priorities reflected in the first National Strategy for Transformation (NST-1), Sector Strategic Plans (SSPs) and the Sustainable Development Goals (SDGs). Continued efforts to improve data coverage, frequency and granularity will be complemented by new instruments and initiatives to strengthen NSS performance, including individual sector statistical plans, Imihigo planning and evaluation, implementation of Rwanda's Data Revolution Policy (DRP) and the launch of the NISR Training Centre and capacity building program. In sum, the NSDS3 agenda holds the potential to transform statistics in the country and significantly advance NSS capability.

Under NSDS3, the ministry of Finance and Economic Planning on behalf of the entire Government of Rwanda renews its commitment to support statistics development in Rwanda. The Government of Rwanda will continue to commit the needed resources and calls upon development partners, civil society and the private sector to join this effort and align their contributions to this strategy.

Dr Uzziel NDAGIJIMANA

Minister of Finance and Economic Planning

Acknowledgements

This is the third National Strategy for the Development of Statistics (NSDS3) in Rwanda. The first strategy (NSDS1) was from July 2009 to June 2014, the second one (NSDS2) from July 2014 to June 2019. The third strategy that is starting in July 2019 will mark fifteen years of consistent statistics development in Rwanda by June 2024. All previous strategies were implemented successfully and I believe this strategy will be implemented as well.

Official Statistics capacity in Rwanda has transitioned quickly over the last ten years during NSDS1 and NSDS2. During NSDS1 the main focus was building the capacity of the National Institute of Statistics of Rwanda to deliver key national statistics and manage its mandate. During NSDS2 the focus was to expand engagement in statistics capacity to include key sectors in the National Statistical System (NSS) and producing sector statics. NSDS3 is aiming at adopting new technologies, harnessing big data and the data revolution and widely building statistics capacity across the NSS to produce and use statistics effectively.

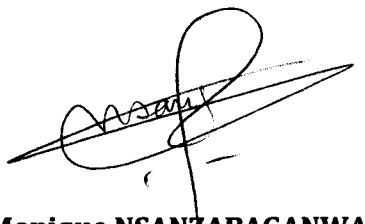
The process for NSDS3 development was very consultative and is as important as the product.

I appreciate the effort of all NSS members who contributed and supported the development of the sector statistical plans that formed the building blocks of NSDS3. My sincere gratitude to the members of NISR Board of Directors for their inspiration and NSDS National Steering Committee members, including UK-aid from the British People, the UN family led by UNFPA and UNICEF, the World Bank, the European Union and the African Development Bank among others. We deeply value our partnership and the commitment to support the development of statistics in Rwanda.

I profoundly appreciate the contribution and technical advice from partners throughout the NSDS3 design process. Special thanks to the AfDB consultant, Professor Ben Kiregyera and staff from the UK-ONS and the World Bank who provided professional reviews of this strategic document.

I would also like to thank the leadership of NISR, NSDS3 Design Team and the entire staff of NISR for their relentless effort throughout the design process.

And finally I acknowledge the support that we have always received from the Government while implementing our mandate of developing official statistics in Rwanda.



Dr Monique NSANZABAGANWA

Chairperson, NISR Board of Directors

Preface

The third National Strategy for the Development of Statistics (NSDS3) is a product of intensive research and consultations. It aims not only at coordinating all statistical activities in Rwanda during the period of 2019/2020-2023/2024, but also at providing general information about the journey of statistical development in Rwanda since 2005, and a better understanding of statistical needs of various development programs at national, regional, continental and global levels. These are mainly the first National Strategy for Transformation (NST-1), Rwanda Vision 2050, the SDGs, EAC Vision 2050 and AU Agenda 2063.

To illustrate various contributions in response to the aforementioned statistical needs, the third NSDS clearly shows statistical projects to be undertaken separately, or together, by NISR and other institutions grouped in 15 sectors. This was done after assessing their Sector Strategic Plans (SSPs) as elaborated in the context of the NST-1. The assessment was carried out using the data value chain framework for a better understanding of challenges in the National Statistical System (NSS). Under this framework, statistical content, channels, choices and consequences were evaluated to assess performance in NISR and the wider NSS, and to identify the strengths, weaknesses, opportunities and threats that shape the data value chain in Rwanda.

As big data is becoming another potential source of official statistics, NSDS3 takes also into consideration the exigencies of the Data Revolution Policy that was approved by the cabinet in April 2017, aiming at leveraging structured and unstructured data generated automatically by the intensive use of ICT in communication, services and observations, in addition to traditional sources. Their collection, processing, analysis and dissemination requires strong and relevant capabilities that need continuous development. Therefore, the third NSDS introduces uninterrupted programs to build capacity of people and required infrastructures. It also comments on the need and strategies for efficient mechanisms of data communication and statistical literacy.

The effective and efficient implementation of this NSDS3 will only be possible with strong collaboration of all NSS members in resources mobilization, governance, monitoring and evaluation using smart indicators as it is mentioned in this document.

We appreciate everyone who contributed in one way or another to the elaboration of the third NSDS. We hope that readers of this document will better understand national statistics, that it will be useful for the development of the NSS, and that it will enable the production and release of good quality, timely and relevant official statistics for evidence-based decision- and policy-making.

Yusuf MURAGWA

Director General, NISR

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Acronyms

AfDB	*African Development Bank*
AIMS	*African Institute for Mathematical Sciences*
ASS	*African Statistical System*
AU	*African Union*
BNR	*National Bank of Rwanda*
CBP	*Capacity Building Program*
CDS	*NISR Communication & Dissemination Strategy*
CMU	*Carnegie Mellon University*
CRVS	*Civil Registration and Vital Statistics*
CSO	*Civil Society Organisation*
DDS	*District Development Strategy*
DDG	*Deputy Director General*
DP	*Development Partner*
DRP	*Data Revolution Policy*
DSC	*Data Science Campus*
EAC	*East African Community*
EDPRS	*Economic Development and Poverty Reduction Strategy*
EICV	*Integrated Household and Living Conditions Survey*
ENR	*Environment and Natural Resources*
GDDS	*General Data Dissemination Standard*
GoR	*Government of Rwanda*
HEI	*Higher Education Institutions*
HLG-PCC	*High-level Group for Partnership, Coordination and Capacity-Building for Statistics for the 2030 Agenda for Sustainable Development*
HR	*Human Resources*
IBES	*Integrated Business Enterprise Survey*
ICT	*Information and Communications Technology*
IDA	*International Development Association [World Bank]*
IMF	*International Monetary Fund*
IoT	*Internet of Things*
JRLO	*Justice, Reconciliation & Rule of Law*
LFS	*Labour Force Survey*
MDAs	*Ministries, Departments and Agencies*
MDGs	*Millennium Development Goals*
M&E	*Monitoring and Evaluation*
MEL	*Monitoring, Evaluation and Learning*
MINALOC	*Ministry of Local Government*
MINECOFIN	*Ministry of Finance and Economic Planning*
MINIJUST	*Ministry of Justice*
MINISANTE	*Ministry of Health*
MIS	*Management Information System*
MINICT	*Ministry of ICT and Innovation*
MoU	*Memorandum of Understanding*
NDP	*National Data Portal*
NEPAD	*New Partnership for Africa's Development*
NGO	*Non-governmental Organisation*

NISR	*National Institute of Statistics of Rwanda*
NQAF	*National Quality Assurance Framework*
NSDS	*National Strategy for the Development of Statistics*
NSO	*National Statistics Office*
NSS	*National Statistical System*
NST-1	*The First National Strategy for Transformation*
PA	*Program Area*
PARIS21	*Partnership in Statistics for Development in the 21st Century*
PFM	*Public Financial Management*
PSDYE	*Private Sector Development & Youth Employment*
RAP	*Reproducible Analytical Pipelines*
RDHS	*Rwanda Demographic and Health Survey*
RISA	*Rwanda Information Society Authority*
RPHC	*Rwanda Population and Housing Census*
RURA	*Rwanda Utilities Regulatory Authority*
SAS	*Seasonal Agriculture Survey*
SDDS	*Special Data Dissemination Standard*
SDGs	*Sustainable Development Goals*
SMART	*Specific, Measurable, Attainable, Relevant, Time-bound*
SMRP	*Statistical Methods, Research and Publication Division*
SO	*Strategic Objective*
SPIU	*Single Project Implementation Unit*
SSA	*Sub-Saharan Africa(n)*
SSP	*Sector Strategic Plan*
SWOT	*Strengths, Weaknesses, Opportunities and Threats*
TWG	*Technical Working Group*
UK-ONS	*UK Office for National Statistics*
UN	*United Nations*
UNECA	*United Nations Economic Commission for Africa*
UNSC	*United Nations Statistics Commission*
UNSD	*United Nations Statistics Division*
UR ACE-DS	*University of Rwanda African Centre of Excellence – Data Science*
UR ACE-IoT	*University of Rwanda African Centre of Excellence – Internet of Things*
URS	*Urbanisation & Rural Settlement*
USS	*User Satisfaction Survey*
VUP	*Vision 2020 Umurenge Program*
WATSAN	*Water and Sanitation*
7YGP	*7-Year Government Plan*

Executive Summary

The third National Strategy for the Development of Statistics (NSDS3) sets the agenda for statistical development in Rwanda from FY2019/20 to FY2023/24. Since its establishment in 2005, the National Institute of Statistics of Rwanda (NISR) has developed and published a wide range of data products in social, demographic and economic statistics, resulting in an overall score of 78.9 in the World Bank Statistical Capacity Indicator[1] and a first place ranking among African countries in the 2018/19 Open Data Inventory.[2] NSDS3 capitalises on this momentum, expanding external engagement with the National Statistical System (NSS) to strengthen Rwanda's data value chain and promote sustainable development for all.

Key Initiatives for NSDS3

At the close of NSDS2, NISR is well-positioned to adopt a demand-driven approach to data production. Ongoing efforts to improve the coverage, frequency and granularity of official statistics will continue, coupled with interventions to strengthen administrative systems across the NSS. The initiation of 15 Sector Statistical Plans, one for each programmatic sector in the National Strategy for Transformation (NST-1), provides a mechanism to monitor NSS statistical outputs and coordinate investments in sector-level capacity. Recent integration of Imihigo planning and evaluation in the NISR portfolio complements these initiatives, expanding mechanisms for influence and accountability within ministries, departments and agencies (MDAs) across government.

The adoption of the Data Revolution Policy (DRP) acts as a catalyst for the NSDS3 agenda, offering a platform to democratise data access and promote innovation. Efforts to join-up data products and augment official statistics with non-traditional data sources such as 'big data', create opportunities to close data gaps using novel methods. Nascent legal and policy reforms to support data openness, integration and protection underpin DRP objectives, strengthening national frameworks for transparency and data governance. DRP implementation will be coordinated from a new Data Science Campus (DSC) at NISR equipped with advanced technology and expert staff to deliver specialised trainings, build partnerships and develop projects to mobilise the data revolution in Rwanda.

In an effort to promote data uptake and use, NSDS3 targets critical gaps in technical capacity and public statistical literacy. DSC training initiatives represent one component of a comprehensive Capacity Building Program (CBP) that will be offered through the NISR Training Centre. The Centre itself will raise Rwanda's profile in the region, with a full suite of programs and resources made available to NSS institutions and the wider public. A new Communication and Dissemination Strategy (2018) complements these initiatives, addressing the disconnect between data supply and demand through user-centred product design and strategic engagement.

The Strategic Framework

The NSDS3 strategic framework is motivated by a vision to *unlock the potential of a productive data value chain* and a mission for NISR to *deepen its role as leader of the NSS*, guided by a 4-part

[1] Higher than Sub-Saharan African (SSA) and International Development Association (IDA) country averages. See: http://datatopics.worldbank.org/statisticalcapacity/SCIdashboard.aspx

[2] See: https://odin.opendatawatch.com/

theory of change (Section 4.3). The framework is designed as a self-reinforcing system, comprised of the following 4 thematic pillars and 12 strategic objectives (SOs):

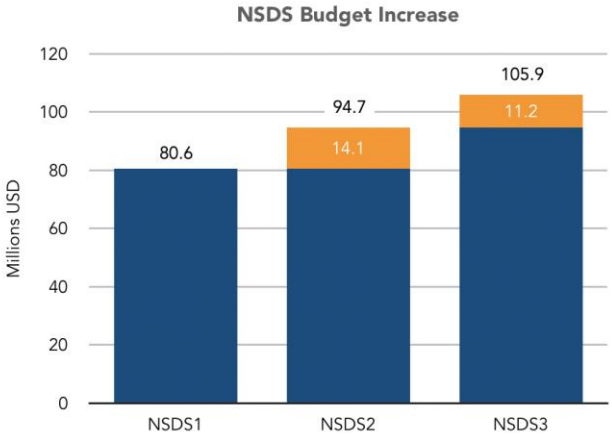
Pillar 1: Produce data to support evidence-based decision-making	**SO.1:** Sustain and enhance core data production at NISR
	SO.2: Enrich and expand data supply across the NSS
	SO.3: Leverage NSS data products to lead Imihigo indicator selection and evaluation
Pillar 2: Lead a national data revolution to deepen statistical impact	**SO.4:** Harmonise best practices in data governance across the NSS
	SO.5: Enable data openness, integration and interoperability through enhanced legal and policy frameworks
	SO.6: Equip and operationalise a public Data Science Campus to facilitate data access and innovation
Pillar 3: Build capability across the NSS to promote data uptake and use	**SO.7:** Expand strategic communication and advocacy to increase data uptake and statistical literacy
	SO.8: Enhance capacity for data production and statistical analysis
	SO.9: Introduce new methods in data science and analytics
Pillar 4: Strengthen the enabling environment for sustainable statistical development	**SO.10:** Build and sustain the workforce to support sustainable statistical development
	SO.11: Invest in operational infrastructure, assets and logistics to support sustainable statistical development
	SO.12: Mobilise resources and strategic partnerships to support sustainable statistical development

Implementation

In light of an expanding portfolio and an increase in external engagement, NSDS3 will require significant efforts to mobilise resources and strengthen national frameworks for statistical development.

Resource Mobilisation

In response to user and policy-driven demand, NSDS3 will sustain current levels of data production, while expanding the range of national statistical services and programs. Under NSDS2, the volume of data production significantly increased, increasing survey frequency and establishing new production lines to target gaps in data availability.



Primary budget drivers for NSDS3 include activities in data production – which represent over 50% of the NSDS3 budget – as well as staff increases to support sector statistical plans, Imihigo planning and evaluation, DRP implementation and the NISR Training Centre. However, NSDS3 will significantly increase efficiency and value for money through strategic investments in

workforce development and technology. Furthermore, scaling ICT-based data collection and MIS development will reduce time- and resource-intensive activities associated manual data entry and optimise quality assurance. Technical capacity building programs will augment these effects, enabling staff to deliver high-quality statistical products more efficiently.

Pillars & Strategic Objectives	NISR	NSS	Total
Pillar I	**63,488,045**	**7,939,791**	**71,427,836**
SO.1	57,951,734	132,636	58,084,370
SO.2	3,661,257	7,807,155	11,468,412
SO.3	1,875,054	-	1,875,054
Pillar II	**2,732,480**	**6,485,335**	**9,217,815**
SO.4	114,405	6,485,335	6,599,740
SO.5	37,405	-	37,405
SO.6	2,580,670	-	2,580,670
Pillar III	**3,224,176**	**1,014,654**	**4,238,830**
SO.7	1,914,339	116,824	2,031,164
SO.8	1,146,514	108,932	1,255,446
SO.9	163,322	788,897	952,220
Pillar IV	**20,950,730**	**61,002**	**21,011,732**
SO.10	9,259,470	61,002	9,320,472
SO.11	11,388,362	-	11,388,362
SO.12	302,898	-	302,898
TOTAL	**90,395,431**	**15,500,782**	**105,896,213**

Monitoring & Evaluation

To ensure financing for statistical development translates to measurable impacts, NSDS3 is accompanied by a monitoring and evaluation (M&E) framework underpinned by the NSDS3 Logframe (Annex 2), providing a mechanism for accountability. M&E arrangements include annual reviews to inform action plans and budgets, a midterm evaluation to identify opportunities to accelerate progress and address barriers to implementation, and a final evaluation to clarify lessons learned and inform future NSDS designs.

Chapter 1. NSDS3 in the National Context

The Republic of Rwanda, 'the land of a thousand hills', is a landlocked country in East Africa known for its diverse landscape with volcanoes, lakes, plains, rainforests and numerous rivers. Located a few degrees south of the equator, the nation is situated in the Great Lakes Region, sharing borders with the Democratic Republic of the Congo, Uganda, Tanzania and Burundi. Rwanda is one of the most densely populated countries on the African continent, with a surface area of 26,338 km and a population of 12 million growing at a rate of 2.4 percent (World Atlas, 2017; UN DESA, 2017).

In the years since the genocide against the Tutsi in 1994, Rwanda has made remarkable progress in social and economic development, charting a path through recovery and reconciliation toward sustainable patterns of growth. The Government of Rwanda (GoR) successfully pursued a programme of structural adjustment in the aftermath of the conflict, mobilising investments to stabilise and rehabilitate the economy (World Bank, 2018). Between 2000 and 2009, Rwanda was the tenth fastest growing economy globally, lifting more than 1 million people out of poverty and expanding human capital through increased access to health and education services (The Republic of Rwanda, 2013). These national achievements have only been possible through the hard work and dedication of millions of Rwandans with the support of friends of Rwanda across the globe.

Today, Rwanda is experiencing one of the most exciting and accelerated periods of socio-economic progress in its history, making great strides toward the UN Sustainable Development Goals (SDGs) and middle-income status (The Republic of Rwanda, 2018). Newly launched long- and medium-term national development plans aim to continue on this trajectory and exceed the levels of growth and poverty reduction achieved in the past two decades to deliver sustainable development for all Rwandans (ibid.). The third National Strategy for the Development of Statistics (NSDS3) is designed to support this ambition, strengthening Rwanda's data supply chain to enable evidence-based policy design and service delivery.

1.1 National Governance and Planning Frameworks

Reforms in national frameworks for planning and governance were essential to Rwanda's progress in social and economic development. Today, these frameworks underpin demand for data and evidence, motivating continued investments in national statistical development under NSDS3.

1.1.1 Planning

Development planning in Rwanda occurs in long- and medium-term cycles. NSDS3 arrives at a critical inflection point in national planning, covering the transition from Vision 2020 to Vision 2050 and the remaining years of implementation for the first National Strategy for Transformation (NST-1).

Long-term plans, or *visions*, provide an overarching framework for national development policy over multiple decades. The first long-term plan, Vision 2020, focuses on 3 major objectives encompassing macroeconomic stability, economic transformation and an established middle class, with a goal of attaining middle-income status by 2020 (The Republic of Rwanda, 2012). The latest long-term plan, Vision 2050, covers 5 broad priorities including standards of living, infrastructure and livelihoods, economic transformation, national values and international cooperation (The Republic of Rwanda, 2018). In addition to these thematic areas, Vision 2050

sets Rwanda on a course to reach upper-middle-income status by 2035 and high-income status by 2050 (World Bank , 2019).

Medium-term development plans, which cover 5-7 year cycles,[3] support implementation of the long-term visions. The current medium-term plan, the NST-1, is organised around 3 strategic pillars including economic transformation, social transformation and transformational governance, which frame national development priorities and programmes from FY2018/19 to FY2023/24. The NST-1 is accompanied by Sector Strategic Plans and District Development Strategies that set specific, localised targets for the national agenda. Implementation of medium-term plans is monitored and updated on an annual cycle, with systems for adaptive planning, budgeting and performance monitoring.

1.1.2 Governance

Following the genocide, the GoR pursued a policy of decentralisation, introducing a 'citizen-centred' framework for governance (MINALOC, 2017). The National Decentralisation Policy (2004) is an example of the government's commitment to empower its people to determine their own future based on national principles of *agaciro* ('dignity') and *kwishakamo ibisubizo* ('self-help') (ibid.). This approach enables citizens to participate in agenda-setting for their communities, monitor program implementation and hold their leaders accountable for local development outcomes.

Under this decentralised model, institutions from the national- to the local-level manage implementation of Rwanda's development strategies through an annual performance contracting system known as 'Imihigo'. Imihigo mainstreams the principles of performance-based management across government, serving as a regular tool for inclusive governance and public accountability (Versailles, 2012). NSDS3 is the first of Rwanda's statistical strategies to incorporate Imihigo data requirements and evaluations as part of the national framework for statistical development.

1.2 NSDS3 Structure

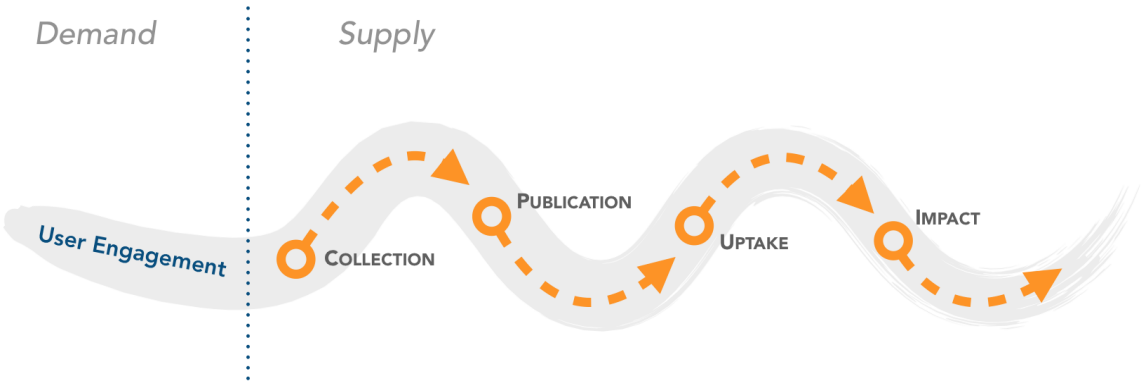
The remaining elements of NSDS3 are structured as follows. Chapter 2 analyses trends in data demand and supply in the context of Rwanda's data value chain. Chapter 3 outlines the key initiatives that comprise the NSDS3 transformative agenda. Chapter 4 describes the NSDS3 design process, methods and theory of change, and provides a current evaluation of NISR and NSS performance. Chapter 5 packages the NSDS3 strategic framework, outlining thematic pillars and strategic objectives for statistical development in Rwanda for the next 5 years. Chapter 6 concludes with plans for implementation.

[3] Previous national development plans were implemented in 5-year intervals. The NST-1 joins medium term planning with the 7-year government plan (7YGP), and will be implemented in a 7-year interval.

Chapter 2. Rwanda's Data Value Chain: Matching Demand and Supply

The value of data to inform decision-making is widely recognised today by policymakers, development practitioners, the private sector and the general public. However, despite an exponential growth in data supply, use and impact — where value is realised in practice — often remains elusive. The *data value chain*, depicted in figure 1 (below), provides a framework to understand this challenge, unpacking the processes 'that change low-value inputs into high-value outputs' over the course of the data 'life cycle' (Open Data Watch, 2018). In the context of statistical development, this framework outlines how the value of data increases as it moves from *collection* and *publication* to *uptake* in policy for sustainable development — the desired *impact*.

Figure 1: The Data Value Chain[4]



Data that responds to demand holds greater potential for impact by aligning with policy needs and user capabilities. For this reason, a productive data value chain originates in user engagement, as visualised in figure 1, identified through appropriate mechanisms to assess needs and collect feedback. Prior to beginning data collection, this process anticipates opportunities for uptake and impact by identifying emerging policy questions and intended use cases. However, user engagement is not a static exercise. As linkages across the value chain are strengthened, opportunities to solicit feedback downstream (in the course of uptake and impact) expand, providing insights to continuously improve upstream activities in data collection and publication (ibid).

Historically, statistical development has placed a strong emphasis on the supply side of the data value chain, particularly on collection and publication where national statistics offices (NSOs) hold greater control (ibid.). This is not unjustified, as upstream choices in data collection 'will affect the quality and usability of data over their whole life-cycle' (ibid.). Interventions in this area tend to focus on addressing skills gaps and, to a lesser extent, financing shortfalls that shape data production (Kiregyera, 2013). However, improving data production is a necessary but insufficient condition to encourage uptake and realise impact. When upstream data supply remains isolated from demand, inefficiencies emerge. A 'broken link' between data producers and users compromises trust in data products and weakens incentives to improve them, limiting their potential to inform development decision-making (Development Gateway, 2017; Custer & Sethi, 2017).

[4] Figure 1 is adapted from the work of Open Data Watch (2018).

Value chain analysis is useful in the context of statistical development in Rwanda for a number of reasons. First, it conceptualises data as an asset, where value is incrementally enriched through use. This harmonises with the language of Rwanda's nascent Data Revolution Policy (DRP), which describes data as a 'sovereign asset', linking statistical development to the NST-1 by identifying data as a vital resource to crowd in investment and optimise national development. Second, and relatedly, conceptualising data as an asset drives efforts to finance statistical development and demonstrate value-for-money in data production. Third, this approach illustrates a path from demand-led data production to evidence-based policy by '…creating a process to transform raw data into actionable information [which] is the essence of the data value chain' (Open Data Watch, 2018). In sum, value chain analysis motivates a more holistic approach to statistical development where the needs of data users from government, the private sector, development partners (DPs), academia, civil society and the public inform priorities for data production across Rwanda's National Statistical System (NSS).

2.1 Demand for Data

As observed in the previous section, data supply must respond to demand to optimise the data value chain. To achieve this, data producers must understand and meet the needs of target users and the data requirements that emerge from policy — the underlying drivers of demand. As responsiveness to these drivers improves, the NSS is positioned to move beyond data collection and publication to advance data uptake and impact.

2.1.1 Mapping User-driven Demand

Who is generating demand for data? Intended audiences for official statistics are diverse, ranging from bureaucrats and policymakers setting development targets, to academics conducting empirical research, to citizens aiming to hold local authorities accountable for service delivery, and so on. Research shows that a tendency to idealise or generalise data users (and their capability) perpetuates a disconnect between data supply and demand, as producers may fail to deliver products that match user needs (Custer & Sethi, 2017; Stout et al., 2018; Jerven, 2016).

To address this problem, Rwanda's biennial User Satisfaction Survey (USS) collects feedback on preferences for official statistics among users from government, academia, civil society, the private sector, media, DPs and the general public (NISR, 2017). The survey provides insights on current alignment of demand and supply across a range of factors such as survey methods, data access and perceived accuracy. In the most recent USS round (2016/17), 89% of respondents find Rwanda official statistics 'meet their priority needs' moderately-well to very-well,[5] and 93% find official statistics moderately to very 'useful for necessary analysis and activities'.[6]

Overall, the current index of user satisfaction stands at 72%, a 6% increase from the previous survey iteration, indicating an acceleration of both awareness and use of official statistics in Rwanda. Notably, a trend of expanding engagement around government data is reflected in the response rate to the USS itself, with increasing participation across every user group and a 58.9% response rate overall, a 12.4% increase from USS 2014/15.[7] However, there remain substantive areas for improvement, as users cite inadequate data frequency and disaggregation

[5] 32.8% moderately well; 36.9% well; 19.3% very well.

[6] 31.1% moderately well; 41.3% well; 20.1% very well.

[7] The 2016/17 USS sampled a pool of 1,518 users.

as a continued barrier to uptake (ibid.). These barriers are reinforced by weaknesses in current dissemination practices. For example, awareness of NISR's data release calendar is low, varying 14-32% across product lines, and 23% of respondents who attempted to download microdata from the NISR portal were unable to complete the process.

While the USS indicates an aggregate increase in user satisfaction overall, these findings must be considered in light of known user characteristics. Table 1 summarises these characteristics in a typology of data users, identifying use cases and data needs common to each group. The typology highlights the complexity of the linkage between data publication and uptake in the value chain; a wide range of publication formats and outreach strategies are required to reach a wide audience and maximise data uptake and impact.

Table 1: Data User Typology[8]

User Type	Description	Data Requirements
Decision-makers	Decision-makers may require data on a **wide range** of issues at **varying levels of granularity**, but presentation is key. The data must be timely, relevant and easily interpreted to **maximise potential to influence** policy design and decision-making.	Technical capacity is typically **low** to **moderate**.* Prefer packaged analysis with **intuitive visualisations** targeting current policy and programmatic issues.
Analysts	Analysts are users with **specialised technical skills** in quantitative and/or qualitative methods. They require large datasets to **conduct research** and **analysis** for the public or private sector and academia, as well as for peer-reviewed publication.	Technical capacity ranges from **moderate** to **high**.* Prefer consistent publication of **highly granular** data in **machine-readable** formats with **transparent documentation**.
Technicians	Technicians require a broad range of data sources to support policy and program **planning**, **implementation** and **M&E**. They are often on the front-lines of **data management**, and therefore play a critical role in both demand- and supply-sides of the data value chain.	Technical capacity typically ranges from **low** to **moderate**.* Require clean, **structured datasets** with **specific indicators** and appropriate disaggregation.
Investors	Investors from private, public and non-governmental institutions require indicators on a range of economic, social and environmental issues to inform **resource allocation decisions**. Transparent, consistent data publication is regarded as essential to **build investor confidence**.	Technical capacity typically ranges from **moderate** to **high**.* Require **consistent** data publication practices, with **transparent methods** to build credibility.
Journalists	Journalists will seek a broad range of data and information, from the very local to the national, to inform **reporting and storytelling**. NSS stakeholders may also engage directly with media outlets to publicise data and development results. Therefore, journalists serve as **key 'infomediaries'** in the value chain, helping to	Technical capacity is typically **low**.* Require **local-** and **national-level** data. Prefer **simple visualisations** and **data tables** for quick analysis.

[8] Insights for the User Typology are drawn from a range of sources including the Sunlight Foundation (2018), Cadasta (n.d.), UK-ONS (2016) and from consultations with NSS stakeholders (Chapter 4).

User Type	Description	Data Requirements
	increase public awareness and data literacy.	
Citizens	Citizens will generally seek highly localised information, **relevant to their communities**, as well as national trends to contextualise them. Engagement will vary significantly across the population based on **targeted outreach**.	Technical capacity varies, but is typically **low**.* Require **local**, relevant information presented in **accessible** formats. Prefer **infographics** and **interactive platforms**.

*Classifications of data literacy and/or technical capacity are generalised based on known trends in Rwanda observed in NSDS3consultations (Chapter 4); there are exceptions within and across institutions.

2.1.2 Mapping Policy-driven Demand

Policy-driven data requirements constitute a second essential aspect of demand. Reporting against indicators specified in domestic, regional, continental and international policy frameworks is essential to facilitate effective planning and support monitoring, evaluation and learning (MEL) activities across government. Patterns of data supply that respond to these requirements mitigate information asymmetries between producers and users by targeting known use-cases. Thus, aligning data collection and publication with policy represents an important benchmark to support data uptake and impact.

Domestic Policy Frameworks

Sub-national

Under a decentralised model of governance, sub-national data is critical to inform local policy and service delivery in Rwanda. **District Development Strategies (DDSs)** are designed in alignment with the NST-1 using a participatory approach and serve as the primary medium-term planning tool for Rwanda's 30 district governments. Each DDS defines local agendas and development targets with a district-specific results framework to monitor implementation. In order to design and implement the DDS, local data users require timely, accurate flows of granular data, disaggregated to the district- and cell-level, to identify needs, evaluate progress and respond to local trends.

National

Rwanda's current medium-term development plan, the NST-1, outlines national development priorities for 7 years: to attain middle-income status and 'to secure prosperity for all Rwandans' (The Republic of Rwanda, 2018). The NST-1 mainstreams and localises development objectives and indicators captured in the East African Community (EAC) Vision 2050, African Union (AU) Agenda 2063 and the Sustainable Development Goals (SDGs), strengthening policy coherence and harmonising demand for data at national, regional, continental and international levels.

The 3 pillars of the NST-1 outlined in Chapter 1 correspond to 18 priority areas and 66 indicators drawn from a suite of data products including surveys, censuses and administrative data from ministries, departments and agencies (MDAs) across government. 16 **Sector Strategic Plans (SSPs)** complement the overall framework, identifying sector-specific needs and priorities for the NST-1 program. SSP results frameworks augment NST-1 data requirements, adding 641 indicators for a total of 707 in the framework overall.

Regional and Continental Policy Frameworks

As referenced above, a commitment to own and implement regional and continental priorities is reflected in Rwanda's national development objectives. **EAC Vision 2050** is a 'regional vision for socio-economic transformation and development' comprised of 8 thematic pillars with 74 indicators, which focus on economic productivity and cooperation in key sectors such as infrastructure, tourism, and agriculture (EAC Secretariat, 2016). **AU Agenda 2063**, 'the Africa we want', is a 50-year continental strategy with 7 core aspirations and 202 indicators (AU Commission, 2014). The Agenda is designed to deliver on existing strategies and priorities, such as the Lagos Plan of Action and the New Partnership for Africa's Development (NEPAD), covering a range of targets for inclusive growth, peace and security, good governance and social inclusion.

In addition to setting goals and targets for social and economic development, the EAC and AU frameworks emphasise the importance of statistical development to strengthen coordination, planning and MEL systems across Africa. This places a particular focus on issues of data harmonisation and comparability across the region and the continent, which informs Rwanda's national approach to data production.

International Policy Frameworks

UN Agenda 2030, also known as **the SDGs**, is an ambitious global framework that aims to deliver sustainable development for all. With 17 goals, 169 targets and 244 indicators in the global monitoring framework, the demand for data emerging from the SDGs is unprecedented. Based on consultations with the UN Statistics Division (UNSD) and other key stakeholders, NISR developed and released an official national list of 150 SDG indicators,[9] which maps indicators from the global framework to the Rwandan context and informs SDG-related data production priorities for NSDS3.

In addition to raising issues of global data comparability and interoperability, the SDG commitment to 'leave no one behind' requires improvements in geographic and demographic granularity to effectively identify and respond the needs of diverse populations.[10] Thus, demand for data increased in both volume and complexity in response to the SDG agenda. For this reason, the launch of the SDGs coincided with a global call to increase investment in statistical systems and to mobilise a global 'data revolution for sustainable development' (IEAG, 2014).

In practice, this call relates not only to the immediate demands of SDG monitoring, but also to the need for an evidence-based approach to program design, implementation and coordination (Stuart et al., 2015). An ambition to 'leave no one behind' can only be achieved if data supply allows policymakers and development practitioners to adequately identify vulnerability and target programs in response to it. This draws attention to the whole data value chain, with an aim to produce data that is timely, granular, credible and delivered in formats decision-makers can use.

[9] The official list of SDG indicators for Rwanda consists of 150 of the 244 indicators in the global monitoring framework. This number is derived based on 3 criteria: 1) deduplication across the framework; 2) applicability to the Rwandan context; and 3) UNSD Tier classification. Indicators classified as 'Tier 3' do not currently have an established global standard methodology for formulation, and are thus excluded from the current list of SDG indicators for Rwanda. See: https://unstats.un.org/sdgs/iaeg-sdgs/tier-classification/

[10] These populations include the disabled, women, ethnic minorities, and people in crisis among others (Stuart & Samman, 2017).

2.1.3 Summarising Data Demand

Indicator counts for each policy outlined in this section are summarised in Table 2 (below). The *gross counts* refer to the total number of indicators in each framework, whereas *net counts* deduplicate within and across frameworks to identify unique indicators. The sum of the net counts yields the *net demand* for data, which stands at a total of 997 unique indicators. This figure represents the minimum threshold for data supply to meet demand under NSDS3. However, user needs and preferences may exceed these requirements. Opening channels for dialogue with users through the USS and other coordination mechanisms is essential to build awareness of preferred publication formats and ancillary data requirements to support data uptake.

Table 2: Policy Data Requirements Summary

Policy Framework	Gross Count	Net Count
National Strategy for Transformation (NST-1)	66	61
NST-1 Sector Strategic Plans (SSPs)	641	572
EAC Vision 2050	74	41
AU Agenda 2063	202	173
UN Sustainable Development Goals	244	150
Total Demand	**1,227**	**997**

2.2 Data Supply

The potential for data uptake and impact is shaped by how well data supply responds to demand. While increasing awareness of user demand is an essential step toward evidence-based policy, current frameworks for statistical development and past performance also hold significant implications for the supply side of the data value chain.

2.2.1 Statistical Development Frameworks

Technical capacity to produce data is only one factor that shapes potential to match data supply and demand. The ability to respond to user- and policy-driven demand and optimise the data value chain is also a function of prevailing legal, institutional, governance and financing frameworks that underpin data production. These frameworks shape the enabling environment, defining opportunities to advance statistical development under NSDS3.

Legal Frameworks

NISR was formally separated from the Ministry of Finance and Economic Planning (MINECOFIN) by Law No. 01/2005 of 14/02/2005, which established it as an independent government institution with a mandate to lead national statistical development. In 2013, the 2005 law was repealed and revised under Law No. 53bis/2013 of 28/06/2013 and supplemented by Law No. 45/2013 of 16/06/2013, which specifies 'the organisation of statistical activities in Rwanda'. Together, these pieces of legislation serve as Rwanda's current legal framework for statistics. The organisation of statistical activities consists of 7 chapters and 26 articles that address the quality of statistical data, NSS coordination, various components of the national statistical programme, legal obligations of survey and census respondents and issues of data protection.

Rwanda's legal framework builds on formalised guidance and policy at international, continental and regional levels. The UN Fundamental Principles, adopted by the UN Statistical Commission in 1994 and endorsed by the UN General Assembly in 2014, constitute the overarching framework for official statistics across nations and the global statistical system. These principles guide statistical development and NSO operations in all countries, including Rwanda. The African Charter on Statistics builds on the UN Principles, providing a continental instrument to regulate and support statistical activities and advocacy. The Charter was adopted by African Heads of State in 1999, committing their governments to: 1) use statistics for policy development, management and decision-making at all levels; 2) develop statistics in a manner consistent with international standards and best practice; and 3) scale up support for statistics. It also commits pan-African institutions to foster coordination by, *inter alia*, addressing duplication in African statistical programmes and strengthening the African Statistical System (ASS). Finally, as a member state of the EAC, Rwanda's statistics laws align with the frameworks outlined in the East African Statistics Act, which is designed to ensure regional policy continuity and support data standardisation and interoperability.

Institutional Frameworks

Within the legal framework for statistics, a complex network of institutions – each with their own policy priorities and data needs – engage with Rwanda's data value chain. Variation in mandates, capability and financing across institutions shape patterns of data supply.

The National Institute of Statistics of Rwanda (NISR)

NISR is the primary institution for national statistics in Rwanda, with a mission to 'assume the leading role in improving capacity to use information for evidence-based decision-making by coordinating a national effort to collect and archive reliable data, [and] to analyse, document and disseminate data within an integrated and sustainable framework' (NISR, n.d., a). The Institute leads the collection and publication of official statistics, including surveys, censuses and administrative data, to fulfil the following core functions:

- To provide relevant, high quality statistical information to meet user needs
- To improve accessibility of official statistics
- To develop and promote strategic partnership in improving the NSS
- To develop the statistical capacity of institutions
- To ensure sustainability, cost-efficiency, cost-effectiveness, transparency and accountability in managing the resources of the NSS

Under the leadership of the Director General, NISR houses three offices led by the Deputy Director General (DDG), the Single Project Implementation Unit (SPIU) Coordinator and the Head of Corporate Services. The DDG's office manages all data production across NISR through five operational units for Demographic and Social Statistics, Census, Economic Statistics, Statistical Methods, Research and Publication (SMRP) and Information and Communications Technology (ICT).

Ministries, Departments and Agencies (MDAs)

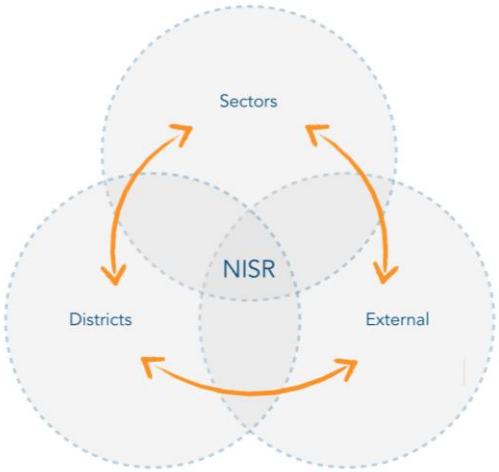
MDAs across the GoR at the central-, sector- and local-level participate in statistical development as both data producers and data users. These institutions engage in the production of administrative statistics in the course of program and policy implementation, and conduct specialised surveys and other quantitative assessments to address data gaps specific to their portfolios. As data users, MDAs leverage official statistics to conduct planning and MEL activities related to their programs and performance contracts under Imihigo. Statistical activities within

MDAs are typically led by the Director General or Director of Planning, implemented by Monitoring & Evaluation (M&E) Officers or, in select cases, a staff statistician.

Rwanda's National Statistical System (NSS)

In addition to producing the largest share of official statistics including regular surveys, censuses and administrative data, NISR's mandate includes NSS coordination and the development of national standards and guidance for data production and dissemination. Article 8 of the 2013 statistics law specifies NISR as the lead or central node within the NSS on both technical and operational dimensions.

Figure 2: Rwanda's NSS



According to PARIS21 (n.d., a.), a 'National Statistical System is the combination of statistical organisations and units within a country that jointly collect, process and disseminate official statistics on behalf of a national government'. This concept is broadened and applied to a wider range of stakeholders in Rwanda, reflecting the GoR policy of decentralisation and an ambition to promote an evidence-based approach to development. The result is a complex institutional ecosystem that includes MDAs, as well as external data suppliers and users from academia, civil society organisations (CSOs), DPs, NGOs and the private sector (NISR, n.d., b; Sabiti, 2017a). Institutions within the system can be differentiated across overlapping sectoral, district and external institutional spheres, as depicted in Figure 2. While NISR's overall leadership mandate remains constant, formal oversight and intervention diminishes moving to more granular levels of administration and outside government, increasing the complexity of NSS coordination.

Within the NSS ecosystem, stakeholders across spheres function as networks, engaging at different points in Rwanda's data value chain to produce and disseminate statistics to inform policy and development programming. Local actors serve as the frontline agents for data collection, supplying raw data to MDAs at the district- and sector-level to be consolidated in administrative systems. MDAs provide guidance to local actors on data requirements and methodologies, and oversee data processing and publication. External stakeholders are increasingly integrated as a part of this broader system as both data producers and users, coordinated and monitored through the NISR Survey Visa System and the USS. NISR guides the whole, setting national agendas and standards for statistical development while working independently to produce official statistics.

Governance Frameworks

Statistical governance frameworks at national, regional, continental and international levels guide statistical development planning in Rwanda. These frameworks provide a mechanism to strengthen coordination and oversight, ensuring policy compliance and improving efficiency in the NSS.

Domestic Governance

Rwanda's frameworks for statistical governance and coordination are delivered through NISR's leadership, as specified in the legal framework. The NISR Board of Directors provides direct oversight for NISR operations, as well as the Institute's wider engagement with the NSS, with representation from key government institutions. The NISR Steering Committee/National Partnership Group is a multi-stakeholder body chaired by MINECOFIN with membership from DPs, civil society and MDAs. The Committee provides input on the strategic direction of the NISR portfolio and a high-level mechanism for user-producer dialogue. Specialised committees are developed on an as-needed basis to address particular dimensions of statistical development and/or specific data products,[11] such as the Rwanda Demographic and Health Survey (RDHS) Steering Committee, the National Census Commission, the Poverty Measurement Committee and the Data Revolution Policy (DRP) Steering Committee. Operationally, the NSS Coordination Team embedded in SMRP leads interventions to improve statistical governance across MDAs, including ongoing efforts to establish Technical Working Groups (TWGs) for statistics under the umbrella of existing Sector Working Groups (SWGs).

Regional and Continental Governance

As an EAC member country, Rwanda engages with the EAC Sectoral Committee on Statistics to improve coordination for official statistics across the East African region. At the continental level, the Statistical Commission for Africa (StatCom-Africa), a subsidiary of the UN Economic Commission for Africa (UNECA), provides guidance for statistical development in the ASS. StatCom-Africa facilitates implementation of UN Statistics Commission (UNSC) policies on the continent and convenes a Committee for NSO Directors General, as well as working groups for data management, development indicators, gender statistics, the informal sector, national accounts, statistical harmonisation and statistical training (UNECA, n.d.). NISR actively engages with a number of regional and continental statistics initiatives these institutions support, including an EAC Regional Statistical Development Plan (RSDP), the African Charter on Statistics (AfCS) and the Strategy for Harmonisation of Statistics in Africa (SHaSA), which create vital channels for coordination and knowledge exchange across countries.

Recent work on statistical development and the data revolution in Africa highlights challenges and opportunities that many NSOs on the continent share, including limited financing, weak administrative systems and low technical capacity. The 2017 High-Level Meeting on Data for Development in Africa addressed these issues directly, proposing a new continental agenda to improve statistical practice and enhance cooperation (Sabiti, 2017b). Continued efforts to build out and expand dialogue on statistical development across African countries generates an enabling environment for reforms in financing and governance, as well as critical opportunities for shared learning to inform the future of development across the continent. NISR's regional and continental engagement provides opportunities to increase the visibility of statistical development progress and programs in Rwanda and facilitate dialogue around best practice.

International Governance

Established in 1947, the UNSC is regarded as 'the apex entity of the global statistical system' (UN Statistical Commission, 2018a), overseeing operations of the UN Statistics Division (UNSD). The Commission holds high-level decision-making authority related to global statistical standards

[11] As NISR pursues a more active role in NSS coordination, additional frameworks for governance and coordination will be developed. These initiatives are discussed in detail in Chapters 3 and 6.

and methods to ensure rigor, comparability, and support their implementation at national and international levels (UN Statistical Commission, 2018b). This mandate includes support for statistical development and coordination across NSOs.

As the 'data for development' movement gained traction in recent decades, the international community expanded institutions and frameworks to guide statistical development. The Partnership in Statistics for Development in the 21st Century (PARIS21) emerged as 'a forum and network to promote, influence and facilitate statistical capacity development and the better use of statistics' (PARIS21, n.d., b). Today, PARIS21 provides guidance on a range of issues such as strategy, policy and financing for NSOs, including official guidelines and principles for NSDS design (Section 4.2). Prior to the formation of PARIS21, the IMF served a particularly critical role in statistical governance through the Special Data Dissemination Standard (SDDS) and General Data Dissemination Standard (GDDS), which set international benchmarks for data production (e.g. coverage, frequency and timeliness), access, integrity and quality (IMF, 2013). NISR actively engages with these frameworks in setting a national agenda for data supply.

In the post-2015 era, a number of new governance initiatives emerged to facilitate statistical coordination around data for the SDGs. Rwanda sits as a member of the High-level Group for Partnership, Coordination and Capacity-Building for Statistics for the 2030 Agenda for Sustainable Development (HLG-PCC), which oversees implementation of the Cape Town Global Action Plan for Sustainable Development Data. As the successor to the Busan Action Plan for Statistics (2011), the Cape Town Action Plan provides an international mandate for investment in statistical development, with an emphasis on strengthening NSO leadership and NSS capacity based on three core principles: completeness of scope, accountability and cooperation (HLG-PCC, 2017). The 6 strategic areas identified in the plan address a range of issues including coordination, innovation, capacity, dissemination, partnerships and resource mobilisation, with an aim to leverage the SDG agenda to develop stronger statistical systems globally (Chapter 2, Box 1).

Financing Frameworks

While legal, institutional and governance frameworks shape the agenda for data supply, the potential to deliver on that agenda is linked to financing. The relationship between financing and data supply is often 'circular' (PARIS21, 2018), with potential to strengthen or weaken the data value chain. When resources are limited, data quality suffers, discouraging use and future investment (ibid.). Likewise, where financing is ad hoc or product-led, data flows can become distorted, limiting coverage and suppressing impact (ibid.; Jerven, 2013; Custer & Sethi, 2017). In the context of Rwanda, NISR has largely overcome these limitations, and is frequently referenced as a 'model' for financing statistics (Bumpsted et al., 2017). In addition to substantive flows of domestic finance, a multi-donor basket fund provides an instrument to expand and sustain activities in core data production, capacity building and NSS engagement while maintaining national ownership over statistical development (Krätke and Byiers, 2014; PARIS21, 2018).

2.2.2 Data Product Typology

Under these frameworks, Rwanda's NSS produces a range of data products to serve the needs of data users and comply with policy requirements and international standards regimes. Table 3 outlines a typology for each of these products, including a brief, generalised description and key institutions engaged in their production.

Table 3: Data Product Typology

Type	Definition	Producers
Survey*	A *survey* refers to the statistical operation in which information is collected from a sample of population and generalised to the whole population. It differs from a census in that all information is collected on a sample basis and it is usually concerned with specific subject or limited number of subjects.	NSS
Census*	A *census* is the total count of elements of interest, along with their characteristics, at a given time in a given area or territory. Because of their comprehensiveness, censuses are produced at a lower frequency relative to surveys.	NISR
Spatial Data*	*Spatial data* refers to datasets that define a location for a given observation in the form of points, lines, polygons or pixels. The NISR GIS team produces official spatial boundary data, which may be joined to other data types with a geographic reference to spatialise the data. Surveys and censuses may also be collected with geographic coordinates to provide a spatial reference.	NSS
Administrative Statistics*	*Administrative statistics* refer to a set of data collected in different sectors for the purpose of administrative work in the sector and may be used for statistical purposes. Administrative statistics are often housed in Management Information Systems (MIS) to facilitate data management and integration across institutions.	MDAs
Big Data	Definitions of *big data* are numerous, referring to both data products and the communities and methods that support their use (Letouzé & Jütting, 2014). Broadly, big data is characterised by the three V's of 'volume, variety and velocity', describing high-frequency, semi- and unstructured data flows that have emerged chiefly through advances in ICT.	MDAs Private Sector
Citizen-generated Data	*Citizen-generated data* refers to data that 'people or their organisations produce to directly monitor...or drive change', often as part of a broader program or agenda to support civic accountability (Piovesan, 2017). These are considered 'unofficial' data sources that may be used to augment NISR surveys and other official data sources.	CSOs NGOs

*Definitions adapted from the *Compendium of Statistical Concepts and Definitions* (NISR, 2016)

2.2.3 Statistical Development in Rwanda

Rwanda's approach to statistical development draws on PARIS21 guidance for the regular design of a **National Strategy for the Development of Statistics (NSDS)**, defined as 'a consistent set of interdependent decisions, taken by the national authorities with respect to what will be done during the next four to five years in order to ensure that better statistics and better analyses of these statistics are made available, and thereby meet the priority needs of national and international decision-makers as well as those of civil society' (PARIS21, 2007). Since its inception in 2005, NISR has designed and implemented two NSDS'. Both strategies emphasised capacity development, core data production lines (official statistics) and standards, and laid the groundwork for NSS engagement. Progress against NSDS1 and NSDS2 objectives define the baseline for current data supply and NSS capability.

The Origins of the NSDS Framework

The concept of an NSDS originated from elements of the Addis Ababa Plan of Action for Statistical Development in the 1990s, which highlighted the essential role of statistics in planning and MEL, and their inherent linkage to effective social and economic development (UNECA, 1990). The principles enshrined in the Addis Ababa Plan eventually informed the development of the IMF SDDS, GDDS and Data Quality Assessment Framework (DQAF), which were among the first international standards regimes to guide national statistics.

Drawing on these initiatives, the full NSDS framework was officially elaborated in the Marrakech Action Plan for Statistics (2004), which advocated for every country to develop an NSDS as a strategy to build national ownership over statistical development and respond to data requirements for the Millennium Development Goals (MDGs). Since that time, the NSDS framework was refined and strengthened through High-Level Forums on Aid Effectiveness in Paris (2005), Accra (2008) and Busan (2011), as an emphasis on planning, MEL and evidence-based decision-making increased among DPs, national governments and NGOs. The linkage between statistical development and broader development effectiveness continues to figure prominently in international policy dialogues, most recently in the context of the SDGs, which called for a 'data revolution' as an integral component of the agenda from its inception (IEAG, 2014).

NSDS1 (2009/10-2013/14)[12]

Rwanda's first NSDS charted a path towards increased efficiency and relevance of national statistics to planning and MEL in government, and a more vibrant, networked structure for the NSS as a whole. The strategy framed these aspirations around five program areas (PAs) covering data production and dissemination, NSS capacity and coordination, and resource mobilisation.

PA.1: Data Production and Management

Area 1 aimed to improve the timeliness and granularity of statistical products, as well as increasing responsiveness to policy-driven data requirements associated with the first Economic Development and Poverty Reduction Strategy (EDPRS1) and the MDGs. All economic indicators and key surveys, including RDHS, the Integrated Household Living Conditions Survey (EICV) and the Rwanda Population and Housing Census (RPHC), were published on time, aligning with government planning and budgeting cycles. Along with improvements in timeliness, the launch of the advance release calendar increased the predictability of data flows and strengthened public accountability.

PA.2: Information Dissemination, Services to Data Users, and Advocacy

Area 2 focused on improving access to published statistical information through targeted outreach, strengthened institutional policy instruments and expanding use of technology. This included the establishment of a Statistical Information Centre on the NISR premises, an expansion of NISR events and regular maintenance of data portals and publications.

[12] The insights and assessment of each of the PAs were drawn from the NSDS1 implementation chapter available in NSDS2. In addition to representing a consolidation of relevant NSDS1 evaluations, this approach also allows for analytical continuity across the three NSDS narratives.

PA.3: Coordination

Area 3 addressed the disconnect between statistical development and the policy cycles of the Rwandan government by increasing NSS efficiency. PA.3 interventions pushed beyond simply producing statistics or disseminating them, looking towards their intended use. In particular, the launch of the USS and Survey Visa System provided mechanisms to strengthen coordination and accountability in data supply across NSS institutions.

PA.4: Capacity Development

Area 4 focused on building out an effective workforce to support operations at NISR, and identifying the skills gaps across the NSS that might inhibit wider statistical development. As a part of this agenda, NISR conducted a capacity needs assessment and designed a 5-year capacity building strategy to support NSDS1 implementation, in addition to building partnerships with research institutions to improve skill-development programs.

PA.5: Financing

Finally, Area 5 looked towards resource mobilisation and partnerships to finance NSDS1 activities and ensure sustainable progress in statistics for the duration of the strategy. Close collaboration with the GoR and DPs, along with timely disbursements, enabled NISR to improve the efficiency of data collection and publication during implementation.

NSDS1 Results

By the close of NSDS1, statistical capability in Rwanda had dramatically improved. Major surveys and economic statistics were published on time, an advance release calendar increased the predictability of data flows, and NISR met its goal to time data release with midterm government planning exercises. Foundational efforts to build partnerships and communication channels across NSS institutions also emerged, and the first ever USS demonstrated that NISR products were increasingly relevant to policymakers, researchers and development practitioners. Collectively, progress under NSDS1 led to a top 5 ranking among Sub-Saharan African (SSA) countries in the World Bank's Statistical Capacity Indicator, signalling a tidal shift both in the volume of statistics produced and in reputation and leadership. However, significant challenges remained.

Though the timeliness and consistency of statistics significantly improved, gaps in disaggregation, frequency and coverage persisted. Despite a reputational advance in the global space, awareness of NISR products among national stakeholders remained low, calling for increased investments in advocacy and outreach. This challenge was closely tied to limitations in statistical capacity outside NISR that continued to pose significant barriers to effective coordination across the NSS. Critical budget shortfalls contributed to this burden and compromised the sustainability of NSDS1 interventions. In one such case, NISR cut capacity building programs to finance core data production. These areas of 'unfinished business' motivated the design of the NSDS2, flowing directly into the new strategic framework.

NSDS2 (2014/15-2018/19)[13]

Drawing on lessons from NSDS1, Rwanda's second NSDS centred on 6 strategic objectives (SOs). Under this framework, NISR successfully built on previous achievements to deepen statistical capability both internally and across the NSS. The supply and range of available data products expanded, and data quality and dissemination improved. Further, in managing transitions between major national and international agendas, NISR demonstrated increasing responsiveness to policy-driven data needs. These developments were bolstered by an increasing emphasis on effective management and governance, which 'provide an excellent example of best practice for other countries' (Bumpsted et al., 2017).

SO.1: Strengthen civil registration system (CRVS), administrative records, surveys and other sources of data

Objective 1 emphasised improving the range, frequency and quality of data production both internally at NISR and externally within the NSS. New surveys including a Labour Force Survey (LFS), Establishment Census, and Integrated Business Enterprise Survey (IBES) closed gaps in business statistics. Changes to key poverty measures, including RDHS and EICV, and improvements in gender statistics responded to emerging demand associated with the SDGs, with updated questionnaires and increased survey frequency. Improvements in administrative data coverage and CPI frequency built momentum to transition from GDDS to SDDS status in the near term. NISR also pursued external pilot engagements with agriculture, education and health sectors as well as civil registration and vital statistics (CRVS), which included management information system (MIS) development and technical trainings at local and district levels to target weaknesses in data collection.

SO.2: Improve quality, dissemination of statistics and public statistical literacy

Under Objective 2, NISR strengthened quality assurance standards and enriched documentation around statistical practice. In particular, the development of the National Quality Assurance Framework (NQAF) represented a significant step toward harmonising standards across NSS data products. NQAF design was complemented by a suite of new documentation, including a Metadata Handbook, Classification Manual and a Compendium of Statistical Concepts and Definitions to improve data literacy and build trust in official statistics. In addition to expanding documentation, NISR made significant design upgrades to their website and data portals to improve data accessibility. Efforts to maintain the advance release calendar, engage with media and a range of public events complemented these efforts, continuing to build awareness of statistical products and practice in Rwanda.

SO.3: Improve statistical advocacy and integrate use of statistics in decision-making

Objective 3 aimed to expand statistical advocacy and public engagement through NISR events and programs. Targeted data release events and stakeholder workshops for key data sources such as RDHS and EICV, as well as public programmes for African Statistics Day, continued to raise the profile of the NISR portfolio. Direct engagement with MDAs also increased due to sector collaborations under SO.1, opening vital channels for dialogue between data producers and users. The integration of Imihigo planning and evaluation in the NISR portfolio provided a

[13] The insights and assessment in this section were consolidated from the NSDS2 Midterm Evaluation conducted in 2017 by representatives from the UK Office of National Statistics (UK-ONS). The evaluation report consisted of an overall assessment of performance against a goal to 'support proposals designed to strengthen the NSS' (Bumpsted et al., 2017), as well as nine case studies which focused on the flagship statistical products and institutional challenges outlined in the NSDS2 strategic objectives, as well as a forward-looking assessment of upcoming initiatives.

further mechanism for statistical advocacy, creating opportunities for practical engagement around the use of statistics in planning and MEL across the NSS.

SO.4: Develop capacities within the NSS

Objective 4 activities were characterised by continued investments in technology, human resources, and capacity building internally at NISR, with some targeted external investments in the wider NSS. In addition to staff increases and trainings in statistical methods at NISR, the construction of a new Training Centre on the NISR campus aims to expand training initiatives and NSS engagement in future strategies. NISR-led capacity development within NSS institutions was largely product-driven with a particular focus on CRVS, including targeted trainings and recruitment of sector Civil Registration Officers to strengthen data production.

SO.5: Consolidate coordination within the NSS

Objective 5 initiatives largely consisted of 'enabling activities', laying a foundation for longer-term progress. In addition to formal developments in policy and strategy, including the design of an NSS Organisational Development Strategy (2015), NISR established the in-house NSS Coordination Team to facilitate Imihigo evaluation, SDG domestication and improvements in administrative systems. The integration of civil society representatives in the NISR Steering Committee, along with plans to form an inter-agency professional group for statisticians, initiated an ongoing effort to develop more inclusive systems for statistical governance.

SO.6: Improve resource mobilisation and build strategic partnerships

Under Objective 6, NISR sustained a robust financing structure for statistical development, with a combination of targeted financial assistance and basket funding to ensure coverage for all product lines and support activities. Notably, during the implementation of NSDS2, the distribution of funding shifted toward domestic financing, from 25% in NSDS1 to over 70% at the close of NSDS2, signalling growing recognition of the value of data to inform national policy. On the other hand, financing for statistical development within MDAs remains limited, typically channelled through Departments of Planning as a line item in larger MEL budgets. In addition to shifts in financing, a new partnership with the International Development wing of the UK Office for National Statistics (UK-ONS) sets the stage for significant improvements in capability in future strategies.

NSDS2 Results

Collectively, NSDS2 interventions in data supply accelerated alignment with major policy initiatives. In particular, NISR's approach to the transition from MDG to SDG measurement 'represents best practice in many respects' (Bumpsted et al., 2017), with high level government buy-in based on extensive consultation with MDAs, as well as proactive adaptation of various surveys. Developments in economic statistics, including rebasing GDP and improving price indices, were focused primarily on achieving SDDS status, illustrating NISR's accelerating potential to adapt to and strategically engage with international standards regimes. While Rwanda remains just short of full SDDS compliance at the close of NSDS2, NISR is well-positioned to fulfil all requirements in the near term.

Pilots in administrative systems and sector-level collaboration held mixed results, but represent an important step toward more productive patterns of NSS coordination and engagement. However, the success of such interventions leans heavily on appropriate ownership and governance structures among MDAs, which has proven to be an ongoing challenge. In particular, investments in education information systems and agricultural statistics continue to lack

appropriate levels of engagement from sector institutions, raising concerns around sustainability and uptake. However, advances in outreach, sustained policy alignment, and the integration of Imihigo planning and evaluation in the NISR portfolio set the stage for significant improvements.

Looking toward the future, persisting capacity gaps observed under NSDS2 threaten the potential to respond to data demand on several dimensions. First, staff shortages, both within NISR and across the NSS, inherently limit the volume, timeliness and quality of statistical outputs. While the NISR staff complement significantly expanded during NSDS2 implementation, the NSDS1 aspiration to 'develop a cadre of staff across the NSS' remains largely unfulfilled. Second, limited technical skills and data literacy, particularly among NSS planning and M&E officers, threatens the quality of data products and their salience to decision-makers. Finally, limited financing for statistics outside NISR constrains data supply and statistical capacity in the wider NSS. In sum, it is more vital than ever to demonstrate the importance of the data value chain to policymakers and mobilise resources for statistical development.

2.3 Mapping Data Demand and Supply

The policy frameworks outlined in Section 2.1 provide a baseline to assess alignment of data supply and demand within Rwanda's current data value chain. Under NSDS2, NISR completed a full assessment of policy data requirements, setting national data sources for each indicator in domestic, regional, continental and international results frameworks. Using existing crosswalks across the AU Agenda 2063, EAC Vision 2050, and SDG indicators, Table 4 provides a summarised mapping of current data supply and demand, identifying the share of indicators allocated to NISR and the wider NSS, a snapshot of current coverage, and related gaps in data production to inform NSDS3.

Table 4: Supply-Demand Mapping

Policy Framework	NISR Sources		NSS Sources		Gaps
	Indicator Count	Current Coverage	Indicator Count	Current Coverage	
NST-1	22	100%	44	100%	0%
SSPs	60	100%	774	85%	14%
EAC Vision 2050	20	100%	54	67%	24%
AU Agenda 2063	61	59%	141	28%	62%
SDGs	81	79%	69	38%	40%

Chapter 3. NSDS3: A Transformative Agenda

NSDS3 represents a critical juncture in Rwanda's statistical development. The strategy aims to sustain progress in core operations achieved under NSDS1 and NSDS2, while building up statistical activities and capacity building programmes to transform the data value chain over the next five years. The initiatives outlined in this chapter will expand NISR's external engagement to connect producers and users and enable an evidence-based approach to policy design and service delivery in Rwanda.

3.1 Demand-driven Data Production

NSDS3 builds on the patterns of data production established under NSDS1 and 2 to respond to policy- and user-driven demand. This entails both sustaining and enhancing current data supply through interventions that improve the *coverage*, *frequency* and *granularity* of official statistics and administrative systems. These three priority issues, outlined in Table 5, define the level of nuance that can be achieved in analysis and therefore hold significant implications for data uptake and impact.

Table 5: Priority Issues in Data Supply

Term	Definition	Implications for Data Use
Coverage	The concept of *coverage* captures the completeness of scope or relevance of data, both within and across products, in relation to user needs.	Coverage gaps compromise the integrity of analysis through systematic exclusion of relevant geographies, topics and/or demographics.
Frequency	*Frequency* (also called 'periodicity') addresses the regularity of a given data production exercise.	Limited frequency compromises analytical quality by referring to outdated evidence to detect trends.
Granularity	*Granularity* refers to levels of disaggregation on geographic and demographic dimensions for a given data product.	Without granular data it is impossible to identify who is at risk of being 'left behind' when sub-populations are lost in averages (Custer et al., 2017).

3.1.1 Surveys and Censuses

Interventions to improve coverage, granularity and frequency of NISR surveys began under NSDS2, when staff adapted questionnaires to expand issue coverage and ensure alignment with emerging policy agendas such as the SDGs. Increasing survey frequency for survey products such as the LFS, continuing efforts to strengthen gender statistics through specialised analysis and capacity building, and the 5th RPHC promise to significantly increase the volume of data supply under NSDS3.

This expansion in data collection comes with the need sustain and expand the release of highly disaggregated data without compromising norms for data protection. For this reason, improved surveys will be complemented by efforts to strengthen policy frameworks around open data in Rwanda, which is a priority area for DRP implementation (Section 3.4).

Box 1. Data for the SDGs: From Cape Town to Kigali

NSDS3 is Rwanda's first NSDS designed for alignment with the SDG agenda, leveraging the global mandate to expand data supply, mobilise resources and strengthen the NSS. Objectives in data production and the other key initiatives outlined in this chapter are motivated by a nationally-led and owned approach to SDG monitoring and reporting.

NISR led an extensive consultative process under NSDS2 to develop an official national list of localised SDG indicators. During NSDS3 implementation, the NSS will aim to fulfil all relevant SDG indicator requirements at the UNSD Tier 1 and Tier 2 level,[14] for a total of 150 priority indicators assigned to NST-1 sectors.[15]

To implement a national approach to SDG measurement, NSDS3 will operationalise the 6 strategic areas outlined in the Cape Town Action Plan in the Rwandan context:

- ***Strategic Area 1:*** **Coordination and strategic leadership on data for sustainable development**
  Rwanda pursued a strategy of early intervention to respond to emerging SDG data requirements. NISR assumed a lead role in this process, identifying where indicators were fully, partially, or not currently captured in official statistics.
- ***Strategic Area 2:*** **Innovation and modernisation of national statistical systems**
  The launch of the DRP (Section 3.4) and improvements in statistical governance (Section 3.7.3) are strongly tied to the 2030 Agenda, providing frameworks to expand data access, facilitate dialogue and introduce NSS stakeholders to new data sources, technologies and techniques.
- ***Strategic Area 3:*** **Strengthening of basic statistical activities and programs, with a particular focus on the monitoring needs of the 2030 Agenda**
  NISR adopted a proactive approach to SDG measurement, adapting key surveys to close SDG data gaps during NSDS2. With over 40% of indicators linked to administrative sources (Abdella, 2017), the SDGs also motivates the design of sector statistical plans (Section 3.2).
- ***Strategic Area 4:*** **Dissemination and use of sustainable development data**
  In addition to ongoing efforts to improve data dissemination at NISR (Section 3.6), the development of the NDP and a specialised SDG reporting platform under the DRP (Box 4) will make SDG data and evidence more accessible to decision-makers and the public.
- ***Strategic Area 5:*** **Multi-stakeholder partnerships for sustainable development data**
  Rwanda's decentralised approach to SDG monitoring provides an opportunity to strengthen sector ownership in data production and plans for DRP implementation open new partnerships with academia and the private sector.
- ***Strategic Area 6:*** **Mobilise resources and coordinate efforts for statistical capacity building**
  The new NISR Training Centre (Section 3.5) will be the central hub of DRP implementation and a comprehensive capacity building program. The facility positions NISR to lead efforts to modernise the NSS and equip MDAs to measure national progress toward the SDGs.

3.1.2 Administrative Systems

Limited financial and human resources constrain opportunities to respond to demand for granular, high-frequency data using surveys and censuses. These activities are resource-intensive and often cannot be feasibly conducted annually. Administrative records offer a vital

[14] The Inter-agency Expert Group for the SDGs (IEAG-SDGs) has assigned a 3-tier classification to all SDG indicators. Tier 3 indicators, which are excluded from the official national list of SDG indicators for NSDS3, are those for which there is no formal, globally comparable methodology. See: https://unstats.un.org/sdgs/iaeg-sdgs/tier-classification/

[15] 18 of the 150 indicators are allocated to MDAs for Disaster Risk Management, Public Financial Management, and other cross-cutting areas, for which there are no sector statistical plans.

alternative data source to expand data supply and respond to demand (Stuart et al., 2015; Centre for Global Development, 2015). Not only are these data crucial for planning and MEL within MDAs, they also hold significant potential to augment analysis and reduce the burden on surveys, increasing efficiency and mitigating costs of statistical development in the future.

While potential benefits of high-quality administrative data are clear, producing them is a serious challenge. Administrative systems are diffuse, requiring intensive cooperation with institutions across the NSS with lower capability. Chronic under-resourcing exacerbates these challenges within MDAs. Many institutions across the NSS lack essential technology, financing and staff to build and maintain such systems. Under NSDS3, NISR will expand and scale interventions to target these barriers and strengthen administrative data production. The integration of sector statistical plans (Section 3.2) will complement ongoing NISR-sector collaborations in health, agriculture, environment, education and CRVS (Box 2), enabling a more holistic approach to administrative systems development across MDAs. The launch of a new National Data Portal (NDP) under the DRP (Section 3.4) also supports these initiatives, setting the stage for further integration of administrative data products in future strategies.

Box 2. Civil Registration and Vital Statistics (CRVS)[16]

CRVS development was a central focus under NSDS2, with significant successes and opportunities for growth. Demographic statistics are consistently among the most used data products according to the USS, calling for substantive investments to move from a dependence on survey snapshots (e.g. EICV and RDHS) to high-frequency records via CRVS. Building from an NSDS1 pilot in electronic data collection, NISR engaged with relevant NSS institutions at the central- and local-level to upgrade ICT systems and infrastructure, and instal Civil Registration Officers to improve CRVS data governance. A NISR-led accountability regime complemented these interventions, which includes regular quality assurance audits and 'spot checks' on-site at Civil Registration Offices.

NISR's investments in CRVS allowed for gradual process and quality improvements in administrative data production and dissemination. Collaboration with MINALOC and MINISANTE demonstrated the potential of a problem-driven approach to statistical capacity building, resulting in a more effective system and increased momentum to improve CRVS data quality. At the close of NSDS2, the work is ongoing. Harmonising data definitions and terminology, improving coverage, integrating systems, and automating quality checks will be priorities for NSDS3.

Economic Statistics

Economic statistics are derived from a combination of sources, but rely heavily on a regular, robust supply of administrative data. Interventions to improve coverage and frequency of economic data products under NSDS3 will focus on meeting the remaining requirements for the SDDS. This entails publication of production indices, as well as increasing the frequency of price indices and balance of payments figures to monthly and quarterly intervals, respectively. Additionally, NSDS3 will focus on strengthening partnerships, building out a coalition to continue to deliver timely, accurate national accounts data and rebase GDP.

3.2 Sector Statistical Plans

The process of statistical development is shared across institutions, leading to varying patterns of NISR-NSS collaboration and engagement. The design of 15 **sector statistical plans** (Annex 3) alongside NSDS3 launches a long-term effort to increase NSS empowerment and ownership in

[16] Insights from NSDS2 are drawn from the Midterm Evaluation conducted in FY2016/17 by the UK-ONS (Bumpsted et al., 2017).

the data value chain. As the lead institution within the NSS, NISR serves a vital function in overseeing the implementation of the sector plans and in addressing current shortfalls in sector statistical capability. In future NSDS designs, NISR will be well-positioned to build on this foundation, enabling sectors to manage statistical development at the district- and local-level to optimise NSS performance. The sector statistical plans align with the NSDS3 implementation period (FY2019/20-2023/24), covering 15 of 16 NST-1 sectors (Box 3).

Box 3. Sector Statistical Plans (NST-1 Sectors) [17]

1. Agriculture
2. Education
3. Energy
4. Environment & Natural Resources (ENR)
5. Finance
6. Governance & Decentralisation
7. Health
8. Information & Communications Technology (ICT)
9. Justice, Reconciliation, Law & Order (JRLO)
10. Private Sector Development & Youth Employment (PSDYE)
11. Social Policy
12. Sport & Culture
13. Transport
14. Urbanisation & Rural Settlement (URS)
15. Water & Sanitation (WATSAN)

3.2.1 Design

PARIS21 guidance suggests that sector strategies should form the 'building blocks' of an NSDS overall (PARIS21, 2017). Thus, NISR developed the sector statistical plans in parallel with the NSDS3 design during FY2017/18. Insights from the sector plans informed the overall NSS assessment (Chapter 4) and design of the NSDS3 strategic framework (Chapter 5). Due to limitations of staff time and resources across the NSS, NISR led the sector plan design process in consultation with key stakeholders from each NST-1 sector. However, NSDS3 constitutes a vital step in advocating for investments in sector statistical capability that will enable a sector-led and owned design process in future strategies.

Each plan consists of 3 sections. Section 1 provides an overview of sector statistical needs and initiatives based on a review of their SSP and relevant policy frameworks outlined in Chapter 2. Section 2 outlines data requirements for each sector based on the indicator frameworks for the SSP, NST-1, EAC Vision 2050, AU Agenda 2063 and the SDGs. Section 3 outlines planned statistical activities and investments for the NSDS3 implementation period.[18]

The process of designing the plans revealed cross-cutting gaps in sector statistical capacity. To target these gaps, in addition to supporting sector activities in data production and capacity

[17] The NST-1 sector for Public Financial Management (PFM) is excluded from the sector statistical plans, as data production activities in PFM are limited to internal operations. However, PFM stakeholders will be invited to participate in NSDS3 capacity building program and other NSS statistical development initiatives along with other NST-1 sectors.

[18] Extended versions of each sector plan are available on the NISR website, which include an additional assessment section that identifies the statistical practices, systems and resources that currently exist (or are needed) to fulfill sector data production requirements and support analysis in each sector.

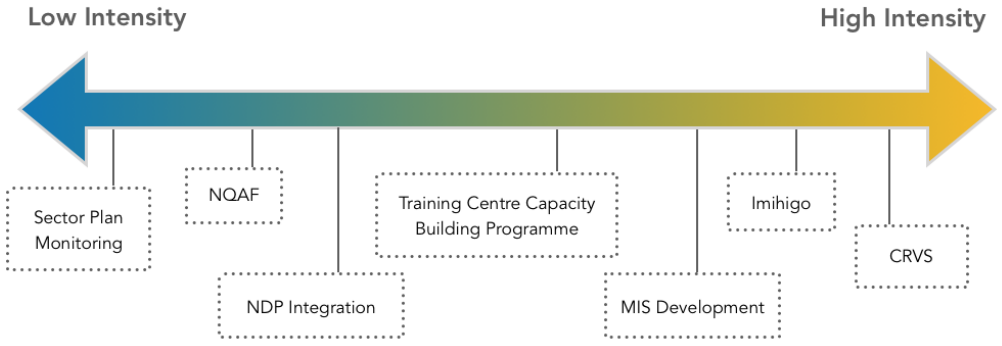
building, NISR will leverage the plans to advocate for a baseline of resources and standards to be rolled out in all sectors by the close of NSDS3, including the following:

- Design of a sector data management plan
- Incorporate a dedicated budget line for statistical activities
- Develop a functional MIS, with linkages to the National Data Warehouse at RISA
- Establish a linkage between the sector MIS and the NDP[19]
- Ensure at least 1 statistician on staff in all lead sector MDAs[20]
- Establish a TWG for statistics in each sector

3.2.2 Implementation

A model of shared responsibility for statistical development is mainstreamed in the NSDS3 design and sector statistical plans, which differentiate between *high-intensity* and *low-intensity* engagement between NISR and sectors. Progress against the plans will be assessed on an annual basis through a new review mechanism led by NISR in partnership with MINECOFIN and other key stakeholders. Figure 3 (below) visualises NSDS3 sector engagement on a spectrum, providing examples of high-intensity and low-intensity activities captured in the sector statistical plans.

Figure 3: NSDS3 Sector Engagement



High-intensity activities are NISR-led and/or financed, conducted in partnership with MDAs. For example, NISR projects in MIS development and administrative systems for agriculture, health, environment, education and CRVS operate under this model. On the other end of the spectrum, low-intensity activities centre on NISR's efforts to strengthen outreach, advocacy and accountability at the sector-level by tracking statistical outputs (Chapter 6), harmonising technical guidance and improving governance frameworks.

3.3 Imihigo Planning and Evaluation

The GoR re-introduced the pre-colonial practice of performance contracting, known as *Imihigo*, in 2006, as a strategy to strengthen planning and MEL systems across all levels of government administration (AfDB, 2012). Imihigo is a performance-based management system designed to ensure short-run implementation of the current medium-term national development plan. The annual Imihigo cycle begins with the preparation of individual contracts for each institution, known as *Umuhigo*, which roll into 3 aggregated tiers: *Central*, *Local* and *Joint* Imihigo. The latter

[19] Discussion of NDP implementation is included in Section 3.4 on 'The Data Revolution'.

[20] These MDAs are designated leaders of the sector secretariat.

are designed to capture cross-cutting policy areas that are not confined to a single sector, such as gender equality and job creation, and include external stakeholders from the private sector and NGOs. Imihigo evaluation feeds into evidence-based planning and budgeting decisions for the following fiscal year (Versailles, 2012).

One of the distinctive aspects of Imihigo is that they are self-designed. MDAs designate their own performance targets and indicators individually for Umuhigo and collaboratively for Local, Central and Joint Imihigo. This allows high institutional ownership over the contract and strengthens accountability mechanisms (ibid.). The indicators used to monitor, and later evaluate, Imihigo are drawn from surveys, censuses and administrative systems, creating an overt linkage between statistical development and government performance monitoring. For this reason, Imihigo planning and evaluation officially transitioned to the NISR portfolio during the fourth year of NSDS2 implementation (FY2017/18). This new workstream strengthens NISR's leadership function under NSDS3, providing a clear opportunity to enhance collaboration between NISR and MDAs.

3.3.1 NISR's Imihigo Mandate[21]

The annual Imihigo program of work occurs in 4 phases: preparation, validation, monitoring and evaluation. NISR manages the validation and evaluation phases, while MINECOFIN continues in its role leading the Imihigo program overall. This division of labour reflects the mandates of each institution. As the leader of the NSS, NISR is well-positioned to guide indicator quality assurance during the validation phase and apply rigorous methods to Imihigo evaluation. Likewise, assignment of general oversight to MINECOFIN ensures continuity in their leadership function for government planning and budgeting.

Validation

The validation phase is a new addition to the Imihigo planning process introduced by NISR. Following a formal review of current Imihigo practice, the NISR team identified two significant challenges in indicator formulation. First, Imihigo indicator frameworks often failed to follow a logical flow through inputs, activities, outputs and outcomes to effectively track the results chain. Second, poorly formulated indicators specified by MDAs undermined appropriate measurement and subsequent evaluation. During the validation phase, NISR will address these challenges by reviewing all Imihigo indicators to ensure they are *specific*, *measurable*, *attainable*, *relevant* and *time-bound* (SMART), and logically sequenced.

Table 6: SMART Indicator Criteria for Imihigo[22]

Criterion	Definition
Specific	Indicators should be as precise as possible, with appropriate levels of disaggregation.
Measurable	Indicators must be meaningful and quantifiable based on observable criteria.
Attainable	Indicators and targets should be ambitious, but informed by known trends and realistic projections of progress for the period of observation (e.g. annual Imihigo).

[21] Details on the Imihigo methodology are drawn from the *Revised Methodology for Imihigo Planning and Evaluation* (NISR, 2018a)

[22] These definitions draw on results-based management literature from Frey & Osterloh (2001) and technical guidance from UNDP (n.d.).

Criterion	Definition
Relevant	Indicators must be appropriate to the development priorities and targets identified in policy, and clearly linked to program interventions and outcomes.
Time-bound	Indicator measurement must be linked to the period of observation (e.g. annual program implementation).

Evaluation

Imihigo evaluation occurs twice annually. At the close of each calendar year, NISR leads a 6-month midterm evaluation to provide feedback on progress against Imihigo targets to enable institutional learning and inform programme adaptation, as needed. No scores or rankings are assigned in this process, maintaining a focus on trends and performance within Imihigo clusters. At the close of the GoR fiscal year, NISR conducts and releases a final Imihigo evaluation, which includes district rankings, to inform the annual planning and budgeting cycle. Final evaluation scores are synthesised for all levels of Imihigo and weighted by NST-1 pillars as well as institutional performance benchmarks, including program outcomes, annual plan implementation, citizen satisfaction and participation.

3.3.2 Implications of Imihigo for Statistical Development

The role of NISR in Imihigo planning and evaluation strengthens its leadership in the NSS and supports the broader agenda for statistical development in the following areas:

Enhancing statistical literacy

Past challenges with indicator formulation for Imihigo illustrate the need to improve statistical literacy across MDAs. NISR's new mandate will open channels for dialogue around effective statistical practice and its relevance to the Imihigo programme.

Aligning with planning and budgeting cycles

The relationship between Imihigo scores and the annual planning and budgeting process provides a natural link between data and decision-making. This linkage serves a dual function in statistical development, introducing opportunities to advocate for dedicated budget lines for statistical activities while illustrating the relevance of data to policy and service delivery.

Strengthening NSS accountability

Central and local Imihigo planning and evaluation provides an immediate, practical example of demand for data and a strong incentive to ensure its quality. NISR can leverage their leadership role in Imihigo to advocate for the inclusion of indicators to monitor statistical activities as a mechanism for NSS accountability.

3.4 The Data Revolution

In April 2017, the GoR released an innovative policy designed to facilitate a national data revolution, designating NISR as the lead implementing institution. The **DRP** (FY2017/18-FY2021/22) aims to 'build an innovation [and] data-enabled industry to harness rapid social and economic development' (The Republic of Rwanda, 2017) mobilised through five objectives: 1) establish principles for data management; 2) develop human resource capacity; 3) establish a framework for data creation, release, analysis, and re-use; 4) develop data-based innovations and support job creation; and 5) establish a data governance framework. A suite of policy frameworks underpins the DRP, including the NST-1 and the SDGs, which highlight the critical

role of data and technology in advancing to the next frontier of national social and economic development. NSDS3 leverages this agenda to strengthen NISR's leadership within the NSS, mobilise new partnerships and strengthen systems and frameworks that underpin the data value chain.

3.4.1 NISR's Role and Programme of Work[23]

NISR is the designated lead or coordinating institution for the DRP, signalling a significant expansion of NISR's leadership role and programmatic scope during NSDS3. In addition to facilitating overall implementation with key partners, NISR will work directly to implement the following 5 key elements of the DRP program:

The Data Science Campus (DSC)

The DSC, housed within the NISR Training Centre, will be the hub of DRP implementation. NISR will make significant investments in infrastructure and human resources to operationalise the Campus and build out a new portfolio of work that harnesses advanced methods, novel data sources and technology to produce research and analysis for the public good.

Human Capital Development

The DRP aims to build a workforce equipped with the skills required to catalyse the data revolution in Rwanda. The DSC will support this objective through a customised data science training program targeting NISR staff, the NSS and the wider public.[24] New graduate programs in data and computational sciences offered through Rwanda's higher education institutions (HEI) will complement these initiatives to expand the workforce in the medium- to long-term.

Policy and Legal Frameworks

Transparency and open data are core elements of the data revolution, requiring robust standards to balance data access and protection (UNDP, 2017). Under the DRP, NISR will coordinate efforts to review and adapt current policy and legal frameworks to support DRP implementation, strengthen partnerships and foster a culture of ethical data use.[25]

IT Systems and Infrastructure

One of the primary aims of the DRP is to expand the range of data supply to include big data and other unofficial data sources. NISR will leverage this opportunity to invest in technology upgrades required to manage and analyse high volumes of data and to encourage similar upgrades at the sector-level. The DRP also calls for new systems to streamline data access, including a National Data Portal (NDP) managed by NISR,[26] to join-up diffuse data sources in a single interface.

Advocacy

The DRP aims to harness new methods, data sources and platforms to connect data producers and users and inform decision-making. But building awareness of this agenda will be key to its

[23] Information on DRP implementation at NISR is drawn from the *Data Revolution Policy: Implementation Strategy* (NISR, 2018b).

[24] The data science trainings offered through the DSC will be one component of the larger NISR Capacity Building Program offered at the Training Centre (Section 3.5)

[25] Further discussion of planned policy and legal reforms are provided in Table 6 (partnerships) and Section 3.7.

[26] MINICT will lead the development of the NDP in the short-term, which will transfer to NISR for implementation and management over the medium- to long-term.

success. As a part of the broader NISR Communication and Dissemination Strategy (Section 3.6), NISR will promote DRP initiatives to NSS stakeholders and the wider public to increase awareness around the data revolution and its potential to transform social and economic development in Rwanda.

Box 4. Launching Rwanda's Data Science Campus: 'Quick Wins'

In the early years of DRP implementation (FY2017/18-FY2018/19), NISR began to develop a suite of specialised projects and partnerships that will serve as the foundation for the new DSC portfolio of work. These 'quick wins' serve a dual function, creating awareness of the 'art of the possible' in data science and identifying emerging resource requirements for DRP implementation. Current 'quick win' projects include the following:

1. **NISR Data Visualisation System:** this system will provide a means for the public to quickly access and interact with data generated by NISR and external NSS partners.
2. **NISR Mobile App:** this project aims to make data visualisations and other statistical products more readily accessible to data users.
3. **SDG Reporting Platform:** built on open UK-ONS code, this open platform will serve as a tool for public reporting against Agenda 2030 goals and targets, featured alongside national, regional, and continental indicators.
4. **Reproducible Analytical Pipelines (RAP):** RAP will leverage Python and R coding languages to automate repeated tasks in data management and analysis to improve efficiency in data production and publication.
5. **Synthetic Data:** the DSC will build capacity to produce and use synthetic data (e.g. data that is generated by algorithms) to expand opportunities for analysis and address concerns around data protection and confidentiality.
6. **Integrated Business Enterprise Survey (IBES) Automation:** NISR will apply data science techniques to improve efficiency in survey data collection and processing through automation.

3.4.2 Partnerships

The burden of DRP implementation does not rest with NISR alone, but with a network of stakeholders from government, DPs, NGOs, the private sector, academia and civil society. Risks of failed or partial implementation are substantive in the absence of effective partnerships. However, under a joint-implementation model, the DRP holds significant potential not only to enhance data availability, technology and 'know-how' in the NSS, but to deepen patterns of collaboration. Table 7 clarifies current activities and partnerships for each of the 5 objectives outlined in the DRP.[27]

Table 7: DRP Implementation Partnerships

DRP Objective	Components	Partners
1. Establish principles for data management	• Ensure compliance with the NQAF in the production of statistics • Develop internal policies for data management and integration for NISR programs in the DSC • Provide guidance to NSS institutions engaging in data science projects on DRP data management policies • Development of the NDP with linkages to the National Data Warehouse	**NISR** **MINICT** **RISA**

[27] At the time of the NSDS design, key partnerships for DRP implementation are already in place. However, NISR will continue to expand these partnerships over the course of NSDS3 implementation.

DRP Objective	Components	Partners
2. Develop human resource capacity	• Establish the DSC on-site at NISR with appropriate technology and infrastructure • Design NISR staff training programs in data science and big data analytics • Design training programs to socialise key stakeholders in government and the public to demonstrate 'the art of the possible' in data science, and improve data literacy • Design a data science training program and a project pipeline for NSS institutions • Development of advanced degree programs in data and computational sciences	**AIMS** **CMU** **NISR** **UK-ONS** **UR ACE-DS** **UR ACE-IoT**
3. Establish a framework for data creation, release, analysis and re-use	• Develop MoUs with public and private sector institutions to establish norms for data access and fair use • Develop policies and guidance for data sharing, analysis and publication across institutions (public and private) • Develop appropriate legal frameworks for data protection, data retention, and data sharing	**BNR** **MINICT** **MINIJUST** **RISA** **RRA** **RSSB** **RURA**
4. Develop data-based innovations and job creation	• Develop a DSC project pipeline to demonstrate relevance of data science to decision-making • Create a new team at NISR to staff the DSC equipped with skills in data science, analytics and programming • Integrate DRP programs in the NISR communication and dissemination strategy as a tool for advocacy around the data revolution	**AIMS** **NISR** **RDB** **RURA** **UK-ONS**
5. Establish a data governance framework	• Establish national governance arrangements for the DRP, including a multi-stakeholder forum and steering committee • Develop data classification system (including restricted, private, and public) to control access to the NDP and NISR data warehouse • Develop national policies and guidance to support a strong culture of data ethics and regulate partnerships	**BNR** **MINICT** **NISR** **RISA** **RURA** **UK-ONS**

3.5 The NISR Training Centre

The newly constructed NISR Training Centre is designed to build NSS capacity 'to produce, analyse, disseminate and use high quality and timely official statistics in policy formulation, decision-making and planning processes' (NISR, 2017b). The launch of the Centre will significantly expand NISR operations under NSDS3, providing a new state-of-the-art facility to support statistical development. As the home of NISR's Capacity Building Program and the DSC, the Centre is envisioned as a hub for training and thought leadership in statistics and data science in Rwanda and beyond.

3.5.1 Capacity Building Program (CBP)

Under previous strategies, capacity building initiatives at NISR focused on product-specific interventions to improve data quality or one-off trainings for particular producer and user groups. NSDS3 builds on this experience with a comprehensive NISR Capacity Building Program (CBP) designed to target weaknesses in Rwanda's data value chain and equip the NSS with practical skills to produce and analyse data and maximise policy impact.

The CBP will deliver short, practical trainings with an aim to improve job performance, both within NISR and across the NSS. Trainings will cover a wider range of issues and concepts than in previous strategies to address the needs of diverse data producer and user communities.[28] Broadly, the CBP encompasses 4 thematic streams:

Data Literacy

The CBP will address data literacy on several dimensions to meet the needs of various data producer and user types. Trainings in data management will target NSS statisticians and M&E officers to enable more effective patterns of data production and dissemination in MDAs. Product-centred trainings will enable analysts to become more aware of available data and how to use it to inform policy.

Statistical Methods

Statistical methods trainings will target both the producer- and user-side of the value chain. Trainings in survey design will enable staff from NISR and planning departments in MDAs to produce more robust data products. Trainings in statistical software, including STATA and SPSS, will introduce statisticians and analysts to sophisticated methods in data management, quantitative analysis and data visualisation.

Data Science Methods

As part of the DSC program of work, staff will develop and deliver training courses in data science methods and programming languages, including R and Python, to equip NSS staff with skills to realise the data revolution in Rwanda. This program will be facilitated through a range of strategic partnerships with the UK-ONS and Rwanda HEIs, including the University of Rwanda (UR), Carnegie Mellon University (CMU), and the African Institute for Mathematical Sciences (AIMS).

Programme Management and Communication

In addition to targeting technical skills in statistical methods and data literacy, the CBP includes a suite of trainings to develop soft skills for the statistical workforce. Improving project management and communication capability, both within NISR and across MDAs, is key to increase efficiency in data production, improve data quality and create opportunities for uptake.

3.5.2 Operationalising the Centre

The launch of the Training Centre will begin in the final year of NSDS2, with plans to incrementally develop and expand the CBP over the course of NSDS3 implementation. Roll-out of the CBP will target 3 user categories, beginning with foundational skills in data management and literacy, and gradually building towards more advanced analytical methods in statistics and data science.

- **User Category 1:** targets current NISR and NSS staff working upstream in the data value chain (e.g. data collection and publication). Focus on basic statistical skills to increase capacity for data production, data management and dissemination.
- **User Category 2:** targets current NISR and NSS staff with a strong foundation in statistical methods. Focus on more advanced methods for data production and analysis to expand opportunities for data uptake and impact.

[28] A full list of planned trainings and associated costs is available in Annex 1 under Pillar 3.

- **User Category 3:** targets external data users and producers, both within Rwanda and the wider region. Focus on expanding regional and global partnerships for statistical capacity building.

3.6 Communication and Dissemination

The need for appropriate resourcing and outreach to build communities of data use was highlighted in NSDS1 and NSDS2 as an area for growth, 'and remains an ongoing area needing committed leadership going into NSDS3 and beyond' (Bumpsted et al., 2017). The NSDS3 Communication and Dissemination Strategy (CDS) renews this commitment, targeting the disconnect between publication and uptake in the data value chain.

3.6.1 A Three-fold Plan to Connect Producers and Users

The CDS outlines 3 objectives to improve communication and dissemination practice at NISR during NSDS3 implementation:

Diversify channels and messaging

Diverse audiences call for a diversified approach to outreach and publication, one that recognises the unique needs of each group identified in the NSDS3 User Typology (Chapter 2, Table 1). The CDS includes plans to augment NISR's static publications and web portal updates with infographics and Kinyarwanda translation to democratise access to information for audiences with lower literacy and numeracy. The CDS also introduces regular, targeted social media campaigns as a vehicle to reach broader audiences and encourage public engagement.

Develop and strengthen networks

The CDS retains a focus on building networks of statistical practice to bridge the gap between data publication and uptake. The NISR communications team will institutionalise outreach to existing contacts in a new monthly bulletin that highlights current statistical products and programmes. The launch of the Training Centre complements the CDS in this regard, providing a venue for regular training and events, including African Statistics Day and product release workshops, which raise the visibility of official statistics and their contribution to social and economic development.

Enhance a culture of innovation

The shift toward external engagement envisioned in NSDS3 strengthens the mandate to continuously improve communication and dissemination practice throughout implementation. In particular, initiatives described in this chapter — including sector plans, Imihigo and the DRP — will create opportunities for statistical advocacy. The NISR communications team aims to capitalise on these opportunities to adopt a culture of learning and innovation, promoting statistical development through new events, public competitions and publications to more effectively engage data producers and users and facilitate dialogue.

3.6.2 Global Engagement

As NISR has developed its reputation as an NSO, opportunities to showcase and promote its work in international fora have emerged. In particular, work on the DRP and the launch of the Training Centre enabled NISR to host the 5th UNSD International Conference on Big Data (2019), and precipitated invitations to present on issues of NSS leadership and public data literacy at the 2018 UK Commonwealth Session for Statistics and 2018 UN World Data Forum. During NSDS3, NISR will continue to strengthen its engagement with statistical communities

across the region, continent and globe to raise the profile of statistical development in Rwanda and identify best practices to inform future strategies.

3.7 The Enabling Environment

The initiatives described in this chapter necessitate a shift not only in NISR's programmatic scope, but also in Rwanda's underlying statistical development frameworks, which shape the enabling environment for NSDS3. Strategic adaptation of the legal, institutional, governance and financing frameworks outlined in Chapter 2 will be essential to support a shift toward external engagement and strengthen NISR's leadership in the NSS.

3.7.1 Legal Frameworks

The launch of the DRP and associated initiatives to crowd in unofficial data, join-up administrative systems and expand opportunities for research and analysis raise new policy issues for open data and transparency in Rwanda. The current legal framework for statistics provides a broad mandate for data access at NISR, but how access extends across MDAs and external NSS stakeholders is less clear (Young & Shearman, 2018). The lack of an explicit relationship between the law establishing NISR, Law No. 53bis/2013 of 28/06/2013, and the law outlining the organisation of statistical activities, Law No. 45/2013 of 16/06/2013, contributes to that lack of clarity. Addressing these ambiguities will be essential for full NSDS3 implementation, particularly in enabling NSS institutions to open their data to a wider audience and, relatedly, to allow researchers and analysts to access and use data for the public good.

As part of the DRP program of work, NISR will work with RISA, RURA, MINIJUST and other key NSS stakeholders to respond to gaps in the legal framework as required and develop appropriate policies to support data sharing across institutions. In particular, definitions of key terminology, procedures for data access accreditation and standards for data release will be addressed (ibid.). These policy initiatives will be accompanied by efforts to strengthen standards for ethical data use and data protection to balance a mandate for openness with concerns around data sensitivity and citizen anonymity.

3.7.2 Institutional Frameworks

As the portfolio of work at NISR expands under NSDS3, the institutional burden will as well, calling for new operational units, mechanisms for coordination and investments in human resources. In particular, the launch of the Training Centre and DSC highlight a need to strengthen and expand the current staff complement to attract and retain strong technical skills in statistical methods and data science. Similarly, the sector statistical plans will demand unprecedented levels of NISR staff time to monitor implementation, highlighting a need for sector-level investments to support statistical development in various MDAs.

NISR

NISR will pursue a two-fold strategy to address NSDS3 human resource requirements. First, annual staff increases will gradually expand existing teams while building out new units for the Training Centre and DSC. However, recruiting skilled staff to implement DRP initiatives will require NISR to compete with the private sector for a limited pool of qualified candidates. Furthermore, as current staff improve their technical skills through professional and academic training, it will be vital to improve retention to ensure a strong return on these capacity building investments. Thus, improvements in staff retention mechanisms will complement staff increases to attract and retain talent. In addition to opportunities for professional development,

adjustments to benefits and salaries offer a vehicle to sustain growth in the statistical workforce over the medium- to long-term.

NSS

While human resources at NISR fall short of requirements, many MDAs lack dedicated statistical staff altogether. Under this model, pressures on NISR continues to grow while capacity in the NSS remains low. The NSS Organisational Development Strategy (2015), proposes a solution to this problem through the development of a 'national cadre of professional statisticians', with specialised staff embedded at all levels of the NSS. The sector statistical plans create an opportunity to develop this cadre by advocating for dedicated statistics units in all NST-1 sectors[29] and strengthening mechanisms for accountability and oversight. As MDAs adopt this model, it will provide the necessary foundation for growth under future strategies.

3.7.3 Governance Frameworks

The integration of sector statistical plans, Imihigo and launch of the DRP centre on strengthened partnerships and cooperation with the wider NSS. This emphasis on external engagement increases the complexity of statistical coordination and governance. In response, NISR will expand domestic governance instruments to ensure a participatory approach to NSDS3 implementation. These include the DRP Steering Committee and a new NISR/MINECOFIN annual review mechanism to monitor sector plan implementation. TWGs for statistics at the sector-level will complement the annual review mechanism by promoting dialogue around sector activities in data production, dissemination and use.

3.7.4 Financing Frameworks

The growth of the agenda for statistical development under NSDS3 highlights a need to augment instruments for resource mobilisation. The launch of new workstreams covered in this chapter, as well as sustained improvements in data coverage, frequency and granularity, drive increased costs. However, investment in statistical development 'pays for itself' by improving the efficiency of the data value chain, increasing value for money and providing evidence to support better decision-making.

The transition from a majority domestic financing model under NSDS2 highlights a need for a continued commitment from the GoR to finance statistical development. Adaptations to the legal framework and the launch of the sector statistical plans will provide new mechanisms to identify and respond to emerging financing requirements and develop strategic partnerships.

[29] Under NSDS3, NISR will focus on the recruitment of at least 1 staff statistician in all lead sector MDAs.

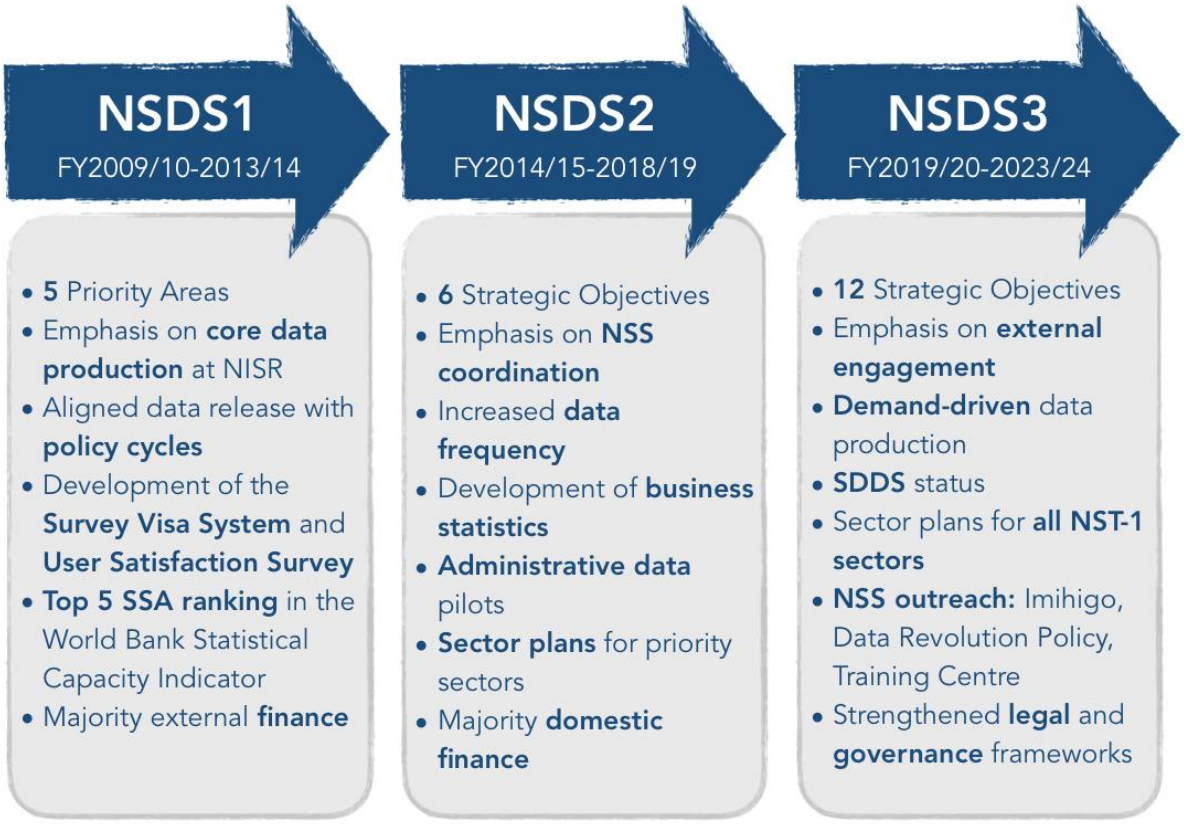
Chapter 4. Design Approach and Assessment

NSDS3 is a comprehensive medium-term planning document, outlining strategic priorities for NISR and the wider NSS for the next 5 years, from FY2019/20 to FY2023/24. This chapter provides an overview of the NSDS3 design process, as well as an assessment of the current landscape for statistical development and its implications for the data value chain.

4.1 Differences Across Rwanda's Statistical Strategies

In order to strengthen Rwanda's data value chain, NSDS3 must strengthen existing statistical activities to respond to user needs while also pushing the frontier of data production, advocacy and analytical capability to drive evidence-based policy and promote innovation. A comparison across Rwanda's three NSDS' indicates a progressive shift from internal capacity building at NISR toward external NSS engagement. This shift signifies a more inclusive approach to statistical development that facilitates user-producer dialogue to realise impact. Figure 4 provides a side-by-side comparison of NSDS1, 2 and 3, highlighting this progression over time.

Figure 4: NSDS Comparison



4.2 The NSDS3 Design

NSDS3 was designed by staff at NISR in consultation with NSS stakeholders, guided by international standards outlined in the PARIS21 NSDS Guidelines (Version 2.3, 2017). The NSDS design team structured the design approach to align with the **10 Essentials for a Good NSDS** (Table 8, below), which serve as the guiding principles for statistical development planning in Rwanda.

Table 8: 10 Essentials for a Good NSDS[30]

Essentials	Application to the NSDS3 Design
1. Backed by political support, nationally led and owned	GoR and NSS leadership actively engaged in consultation throughout all phases of the NSDS3 design process to identify current obstacles to statistical development and ensure broad-based ownership over the final document.
2. Designed through a sound methodological approach	The NSDS3 design team formulated a rigorous assessment strategy integrating recent evaluations and surveys from NISR, as well as a structured approach to collect information on the statistical needs and past performance of the wider NSS.
3. Policy and results-based with a quality fit for purpose	The NSDS3 design mainstreams national, regional, continental and international policy agendas that inform development priorities in Rwanda over the next 5 years. Consultations and assessments to evaluate shortfall against associated data requirements served as a benchmark to define targets for statistical development under NSDS3.
4. Taking into account what is in place and international commitments	Leveraging existing evaluations and surveys as a starting point, the NSDS3 design team deployed assessments to take stock of current statistical capacity. Insights from these assessments were evaluated against policy commitments to inform a demand-driven approach to statistical development for the next 5 years.
5. Drawing on international statistical standards	The NSDS3 leveraged PARIS21 guidance to formulate assessments, engage stakeholders and identify priorities. The design team contextualised analysis in international standards and recent policy research to develop the NSDS3 narrative, theory of change, and strategic framework.
6. Covering the whole National Statistical System (NSS)	NSDS3 is the first to incorporate statistical plans for all sectors in the national development plan (NST-1), marking an important step toward comprehensive NSS coverage. The design team developed the plans in an inclusive process to capture the needs of a broad range of stakeholders. Insights from sector consultations were used to identify cross-cutting themes to inform the NSDS3 strategic framework.
7. Setting out an integrated statistical capacity building program	The NSDS3 design process ran parallel to planning for DRP implementation and the launch of the NISR Training Centre, which serve as the centrepiece of the new Capacity Building Program (CBP). The program is featured as a free-standing pillar in the NSDS3 strategic framework.
8. Funded as a priority by governments	Funding for statistics in Rwanda shifted to a majority share domestic financing model under NSDS2. However, NSDS3 will require continued resource mobilisation efforts to accommodate an expanding portfolio.
9. Serving as a coherence framework for external assistance	NSDS3 provides a forward-looking framework to inform strategies for external resource mobilisation. The inclusion of development partners and NSS planning departments throughout the design process constitute early efforts to improve coordination and break down silos that emerge under a

[30] Drawn from PARIS21 (n.d.) NSDS Guidelines: Understanding Phase.

Essentials	Application to the NSDS3 Design
	mismatched financing framework.
10. Incorporating monitoring, evaluation and reporting	The NSDS3 implementation plan includes a regime for regular reviewing, reporting and evaluation. Activities from the sector plans are mainstreamed in the NSDS3 strategic framework and logframe to allow for a clear assessment of progress internally and externally.

4.2.1 Design Phases

The design process itself followed a series of 6 phases during the final years of NSDS2 implementation (FY2016/17-FY2017/18). Each phase adopted a participatory approach to mobilise broad-based support for the final strategic document.

Phase 1: Acknowledging

The *acknowledging phase* grounds the NSDS design process in producer advocacy and user needs, enabling 'government and the highest authorities of the NSS...[to] recognise the role of statistics in development, and that the existing system does not always match demand' (ibid.). During this phase, NISR engaged stakeholders from across government — at technical and decision-making levels — to advocate for investments in national statistical development and build high-level awareness of the forthcoming design process.

Phase 2: Understanding

The *understanding phase* builds practical 'awareness and ownership' (ibid.) of the NSDS among NSS stakeholders. This phase ran parallel to the design of NST-1, providing valuable opportunities to frame the NSDS3 design around emerging issues in national policy. NISR capitalised on this momentum by conducting systematic reviews of incoming data requirements in consultation with MDAs during this time. Internal reviews of institutional documentation, including the NSDS2 Midterm Evaluation and the most recent USS, complemented this process, as NISR staff worked to identify priorities for the new strategy. Plans for new workflows also began during this phase, including DRP implementation and the Training Centre launch.

Systematic Indicator Reviews

NISR systematically reviewed all indicators captured in national, regional, continental and international policy frameworks, including the NST-1, EAC Vision 2050, AU Agenda 2063 and the SDGs, to underpin the NSDS design. Staff evaluated each indicator on three dimensions: 1) relevance to the Rwandan context; 2) feasibility of measurement; and 3) availability of appropriate local data sources. The reviews aimed to maximise use of NISR products to reduce the burden on under-resourced NSS institutions. NISR delivered results from these reviews to relevant MDAs for iterative consultation, resulting in a finalised list of appropriate national sources for each framework.

NSDS2 Midterm Evaluation

NISR enlisted support from the UK-ONS to conduct an independent evaluation of progress against NSDS2 during FY 2016/17, which provided an early indication of emerging priorities for NSDS3. The report is built around 7 qualitative case studies based on the NSDS2 strategic framework, covering specific product lines including poverty statistics, labour statistics, economic statistics and administrative systems, as well as operational objectives such as dissemination, quality assurance and data literacy.

Phase 3: Preparing

The *preparing phase* lays the foundation for the NSDS design by securing official commitments, building constituencies and mobilising resources (ibid.). The NSDS3 design team led internal preparation at NISR during this phase, conducting desk reviews, outlining a roadmap and developing the assessment rubric. These preparations included initial outreach to NSS stakeholders to request institutional focal points and build awareness of the design process. Internal (NISR) and external (NSS)[31] statistical activities audits also launched at this stage, providing initial NSDS3 budget projections.

Thematic Desk Reviews

The NSDS3 desk review covered a range of themes to address the programmes and priorities outlined in Chapter 3. These included national policies, the data revolution, communication and dissemination and statistical capacity building. The design team compiled insights from a range of sources including legal documentation, technical guidance and international policy research to guide the development of the NSDS3 conceptual framework, consultation questionnaires and assessments.

Internal and External Statistical Activities Audits

A series of internal and external activities audits captured landscape of statistical activities for NSDS3, both within NISR and across the NSS. The internal audit engaged directors of each unit at NISR to assess planned activities and forward costing using a set template. This process served a dual function by soliciting inputs for NSDS3 while improving internal awareness of the design process. The design team reviewed all documentation in an iterative process to refine costs, enhance alignment with strategic priorities and ensure institution-wide buy-in.

Similarly, the external audit engaged focal points from across the NSS to collect information on statistical activities and associated costs for MDAs, NGOs, CSOs, HEIs and DPs that would inform the design of sector statistical plans. To facilitate the audit process, the design team hosted a workshop for NSS stakeholders to introduce the audit template and provide more information on the NSDS3 design, including sector statistical plans and sector-level data requirements.

Phase 4: Assessing

The *assessing phase* aims to develop 'an understanding of the adequacy of statistical outputs and the organisation and management of the NSS as a whole' (ibid.). The assessment phase provided a framework to evaluate the inputs from the understanding and preparation phases, in order to balance ambition with feasibility in the NSDS3 design. In addition to conducting a series of customised assessments, the design team began sector statistical plan production at this time. This process included semi-structured consultations with representatives from all NST-1 sectors to produce a working draft of each plan.[32]

Rapid Data Assessments

Leveraging indicator frameworks for the NST-1 and SSPs, as well as the mappings devised for international, regional and continental agendas, the design team calculated indicator counts for every required data source allocated to NST-1 sectors. Indicator counts were disaggregated by frequency, lead institution and baseline availability to identify current data gaps. These rapid

[31] Outreach to Over 100 institutions across government, development partners, NGOs, academia and civil society.

[32] Discussion with lead secretariat institution(s) constituted the minimum requirement for the initial consultation.

assessments served as the underlying framework for sector statistical plans, providing a full picture of data needs for sector-level planning and MEL. At the conclusion of this process, the design team cross-referenced indicators and sources from all relevant policy frameworks to calculate the gross and net indicator requirements for NSDS3. The assessments were used as a reference during stakeholder consultations (see below) to ensure accuracy, comprehensiveness and clarity in the sector plans.

Stakeholder Consultations

The design team developed initial outlines of each sector statistical plan based on the SSPs and rapid data assessments. With these outlines as a starting point, the team called sector representatives to participate in consultations at NISR to discuss current data needs and statistical capacity in each sector. These consultations occurred throughout February and March 2018 using a semi-structured interview approach and a customised interview guide drawn from the '4C's' framework (Custer & Sethi, 2017; Section 4.3).

SWOT Analysis

Based on inputs from all assessments, the design team conducted an analysis of Strengths, Weaknesses, Opportunities and Threats (SWOT) associated with current statistical activities vis-a-vis NSDS3 priorities at three levels: 1) NISR as an institution; 2) the NSS as a whole; and 3) individual NST-1 sectors.

Phase 5: Drafting

The *drafting phase* draws on PARIS21 guidance for 'envisioning' NSDS objectives, 'identifying strategic goals' and 'elaborating an action plan' (ibid.). During this phase, the design team developed and refined the NSDS3 strategic framework, defined the theory of change, compiled an initial budget and revised sector plans to produce a complete NSDS3 Draft 0. Draft 0 leveraged insights from the understanding, preparing and assessing phases to develop a comprehensive discussion of NISR institutional priorities and an analysis of the NSS as a whole.

Phase 6: Reviewing

Following the production of a full Draft 0, the *reviewing phase* included the development of the NSDS3 logframe and budget, as well as a parallel process of internal and external validation to develop a final draft of the strategy for official approval.

Validation

Internal validation included a workshop for NISR leadership, focusing primarily on refining the NSDS3 strategic framework and budget. A second leadership workshop occurred on delivery of the final provisional draft to ensure buy-in and finalise the NSDS3 logframe.

External validation occurred in two phases. During Phase 1, the design team convened NSS focal points to review the draft sector plans and the overall NSDS3 design. Phase 2 consisted of expert consultations, supported by the UK-ONS and a consultant from the African Development Bank (AfDB), who provided comments and guidance for the design of the final NSDS3 provisional draft.

Approval

Following the conclusion of the validation period, a final NSDS3 draft was submitted for official review and approval to the NISR Board of Directors, the NISR Steering Committee, NSS leadership, the PS Forum and the GoR Cabinet.

4.3 Assessing Statistical Development in Rwanda

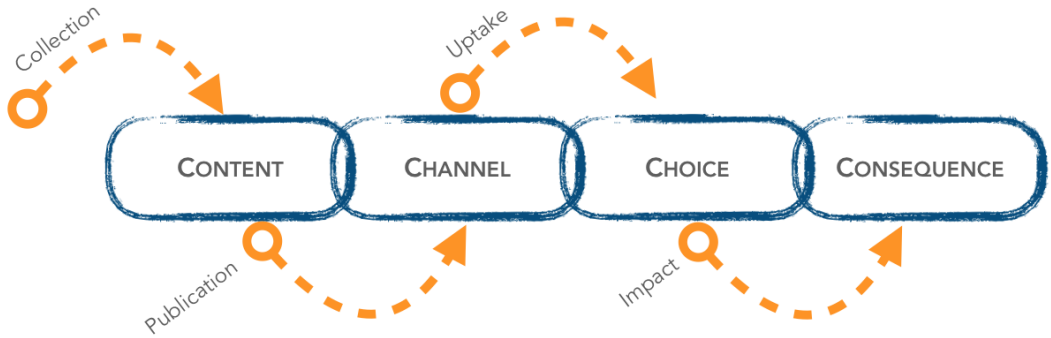
The data value chain provides a framework to 'identify impediments toward the final goal' (Open Data Watch, 2018). 'The final goal' for statistical development is to facilitate evidence-based or 'data-driven' decisions to maximise impact. Increasing the impact of data on policy and service delivery will require overcoming barriers emerging at each point in the value chain. To identify these barriers, NSDS3 adopts a four-part theory of change that 'presents the causal logic of getting from data to impact as the interaction of four C's: *content*, *channel*, *choice*, and *consequence*' (Custer & Sethi, 2017).

The '4Cs' were originally introduced as a framework to interpret 'the trajectory of maturation' for digital accountability initiatives, identifying linkages between e-government platforms and citizen engagement (Custer et al., 2016). This work was later extended to address the broader landscape of government transparency and accountability, outlining the conditions under which improvements in data supply can influence policy (Custer & Sethi, 2017). Under this framework, NSS institutions '...disclose data on development resources and results (content), disseminate this information to users online or offline (channel), whereby citizens and officials take action individually or collectively (choice) to improve the country's performance on achieving sustainable development for all (consequence)' (ibid.). In the context of NSDS3, the '4Cs' are used to assess NISR and NSS performance and to identify the strengths, weaknesses, opportunities and threats that shape the data value chain in Rwanda.

4.3.1 Unpacking the Value Chain: the 4C's

As visualised in Figure 5 (below), each component of the theory of change mediates a link in the data value chain, unpacking the systems, infrastructure, capacity and resources that define the progression from data collection to impact. Data producers package raw data they collect to create content for publication. Publication channels shape opportunities for data uptake. Levels of uptake constrain choices to use evidence to impact policy. The impact of evidence on policy holds consequences for development outcomes, and whether those outcomes reinforce data production and use.

Figure 5: The 4C's and the Data Value Chain[33]



The strength of each linkage across the 4C's is determined based on set characteristics of data products. Table 9 (below) defines these characteristics for each of the 4C's and their implications for the data value chain.

[33] Figure 5 was adapted from material in Custer et al. (2016), Custer & Sethi (2017) and Open Data Watch (2018).

Table 9: The 4C's Evaluation Criteria[34]

4C's	Criteria	Definition	Value Chain Implications
Content	*Granularity*	Refers to data precision and disaggregation; appropriate levels are defined by user- and policy-driven demand.	Limited granularity in data collection and publication limits uptake and impact by obscuring relevant populations and geographies.
	Accuracy	Addresses issues of validity, quality and timeliness of data, which are shaped by collection and publication practices.	Concerns around data accuracy discourage uptake by weakening incentives for use and compromising the validity of findings.
	Silos	Siloed data systems are opaque or disconnected within and/or across institutions, largely due to NSS fragmentation.	Silos increase risks of data duplication, gaps and errors, limiting interoperability and disrupting linkages across the value chain.
Channel	*Access*	The ability to use data, defined by formal standards (e.g. law and policy) and/or informal norms for data publication.	Levels of access affect both awareness of data and opportunities for use which shape opportunities for data uptake and impact.
	Connectivity	Addresses the ability to access and use data products that are published online in static or dynamic formats.	Variation in connectivity requires 'tech-sensitive' data publication that balances analogue and digital formats to expand uptake.
	Invisibility	Refers to user awareness as a function of dissemination strategies and public data literacy.	Improvements in collection and publication are not sufficient conditions for uptake; low awareness constrains data uptake and impact.
Choice	*Credibility*	Refers to user trust in data producers ; may be a function of perceptions and/or methodologies for data collection and publication.	Credibility Transparency and data governance build credibility over time through user-producer dialogue, encouraging data uptake and impact.
	Informality	Addresses the tendency to rely on evidence sourced from personal networks rather than unfamiliar data products.	Informality distorts data uptake and impact by creating information asymmetries. Users with stronger networks will have greater access.
	Incentives	Structured based on institutional norms, as well as the quality of data collection and publication.	Where incentives to use data are clear and formalised, investments in NSS statistical capability strengthen the whole data value chain.
Consequence		When data informs policy, it holds consequences for development outcomes.	As data impacts policy, consequences for development may strengthen or weaken the value chain over time.

[34] Adapted from Custer et al. (2016) and Custer & Sethi (2017).

4.3.2 Evaluating the Value Chain: Applying the 4C's to the NSS

The NSDS3 evaluation assesses current NSS performance against the 4C's criteria described in Table 9, identifying how the agenda outlined Chapter 3 will target gaps and strengthen linkages in Rwanda's value chain.

Content: are NSS data products fit for purpose?

The first link, *content,* refers to whether available data is 'fit for purpose'; that is, whether data that is collected and published by the NSS is relevant to user- and policy-driven needs (ibid). As described in Chapter 2, efforts to align data production with policy requirements set a course to match data supply with demand. However, producing the 'right' data is not the sole condition for content to be truly fit for purpose. The process of moving from collecting and publishing data to increasing uptake and impact is a function of data granularity, accuracy and silos (ibid).

Granularity

As observed in Chapter 3, granularity of official statistics improved under previous strategies, but continues to fall short of requirements. The SDG mandate to 'leave no one behind' reaffirms the need to improve geographic, sector and demographic disaggregation to optimise policy and target interventions according to need. A recent UNSD feasibility study for SDG monitoring in Rwanda identified disaggregation and underdeveloped administrative systems as the primary barriers to increasing SDG data coverage (Abdella, 2017). Improvements in granularity will place additional pressure on frameworks for data management, protection and quality assurance, which may prove a particular challenge at the sector-level where limitations in data governance and technical capacity are prominent. NSDS3 interventions to improve granularity include the following:

- *Data Production:* Adaptation of surveys and administrative systems to strengthen policy alignment;
- *Sector Statistical Plans:* Target weaknesses in NSS data production and administrative systems;
- *Data Revolution:*
    - Strengthen legal and policy frameworks for data access and protection to facilitate more open, disaggregated publication;
    - Fill data gaps with granular, high-frequency data flows (e.g. 'big data').

Accuracy

Challenges in data accuracy emerge on both technical and institutional dimensions. Limited technical capacity in MDAs can compromise standards and methods for data collection and management. On the other hand, even in cases where technical capacity is comparatively high, weak institutional frameworks and limited resources often undermine data quality and accuracy. NISR significantly expanded institutional capacity for data management and quality assurance under NSDS2 through the launch of the NQAF and survey visa system, which institutionalised validation mechanisms for NSS data products. Additionally, systems improvements such as paperless (i.e. ICT-based) data collection and MIS development can enhance quality assurance by reducing data entry errors and shortening the time horizon between data collection and publication. NSDS3 interventions to improve accuracy include the following:

- *Data Production:*
    - Transition to paperless data collection to mitigate data entry errors and leakage;

    - MIS development to streamline data management and publication;
- *Sector Statistical Plans:* Build technical capacity and mobilise resources for data production;
- *Capacity Building:* provide training in data management and survey methods.

Silos

Fragmentation of data producers perpetuates data silos across the NSS. Improvements in communication and dissemination under NSDS2 increased awareness of NISR data products and methods, but NSS systems remain diffuse. To address this challenge, NISR piloted efforts to strengthen administrative data production in specific sectors with some significant success (Section 2.2.3). However, coordination across the NSS remains a challenge; one that will require substantial investment to address. As the leader of the NSS, NISR can work to counter silos by dedicating resources and staff to facilitate NSS coordination. Financing streams also play a critical role in reinforcing or breaking down silos, as minimal coordination among donors may route budgets away from high priority activities or fund duplicate activities. NSDS3 interventions to disrupt data silos include the following:

- *Sector Statistical Plans:* Harmonise data systems and financing;
- *Data Revolution:* NDP and SDG portal to support data integration and interoperability;
- *Communication and Dissemination:* facilitate awareness of existing data products and reduce risks of duplication;
- *Enabling Environment:* encourage coordination and dialogue through the NISR-MINECOFIN joint sector review mechanism and sector TWGs.

Channel: do NSS data products reach users?

After producing content that is fit for purpose, the second link, *channel*, refers to the publication strategies data producers employ to encourage user uptake. This encompasses producer decisions around what data to publish and how to disseminate it. Even when data is open, patterns of dissemination shape who is aware and capable of using data. Thus, the quality of channels is determined as a function of access, connectivity and visibility (ibid.).

Access

Issues of data access are mediated through formal and informal norms and standards for data sharing and publication in the NSS. NISR holds significant formal power to access data and a mandate to publish official statistics under the current legal framework, but there is comparatively less clarity for the scope of public release. NISR enhanced data access through improvements in documentation, data tables and web portals during NSDS2, leading to a top score in the 2018/19 Open Data Inventory[35] (Open Data Watch, 2019). But many NSS institutions lag behind. MIS platforms are generally closed, limiting their potential to broaden data availability. Under these conditions, users rely on informal relationships and formal requests to access data they need. Informal norms in publication also hold de facto implications for data use, as NSS publications are rarely channelled in machine-readable formats and tend to focus on broad national trends. NSDS3 interventions to expand data access include the following:

- *Data Revolution:*
    - Formalise standards for data sharing and access in legal and policy frameworks;

[35] Rwanda is ranked 1st in Africa in the most recent Open Data Inventory. It holds the 38th ranking globally.

    - Open and join-up MIS platforms across the NSS through the NDP;
    - Leverage the DSC to promote collaboration and crowd-in unofficial data sources (e.g. big data);
- *Capacity Building:* Promote best practices in data management and release.

Connectivity

As the data revolution has advanced, NSS data producers increasingly turn to digital publication channels. Technology-enabled dissemination figured prominently in NSDS2, but limited connectivity can weaken these channels. Citizens and NSS stakeholders in more remote areas at the district- and local-level often experience inconsistent internet connectivity, limiting their access to online dissemination platforms. This effect, known as the 'digital divide', is compounded by known limitations of technical capacity and data literacy (World Bank, 2016). In cases where skills, software and/or hardware remain inadequate, rather than democratising data access, digital publication can systematically exclude some audiences (ibid.). NSDS3 interventions to overcome limited connectivity include the following:

- *Data Revolution:* Expand access to appropriate hardware and software for data analysis through the DSC;
- *Capacity Building:* Improve user capability to access and use digital publications and platforms through trainings in data literacy;
- *Communication and Dissemination:* Expand 'analogue' dissemination through events, workshops and static publications.

Invisibility

Though data is published, it may not be visible to data users; building awareness is essential. The issue of invisibility can disrupt otherwise strong dissemination channels. NISR made considerable progress in communication and advocacy for official statistics under NSDS2, but awareness of NSS products remains limited (and often siloed). Visibility is also affected by publication formats and design, as large technical reports and complex data portals require high levels of data literacy to use. These channel disruptions act as a barrier to data uptake and impact. Request-based systems for data access reinforce these effects, as users may remain unaware of what is (or is not) available. NSDS3 interventions to increase visibility include the following:

- *Sector Statistical Plans:* Promote best practices to improve NSS publication, coordination and dissemination;
- *Data Revolution:* Facilitate data integration and publication though DSC 'quick win' projects and the NDP;
- *Capacity Building:* Increase use of available data through product-specific trainings;
- *Communication and Dissemination:* Raise visibility through targeted events, media engagement and publications.

Choice: when are NSS data products used and why?

Once appropriate content is disseminated through effective channels, the minimum threshold for data use has been met. However, even where data flows are strong, uptake and impact downstream in the value chain often lag behind. Identifying and responding to factors that affect the *choice* to use data — including credibility, informality and incentives — is crucial to facilitate evidence-based policy (Custer & Sethi, 2017).

Credibility

The issue of credibility touches on practical dimensions of content, such as timeliness and accuracy, as well as user perceptions of data quality. Where methodologies remain opaque or published resources are outdated, a 'trust-deficit' emerges, compromising data uptake and impact (ibid.). In such cases, users tend to select evidence they find more believable, or may revert to anecdotal information from their own experience or their network. The USS 2016/17 showed users find Rwanda official statistics to be broadly credible. NSDS2 interventions to make documentation and data standards more transparent strengthened data credibility, but efforts must be made to standardise these best practices across the NSS. NSDS3 interventions to build credibility include the following:

- *Data Production:* Strengthen compliance with international methods, norms and standards regimes, including SDDS;
- *Sector Statistical Plans:*
    - Improve administrative statistics through NISR-sector collaboration;
    - Facilitate dialogue around best practices in data management and quality assurance through the NISR-MINECOFIN joint review mechanism and TWGs;
- *Data Revolution:* Join-up NSS data products in the NDP to identify discrepancies and create opportunities for validation;
- *Capacity Building:* improve data quality assurance through trainings in statistical methods and data management.

Informality

Perceived credibility can be strongly linked to informality, particularly within personal networks of knowledge and practice. Where informal relationships hold strong implications for data access, this effect is compounded, lowering uptake for those with smaller or less influential networks. A request-based system for data sharing in the NSS is highly sensitive to such limitations. During NSDS2, NISR's efforts to formalise access to official statistics through publication and target outreach hedged against this effect, but more active engagement with NSS networks and working groups remains an outstanding area for growth (Bumpsted et al., 2017). NSDS3 interventions to address informality include the following:

- *Data Revolution:*
    - Strengthen legal and policy frameworks to formalise data access and sharing across stakeholders;
    - Expand broad-based public access to data through the NDP;
- *Communication and Dissemination:* Expand outreach to build networks of producers and users.

Incentives

Once data is credible and access is formalised, opportunities to expand uptake depend on incentives for use. When technicians and decision-makers are not expected to draw on evidence for their work, incentives to use data to inform policy design and service delivery will be low. But incentives are also strongly related to dissemination channels. Data products that are cumbersome to access and use weaken incentives for uptake, even when content is fit for purpose. Limited data integration and interoperability across the NSS tend to reinforce these barriers, as do limited capacity and resources. Sector technicians currently spend significant time consolidating and verifying data, which crowds out opportunities for analysis and hampers

timely data release. NSDS3 interventions to strengthen incentives for data use include the following:

- *Sector Statistical Plans:* Advocate for sector-level investments in staff and infrastructure to support statistical development;
- *Imihigo:* Strengthen accountability in NSS statistical practice through NISR engagement in planning and performance evaluation;
- *Data Revolution:* Demonstrate data use cases for policy design and service delivery;
- *Communication and Dissemination:* Improve publications for ease of use.

Consequences: do NSS data products influence policy and inform decisions?

Moving through the data value chain, the consequences of statistical development are determined as a function of the quality of content, the coherence of channels, and the integrity of choices. Currently, known data use cases are limited across the NSS, despite a government-wide mandate to use evidence to inform policy. NSDS3 initiatives summarised in Chapter 3 work at both sides of this challenge to advocate for data use, understand its impact on policy and interpret its consequences for national development. NSDS3 interventions to identify the consequences of data-driven policy and decision-making include the following:

- *Imihigo:* Illustrate linkages between data use and policy impact through Imihigo evaluation;
- *Data Revolution:* Leverage the DSC to promote data-driven research for the public good;
- *Communication and Dissemination:* Strengthen networks, identify data use cases and track impact.

4.3.3 De-risking the Value Chain: SWOT Assessments

Based on the evaluation above, some important themes emerge. First, core capacity at NISR is rapidly expanding, with new initiatives and resources to support statistical development. Second, although some NISR-led pilots in administrative systems show promise, coordination and capacity for data production and use across the wider NSS remains limited. In sum, the supply-side of the value chain is expanding, but a disconnect from the demand-side remains. An analysis of strengths, weaknesses, opportunities and threats (SWOT) for NISR and the NSS highlight ways to bridge this gap and de-risk the data value chain during NSDS3 implementation.

SWOT at NISR

Based on the achievements and challenges emerging at the close of NSDS2, Table 10 outlines current institutional capability at NISR in a SWOT framework. These points establish a baseline for NSDS3, highlighting openings and barriers to institutional growth and reform as NISR continues to strengthen its leadership in the NSS.

Table 10: NISR SWOT Assessment

Strengths	Weaknesses
1. Strong foundation in data production at NISR responsive to national and international policy agendas. 2. Efficiency of statistical practice and maintenance of the advance release calendar sets expectations for timeliness. 3. Development of an NISR NSS coordination unit and more inclusive governance arrangements improved communication channels. 4. Push to transition to ICT-based data collection introduces opportunities to standardise data management and increase accuracy. 5. Work in NSDS2 on SDG adaptation and SDDS compliance demonstrate increasing capacity to respond to international standards and agendas. 6. Functioning survey visa registration system acts as a mechanism for coordination and compliance with the NQAF. 7. Improved web presence and development of data portals increases data access and visibility. 8. The launch of the NISR Training Centre and DSC provides a venue and infrastructure to build capacity and promote innovation.	1. Nascent or absent engagement with NSS sectors and MDAs limits coordination and harmonisation of statistics production. 2. Limited disaggregation of some products compromises policy-relevance. 3. Staff shortages and limited benefits overburden current capacity and make staff retention an ongoing concern. 4. Limited strategic engagement with media weakens opportunities to increase credibility and visibility of NISR's portfolio and mission. 5. As the NISR portfolio expands, current resource constraints may make full NSDS3 implementation infeasible.
Opportunities	**Threats**
1. Pilot collaborations between NISR and NSS institutions in administrative systems provide insights for future adaptation and intervention. 2. Alignment of data products to national and international policy agendas, including the NST-1 and SDGs, create opportunities for high policy impact. 3. The implementation of the DRP increases the visibility of NISR's work and leadership, providing a platform for partnership and NSS engagement. 4. The emphasis on statistics and evidence in the NST-1 and SDG agendas create momentum to invest in national statistical development. 5. Continued development of Communications and Dissemination strategies create opportunities to improve awareness of NISR data products and build institutional reputation through media and strategic comms. 6. Advances in ICT broaden the supply of data (e.g. big data), strengthen data collection and expand platforms for data access.	1. Insufficient financing may compromise targets for data production, capacity building and NSS engagement. 2. Failure to update policy to adapt the NISR institutional framework will compromise opportunities to mobilise resources and to improve staff benefits. 3. Failure to refine appropriate legal and policy frameworks for data access and openness, and private sector partnerships, will inhibit full implementation of the DRP. 4. Low data literacy minimises data uptake and impact of NISR data products and weakens effective accountability and feedback. 5. Limited national pool of talent in data science and analytics makes hiring and retaining staff for DRP implementation a challenge.

SWOT in the NSS

While NSDS1 and 2 provided some targeted progress in specific programme areas, the aspiration to develop a fully coordinated NSS with high capacity for data production and use remains a central challenge in Rwanda's statistical development. Table 11 outlines some of the openings and barriers to NSS development, providing a baseline for NSDS3 engagement.

Table 11: NSS SWOT Assessment

Strengths	Weaknesses
1. Development of the NQAF, Metadata Handbook, and Classification Manual set standards for NSS data management and quality assurance. 2. Push to transition to ICT-based data collection introduces opportunities to standardise data management and increase accuracy. 3. Move to develop management information systems (MIS) across sectors and key MDAs provide frameworks and infrastructure to improve data management.	1. Limited supply of trained statisticians on staff in core NSS institutions compromise capacity and the quality of administrative data. 2. Lack of harmonised frameworks for statistical governance across the NSS inhibit data integration and interoperability and weaken mechanisms to respond to emerging data requirements. 3. Limited presence of statisticians in NSS governance structures (e.g. SWGs and TWGs) lowers the visibility of statistics and undercuts efforts to build capacity. 4. Fragmentation across NSS institutions perpetuates data silos that increase risks of duplication and low interoperability. 5. Reliance on M&E officers for data production limits available time and resources for statistics, and weakens data quality.
Opportunities	**Threats**
1. Alignment of data products to national and international policy agendas, including the NST-1 and SDGs, create opportunities for high policy impact. 2. The establishment of the NQAF under NSDS2 and launch of sector plans under NSDS3 provide mechanisms for improved NSS coordination and data harmonisation. 3. The development of a National Data Portal under the DRP opens dialogue for improved transparency and interoperability across NSS data sources. 4. Establishment of the NISR Training Centre and DSC create access to training in data science and statistics, as well as opportunities for collaboration on analytical projects. 5. Advances in ICT broaden the supply of data (e.g. big data), helping to overcome limitations of data supply from MDAs, while streamlining data collection data access. 6. Integration of Imihigo in the NISR portfolio creates avenues for dialogue with NSS institutions around statistical development priorities.	1. Statistics for cross-cutting policy areas (e.g. environment, gender etc.) suffer from limited ownership among specific MDAs and risk being overlooked. 2. +/- 40% of SDG indicators assigned to administrative sources burden underdeveloped statistical practice at the sector, district, and local levels. 3. Insufficient human and technical resources may slow or limit implementation of sector plans. 4. Lack of dedicated budget lines for statistics obscures resource flows and requirements to ensure robust data supply.

Chapter 5. The NSDS3 Strategic Framework

The NSDS3 strategic framework is designed as a self-reinforcing system of statistical development priorities, comprised of 4 pillars and 12 strategic objectives. Together, the framework captures all NSDS3 activities and associated budget requirements, both within NISR and across the NSS.

5.1 Vision, Mission and Core Values

The NSDS3 strategic framework references the concept of a data value chain to promote a holistic approach to statistical development. The vision and mission of NSDS3, mobilised by NISR's core values, address this aspiration, with the goal of translating data supply to substantive policy impact.

Vision

To unlock the potential of a productive data value chain as a vehicle for evidence-based decisions that drive national transformation for sustainable development.

Mission

To expand and deepen NISR's role as the leader of the NSS, facilitating effective statistical development and coordination system-wide.

NISR Core Values

- Uphold institutional integrity and independence[36]
- Focus on client service
- Apply the highest professional standards
- Provide value for money
- Teamwork

These values will continue to be fostered among staff, mainstreamed in performance contracts and demonstrated by NISR leadership. Adherence to these values will enable NISR to achieve the NSDS3 vision and mission with a focus on delivering timely, accurate official statistics in accessible formats for decision-makers and the general public.

5.2 Pillars and Strategic Objectives

The NSDS3 strategic pillars consolidate the initiatives described in Chapter 3 under the 4 themes, as outlined in Table 12 (below). Rather than treating strategic objectives (SOs) in isolation, these themes provide a lens to frame the NSDS3 agenda as a whole, outlining the ways the SOs work together to strengthen the NSS. This approach aligns with the concept of the data value chain, where progress in one domain yields benefits in upstream data collection and publication, as well as downstream uptake and impact.

[36] The concept of independence, covered in Section 3.7.1, refers to programmatic independence in data production. NISR is not operationally independent, as it relies on financing from the GoR and functions under the purview of the Minister of Finance.

Table 12: Pillars and NSDS3 Initiatives

NSDS3 Pillars	The Transformative Agenda (Chapter 3)
Pillar I	Demand-driven Data Production
	Sector Statistical Plans: *Data Production component*
	Imihigo Planning & Evaluation
Pillar II	The Data Revolution: *Data Science Campus, Policy and Legal Frameworks, IT Systems and Infrastructure components*
	Sector Statistical Plans: *Data Revolution component*
Pillar III	Communication & Dissemination
	The NISR Training Centre and Capacity Building Programme
	The Data Revolution: *Human Capital and Advocacy components*
	Sector Statistical Plans: *Capacity Building component*
Pillar IV	The Enabling Environment

Pillar I: Produce statistics to support evidence-based decision-making

Pillar I expands on work in previous strategies to make data supply more responsive to user and policy-driven demand. This includes activities to enhance the coverage, frequency and granularity of official statistics, improve NSS data production under the sector statistical plans, and strengthen NSS performance through Imihigo planning and evaluation.

Pillar I captures SOs 1-3. SO.1 focuses on official statistics produced and released by NISR. SO.2 captures administrative systems development and other NSS data products.[37] SO.3 covers NISR's leadership in Imihigo validation and evaluation phases.

Strategic Objective 1: Sustain and enhance core data production at NISR

SO.1 covers all surveys, censuses and administrative statistics compiled and published by NISR.[38] These activities build on progress achieved during NSDS2, and reflect the data requirements specified in national, regional, continental and international policy frameworks outlined in Chapter 2. Examples of SO.1 activities include the following:

- Implement the RPHC
- Implement periodic surveys, including the RDHS, EICV6 and EICV7
- Implement annual surveys including Seasonal Agriculture Survey (SAS), IBES, Establishment Census and LFS
- Rebase GDP
- Meet requirements for SDDS status

[37] The division of SO.1 and SO.2 activities is designed to highlight a distinction between NISR's core mandate as an independent data producer and its role as the leader of the NSS. By introducing this delineation into the overall structure of NSDS3, it allows for a more rigorous evaluation of these complementary but distinct objectives. In particular, it mitigates the risk that limited content improvements in NSS data products are obscured in evaluations of overall performance at NISR.

[38] A full schedule of NISR data production lines for NSDS3 is available in Annex 1.

Strategic Objective 2: Enrich and expand data supply across the NSS

SO.2 covers data production activities led and/or owned by NSS institutions, with a particular focus on NST-1 sectors. This includes high-intensity engagements led by NISR for CRVS and select sectors identified in Section 3.1, as well as low-intensity activities to guide and monitor sector-level statistical development. The sector statistical plans are the primary instrument to implement SO.2, providing a framework to improve NSS coordination and accountability. Examples of SO.2 activities include the following:

- CRVS systems development
- Administrative systems projects in health, agriculture, education, environment and justice sectors
- Sector plan implementation: data production component

Strategic Objective 3: Leverage NSS data products to lead Imihigo indicator selection and performance evaluation

Indicators for Imihigo will largely be derived from official statistics produced under SOs 1 and 2. Therefore, SO.3 covers all NISR-led activities in Imihigo indicator validation and evaluation phases. During the validation phase, NISR will verify Imihigo indicator frameworks to ensure selected indicators meet SMART criteria and follow a logical sequence. The evaluation phase includes mid-term (6-month) and final (12-month) evaluations for each GoR fiscal year. Examples of SO.3 activities include the following:

- Imihigo indicator validation
- Local, Central and Joint Imihigo midterm evaluations and feedback
- Local, Central and Joint Imihigo final evaluations with scores and district rankings

Pillar II: Lead a national data revolution to scale data uptake and impact

Under Pillar II, NISR will lead a range of initiatives to leverage new partnerships, technology, methods and data sources to enrich Rwanda's data value chain and promote innovation. This includes DRP interventions to expand access to data and technology, support ethical data use and apply novel methods to research and analysis for the public good.

Pillar II encompasses SOs 4-6. SO.4 covers issues in data governance and management, including interventions to crowd in big data and other non-traditional data sources, upgrade technology and improve systems. SO.5 covers the development of policies, standards and legal frameworks to support data sharing, integration and protection. SO.6 covers the launch of the Data Science Campus (DSC).

Strategic Objective 4: Harmonise best practices in data governance across the NSS[39]

SO.4 covers investments in IT infrastructure and systems to support the data revolution, while expanding quality assurance and data governance workstreams from NSDS2. The development of the NDP will route NSS data products into a single platform housed and maintained by NISR. Efforts to strengthen sector-level data governance, standards and systems (e.g. MIS development) captured in the sector statistical plans are also captured here. Examples of SO.4 activities include the following:

- Establish sector data governance frameworks, including the NISR/MINECOFIN annual sector review mechanism and sector TWGs

[39] Corresponds to Objective 4 in the DRP Implementation Plan.

- NDP launch and MIS integration
- Sector plan implementation: data revolution component

Strategic Objective 5: Enable data openness, integration and interoperability through enhanced legal and policy frameworks[40]

SO.5 responds to the DRP mandate to facilitate data openness and integration while protecting sensitive information and intellectual property. To that end, NISR will lead an effort to evaluate current policies and the legal framework governing data sharing and protection. Based on this assessment, new frameworks and standards will be developed to expand access to data across stakeholder groups — including government, development partners, civil society, academia, the private sector and the general public. Examples of SO.5 activities include the following:

- Evaluate the legal framework for data publication, release and re-use
- Establish policies for data sharing across institutions
- Develop guidelines and standards for data protection and ethical use

Strategic Objective 6: Equip and operationalise a public Data Science Campus to facilitate data access and promote innovation[41]

SO.6 captures all required investments to establish the DSC at NISR. This involves equipping the campus with specialised technology and software, as well as developing new workstreams in training and research. In addition, the DSC will expand partnerships and advocacy initiatives to socialise members of the NSS and the wider public to the data revolution.[42] Examples of SO.6 activities include the following:

- Equip the DSC with appropriate software and hardware
- Recruit data scientists and programmers to support DSC projects
- Develop DSC workstreams and 'quick win' projects in partnership with NSS institutions

Pillar III: Build statistical capability across the NSS to improve data uptake and use

Pillar III captures the full operationalisation of the NISR Training Centre and Capacity Building Programme (CBP). This includes training programmes in data literacy, statistical methods and data science, as well as soft-skills development in programme management and communication. Pillar III also incorporates activities captured in the NISR Communication and Dissemination Strategy (CDS) to target the disconnect between data publication and uptake.

Pillar III captures SOs 7-9. SO.7 covers soft-skills development and CDS activities. SO.8 covers the CBP statistical methods stream. SO.9 rounds out DRP implementation with the CBP data science stream.

Strategic Objective 7: Improve data uptake and statistical literacy through strategic communication, dissemination and advocacy

SO.7 activities will aim to sustain and expand progress achieved in NSDS2 in outreach and statistical advocacy through the CDS. This includes maintenance of data portals and static publications, as well as new initiatives to reach a wider audience and strengthen communities of

[40] Corresponds to Objective 3 in the DRP Implementation Plan.

[41] Corresponds to Objectives 1 and 5 in the DRP Implementation Plan.

[42] Corresponds to Objective 6 in the DRP Implementation Plan.

practice. SO.7 also establishes CBP trainings in data literacy, programme management and communication to strengthen NSS dissemination channels. Examples of SO.7 activities include the following:

- Develop and launch the data literacy and programme management streams of the CBP
- CDS implementation
- Implement two USS rounds

Strategic Objective 8: Enhance capacity for data production and statistical analysis

SO.9 activities focus on capacity building in core statistical methods, facilitated by the launch of the NISR Training Centre. The CBP statistical methods stream will provide short, practical trainings in survey design, data processing, visualisation, inference and product-specific analysis. In addition to the CBP, SO.8 includes specialised training initiatives outlined in sector statistical plans, as well as government-sponsored graduate education in statistics for NISR staff. Examples of SO.8 activities include the following:

- Develop and launch the statistical methods stream of the CBP
- Sector plan implementation: capacity building component
- Funding for formal graduate training in statistics at HEIs

Strategic Objective 9: Introduce new methods and techniques in data science and analytics[43]

SO.9 captures human capital component of the DRP, which aims to build capacity in data science and analytics. During NSDS3 implementation, SO.9 activities will include the development of the CBP data science stream, which will be led by the DSC and strategic partners. SO.9 also covers government-sponsored graduate education in data and computational sciences for NISR staff. Examples of SO.9 activities include the following:

- Develop and launch the CBP data science methods stream via the DSC
- Funding for formal graduate training in data science and related disciplines at HEIs

Pillar IV: Strengthen the enabling environment for sustainable statistical development

To effectively implement and sustain the ambitious agenda captured in Pillars I-III, Pillar IV outlines a suite of interventions to strengthen the enabling environment for statistical development. This includes strategic investments in essential human, financial, and operational resources to support NSDS3 implementation.

Pillar IV covers SOs 10-12. SO.10 focuses on the growth of Rwanda's statistical workforce. SO.11 captures all planned upgrades to NISR infrastructure and assets, as well as operational logistics. SO.12 addresses resource mobilisation and partnerships.

Strategic Objective 10: Build and sustain a workforce to support sustainable statistical development

SO.10 activities cover human resources (HR) for statistical development, with an aim to develop a national cadre of statisticians. This includes NISR HR operations, NISR management functions (e.g. leadership, finance etc.) and improvements in staff retention mechanisms. SO.10 also covers internal capacity building for operational staff in areas of program or financial

[43] Corresponds to SO.2 in the DRP Implementation Plan.

management to strengthen institutional performance. Examples of SO.10 activities include the following:

- NISR human resource operations, including restructuring, recruitment and retention
- Recruitment of sector statisticians
- Sector plan implementation: operations component

Strategic Objective 11: Invest in operational infrastructure, assets and logistics to support sustainable statistical development

SO.11 covers the acquisition of appropriate infrastructure, assets and equipment, as well as NISR logistics, to support NSDS3 implementation. Due to ongoing transitions to paperless data collection both within NISR and among MDAs, SO.11 includes investments in technology (i.e. software and hardware) to increase efficiency in data production. Examples of SO.11 activities include the following:

- Equip the NISR Training Centre and upgrade key assets and IT infrastructure across NISR facilities
- Purchase of vehicles, mobile devices, software and other materials to support field-based data collection

Strategic Objective 12: Mobilise resources and strategic partnerships to support sustainable statistical development

SO.12 underpins the entire framework by securing financing and partnerships to execute all NSDS3 activities. NSDS3 is designed to target the needs of a wide arrange of stakeholders and partners, calling for extensive NSS participation and support. Activities captured in SO.12 also cover a substantial portion of the NISR SPIU portfolio, including M&E of NISR operations and sector plan implementation. Examples of SO.12 activities include the following:

- Fully finance the NSDS3 budget through domestic finance and strategic partnerships
- Monitor and evaluate NSDS3 implementation

Table 13: NSDS3 Budget Summary (USD)

Pillars & Strategic Objectives	NISR	NSS	Total
Pillar I: Produce statistics to support evidence-based decision making	**63,488,045**	**7,939,791**	**71,427,836**
SO.1: Sustain and enhance core data production at NISR	57,951,734	132,636	58,084,370
SO.2: Enrich and expand data supply across the NSS	3,661,257	7,807,155	11,468,412
SO.3: Leverage NSS data products to lead Imihigo indicator selection and performance evaluation	1,875,054	-	1,875,054
Pillar II: Lead a national data revolution to deepen statistical impact	**2,732,480**	**6,485,335**	**9,217,815**
SO.4: Harmonise best practices in data governance across the NSS	114,405	6,485,335	6,599,740
SO.5: Enable data openness, integration and interoperability through enhanced legal and policy frameworks	37,405	-	37,405
SO.6: Equip and operationalise a public Data Science Campus to facilitate data access and promote innovation	**2,580,670**	-	**2,580,670**

Pillars & Strategic Objectives	NISR	NSS	Total
Pillar III: Build statistical capability across the NSS to improve data uptake and use	**3,224,176**	**1,014,654**	**4,238,830**
SO.7: Improve data uptake and statistical literacy through strategic communication, dissemination and advocacy	1,914,339	116,824	2,031,164
SO.8: Enhance capacity for data management and statistical analysis	1,146,514	108,932	1,255,446
SO.9: Introduce new methods and techniques in data science and analytics	163,322	788,897	952,220
Pillar IV: Strengthen the enabling environment for sustainable statistical development	**20,950,730**	**61,002**	**21,011,732**
SO.10: Build and sustain a workforce to support sustainable statistical development	9,259,470	61,002	9,320,472
SO.11: Invest in operational infrastructure, assets and logistics to support sustainable statistical development	11,388,362	-	11,388,362
SO.12: Mobilise resources and strategic partnerships to support sustainable statistical development	302,898	-	302,898
TOTAL	**90,395,431**	**15,500,782**	**105,896,213**

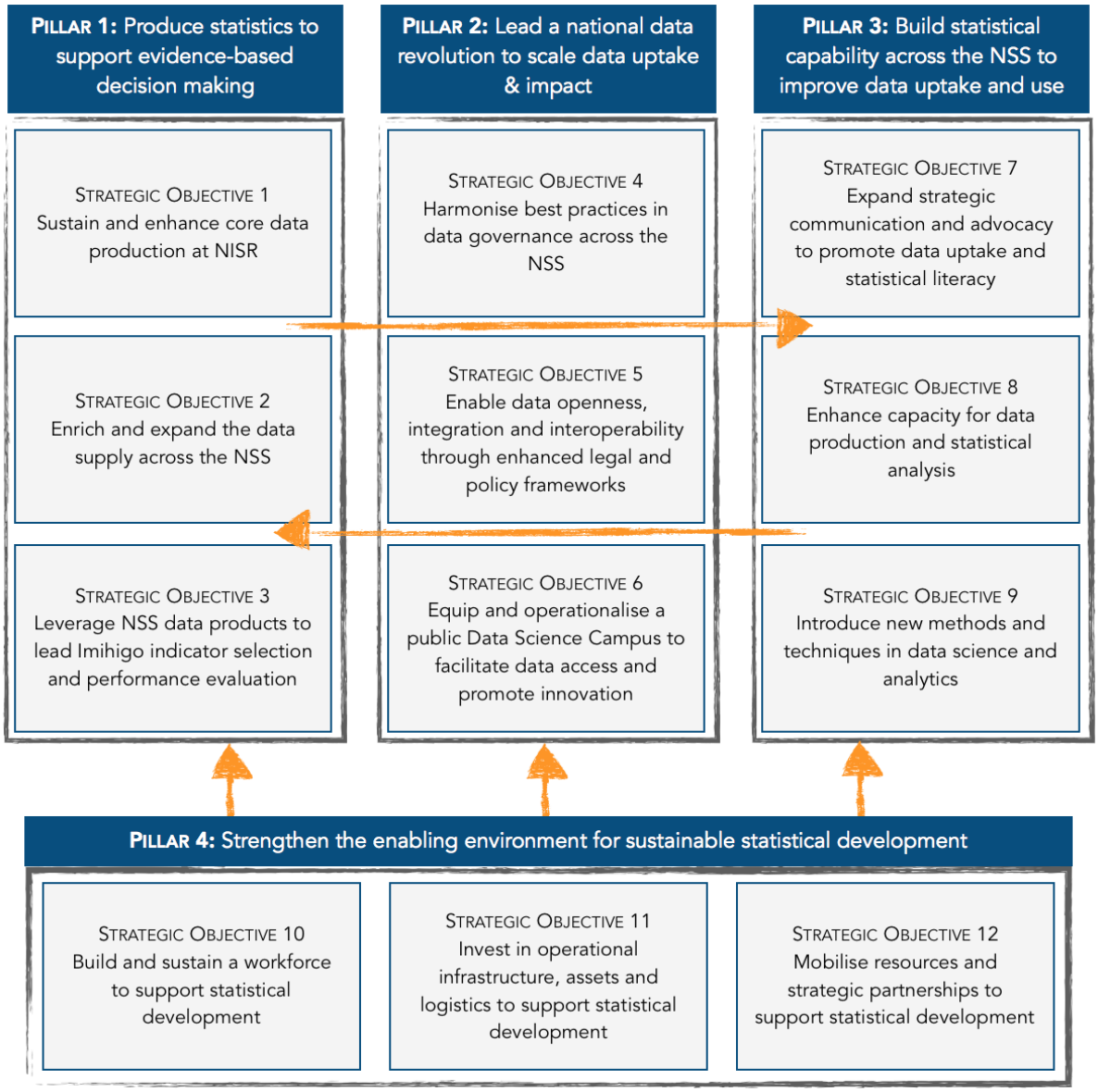
5.3 Operationalising the Framework

As referenced previously, the NSDS3 framework is designed as a self-reinforcing system (Figure 6, below), representing a shift in orientation from Rwanda's previous statistical strategies, with a greater focus on external engagement and NISR's mandate to lead and coordinate the NSS. The data value chain and the 4C's inform this design, identifying mechanisms that work across activities to drive statistical development in Rwanda.

Pillar I aims to sustain and expand the production of statistical content across the NSS, motivated by policy and user demand. Pillar II leverages the DRP to strengthen processes, frameworks and resources to channel data to stakeholders and expand choices for data use. Pillar III introduces a comprehensive plan to build capacity required to produce, analyse and disseminate data to increase uptake and impact. Pillar IV underpins Pillars I, II and III, mobilising the resources required to effectively deliver the NSDS3 agenda.

The SOs captured within each pillar are symbiotic. Data production in Pillar I SOs shapes needs for systems and standards (Pillar II SOs), as well as priorities for training and advocacy (Pillar III SOs). The systems, standards and projects captured in Pillar II SOs optimise data production (Pillar I SOs) and capacity building (Pillar III SOs). Interventions to build technical capacity and data literacy defined in Pillar III SOs will facilitate data production (Pillar I SOs) and create opportunities for collaboration and analysis (Pillar II SOs). The efficiency of these mechanisms is determined by how well the enabling environment (Pillar IV SOs) responds to needs defined in SOs 1-9. Under this framework, NSDS3 activities work together to strengthen Rwanda's data value chain, improving the quality of data collection and publication while promoting uptake and impact.

Figure 6: The NSDS3 Strategic Framework



Chapter 6. Implementing NSDS3

NSDS implementation is the stage when the goals of the strategy are delivered in practice. To that extent, these implementation arrangements are a critical component of the NSDS design, which consist of NISR operational strategies and the NSDS3 MEL framework targeting the following objectives:

- Deliver results, achieve the NSDS3 vision and mission and contribute to the realisation of strategic objectives;
- Manage available financial, human and physical resources effectively;
- Monitor and evaluate progress to overcome barriers to implementation, capitalise on opportunities to advance statistical development and support institutional learning.

6.1 Operational Strategies

It is essential to recognise that while the NSDS3 design process focused on increasing NSS effectiveness, or 'doing the right things', implementation is an operational process that focuses on efficiency, or 'doing things well'. Efficient NSDS implementation will require considerable resources, strong leadership and effective coordination among many institutions and individuals across the NSS. This makes the implementation process inherently more complex than the design process itself. To tackle these challenges, NISR will lead NSDS3 implementation by leveraging the following drivers of strategic success:

- Institutional strengthening
- Human resource development
- Prioritisation
- Process improvement
- Resource mobilisation

6.1.1 Institutional Strengthening

Creating strategic awareness

In a study contrasting high- and low-performing organisations, Kaplan and Norton (2001) show that in 67% of well-performing organisations, staff have a good understanding of overall organisational goals. For this reason, NSDS3 implementation will begin with a process of awareness creation among NISR staff to facilitate a broad understanding and ownership of the vision and mission of the strategy. NISR Senior Leadership, Directors and Team Leaders will be especially essential in this process, ensuring annual action plans, budgets and individual performance contracts (Imihigo) for their units are fully aligned with NSDS3.

In addition to building internal awareness, NISR will leverage current frameworks for statistical governance and a proactive outreach approach to expand awareness among government, DPs, NGOs, HEIs, civil society and the private sector to secure buy-in and mobilise support for the NSDS3 agenda in the wider NSS. NISR will continue to strengthen awareness during NSDS3 implementation though various communication channels including seminars and workshops, newsletters, brochures and bulletins, as well as direct engagement in various committees and working groups.

Updating the legal framework

As discussed in Chapter 3, implementation of NSDS3 will require a review of the current legal framework for statistics in light of NISR's expanding portfolio and an evolving demand for data.

Globalisation, fast-paced technological change, rising data user expectations, a pressing need for disaggregation, performance-based management and linkages between data, governance and politics all contribute to the complexity of law and policy for statistical development (Kiregyera, 2015). Collectively, these considerations call for an effort to refine Rwanda's legal framework, including ongoing work in the following areas:[44]

- An update of Law No. 53bis/2013 to transition from a law 'establishing' NISR to a law 'governing' NISR.
- Clarification of key terminology and the relationship across Law No. 53bis/2013 and Law No. 45/2013 for 'the organisation of statistical activities'.
- A review and update of current laws and policies to address issues of data protection and confidentiality, while strengthening frameworks for data sharing and transparency.

Strengthening coordination

As observed in Chapter 4, high fragmentation across NSS institutions and sectors continues to limit effective statistical practice and constitutes a significant threat to NSDS3 implementation. Thus, plans to strengthen and expand governance frameworks outlined in Section 3.7.3 are an essential element of NSDS3 implementation. These interventions will work in concert with the full suite of NSDS3 strategic objectives to enable NISR to scale up NSS coordination through new partnerships, technology and accountability mechanisms.

6.1.2 Human Resource Development

People are the most important asset of any organisation. The programmes and processes outlined in the NSDS3 strategic framework are implemented and managed by technicians and leaders in the NSS. Better results will be achieved faster when the statistical workforce is empowered to approach NSDS3 implementation with a sense of purpose and equipped with skills required to execute it. Therefore, it is essential that NSDS3 implementation arrangements place a particular focus on human resource development in the following areas:

- Empowering NSS staff to own the NSDS3 vision, mission and strategic objectives by linking them to individual and institutional performance metrics (Imihigo). This linkage will create opportunities to recognise individual staff contributions to successful implementation and opportunities for growth.
- Expanding the NISR staff complement, including recruitment of specialised staff to build out new units in the NISR Training Centre and DSC.
- Leveraging the Training Centre for staff development, offering employees opportunities for mentorship, training and upskilling in data production, management and analysis. Further opportunities will be made available for formal academic training at national HEIs and abroad.
- Expanding statistics units at the sector-level, including recruitment of full-time statisticians to engage in data collection, data management, analysis and dissemination.

As a stopgap measure where internal capability falls short of requirements, NISR will solicit technical assistance from DPs to support specialised projects. Building national statistical capacity will be a core component of any technical assistance program.

[44] Recommended activities to update the legal framework developed in consultation with experts from the UK-ONS (Young & Shearman, 2018).

6.1.3 Prioritisation

NSDS3 adopts a two-tier model to prioritise various activities in the strategic framework, which is adapted from the three-tier model from NSDS2. Tier 1 combines Priority levels 1 and 2 from NSDS2, capturing all activities where NISR is directly responsible for implementation, or has formalised a financial or technical partnership with at least one NSS institution. These reflect moderate- to high-intensity NSS engagements identified in Section 3.2.2, including partnerships in sector data production, MIS development and capacity building. Tier 2 corresponds to Priority level 3 under NSDS2, covering all other statistical activities that are planned, executed and owned by external stakeholders. These are characterised as low-intensity NSS engagements in Section 3.2.2, where NISR serves a general coordination function for the NSS overall, monitoring project implementation where relevant and feasible.

6.1.4 Process Improvement

An ambition to build an NSS that is capable of 'delivering the right data to the right people in the right format at the right time' is the core of the NSDS3 vision, mission and strategic framework (Letouzé & Jütting, 2014). To that end, NISR will target efforts to strengthen processes and systems in the following areas throughout implementation:

- Improving systems for data collection and validation at the sector-level through the design of data management plans;
- Harnessing technology to reduce the cost- and time-intensity of data production, including transitions to paperless data collection;
- Leveraging the DRP to improve efficiency in data production and develop new value-added analytical products and services;
- Accelerating data dissemination by automating data publication in online platforms.

6.1.5 Resource Mobilisation

NSDS3 will be financed by the GoR and development partners. The GoR demonstrated a significant commitment to statistical development during NSDS2, as NISR shifted to a majority share domestic financing model. This is complemented by project-specific financing from a range of partners as well as contributions to the multi-donor basket fund.

With a modest increase in budget from previous strategies, continuing to demonstrate value for money and filling financing gaps through strategic partnerships will remain a critical aspect of NSDS3 implementation. The primary drivers of the anticipated budget increase emerge chiefly from the new initiatives introduced in Chapter 3, including the following:

- New portfolios including the NISR Training Centre, DRP implementation and Imihigo;
- Investments in technology to improve the cost-effectiveness of data collection over time;
- Implementation of the 5th National Population and Housing Census;
- Increased sector engagement under the sector statistical plans;
- Growth of the statistical workforce.

As NISR expands external engagement through the sector statistical plans, Imihigo, the DRP and the NISR Training Centre, advocacy efforts under NSDS3 will continue to focus on making the case to mainstream statistical development as a crosscutting issue in national development. As the benefits of a robust data value chain are realised in practice, investments in statistics will not only be directed towards data production, but also to enhance infrastructure, systems and capacity to increase data uptake and impact.

6.2 Monitoring and Evaluation

Monitoring and evaluation (M&E) activities hold an immediate, practical purpose in implementation, as well as long-term implications for institutional development. Regular M&E provides insights on progress against the NSDS strategic framework, enabling stakeholders to identify and respond to emerging barriers and successes in implementation. Furthermore, M&E also allows the NSS to demonstrate measurable progress and returns on investment, which is critical to effective resource mobilisation. The process of tracking and analysing trends in strategy implementation is also an essential input for institutional learning. As NISR communicates and engages with both challenges and opportunities observed in implementation, these lessons will facilitate an evidence-based approach to future NSDS designs.

6.2.1 Monitoring

Regular monitoring vis-a-vis the NSDS3 logframe (Annex 2) will be led by the SPIU at NISR, with input from the Institute's operational divisions and senior leadership. The NISR Board of Directors and Steering Committee serve as the supervisory bodies for all NSDS MEL activities, providing a mechanism for accountability. Monitoring activities include the following:

- **Imihigo:** NISR will mainstream the NSDS3 goals and targets in relevant institutional and individual performance contracts, to align NSDS3 with the GoR system for performance management. Imihigo and NSS Coordination teams in SMRP will also engage with MDAs to encourage similar action.
- **Annual Action Plans and Budgeting:** based on a review of trends observed in Imihigo and the NSDS3 logframe, NISR leadership will develop an action plan for each year of NSDS3 implementation specifying operational priorities and associated budget allocations.

6.2.2 Evaluation

Beyond internal processes for regular monitoring, formal NSDS3 evaluations will be conducted in two phases. These evaluations will be conducted by an independent external party and submitted to the NISR Board of Directors and Steering Committee for a review of current trends in NSS performance. A **midterm evaluation** will be conducted in the third year of NSDS3 (FY2021/21), providing insights on progress in implementation. The **final evaluation** will be conducted at the conclusion of NSDS3 implementation (FY2024/25), which will be used to inform future strategies and national investments in statistical development.

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Annex 1. NSDS3 Budget

WBS	Activities	Responsibility		Time frame & Costs					Total NSDS3 (in Frw)	Total NSDS3 (in USD)
Objective		Main	Partner	fy 2019/20	fy 2020/21	fy 2021/22	fy 2022/23	fy 2023/24		
Pillar I: Produce statistics to support evidence-based decision-making				**14,324,070,427**	**9,873,028,334**	**16,253,042,551**	**17,549,645,281**	**7,572,515,390**	**65,572,301,982**	**71,427,836**
Strategic Objective 01: Sustain and enhance core data production at NISR				**11,243,048,364**	**7,652,357,295**	**13,790,027,568**	**14,937,220,801**	**5,698,797,391**	**53,321,451,418**	**58,084,370**
1.1	5th Rwanda Population and Housing Census	NISR	GoR, MINALOC, UNFPA	1,606,349,000	2,103,668,418	9,354,291,847	7,504,797,630	98,953,246	20,668,060,141	22,514,226.73
1.2	Conduct Demographic and Health Survey VI	NISR	MoH, RBC	1,875,773,889	2,807,358	-	-	-	1,878,581,247	2,046,384.80
1.3	Conduct the Labour Force Survey	NISR	MIFOTRA	921,074,104	885,038,444	953,875,944	770,221,260	796,853,260	4,327,063,012	4,713,576.27
1.4	Conduct the Seasonal Agricultural Survey	NISR	MINAGRI, RAB	2,190,728,523	1,115,878,306	1,092,769,298	2,200,728,523	1,151,116,011	7,751,220,661	8,443,595.49
1.5	Design, conduct and publish the EICV6	NISR	-	2,840,062,757	1,266,828,975	23,950,500	-	-	4,130,842,232	4,499,828.14
1.6	Develop and maintain the system of National Accounts statistics /Regular GDP estimates compilation	NISR	RRA, MINECOFIN, BNR	9,274,850	9,274,850	9,274,850	9,274,850	9,274,850	46,374,250	50,516.61
1.7	Establishment Census	NISR	PSF	-	892,058,258	-	-	639,354,366	1,531,412,624	1,668,205.47
1.8	Infrastructure and Industry statistics	NISR	MININFRA	14,100,000	14,100,000	12,250,000	12,262,360	12,345,091	65,057,451	70,868.68
1.9	Maintain and develop the system of Price Statistics Compilation /Collecting and analysing Trade Price Indices Survey	NISR	BNR, NAEB	55,997,000	55,997,000	55,997,000	55,997,000	55,997,000	279,985,000	304,994.55
1.10	Maintain and develop the system of Price Statistics Compilation /Collecting and analysing Consumer Price Statistics	NISR	BNR	82,911,816	72,991,816	77,754,100	87,674,100	77,754,100	399,085,932	434,734.13
1.11	Maintain and develop the system of Price Statistics Compilation /Collecting and analysing Producer Price Statistics	NISR	BNR	35,420,000	32,840,000	32,996,600	32,996,600	33,657,898	167,911,098	182,909.69

WBS	Activities	Responsibility		Time frame & Costs					Total NSDS3 (in Frw)	Total NSDS3 (in USD)
Objective		Main	Partner	fy 2019/20	fy 2020/21	fy 2021/22	fy 2022/23	fy 2023/24		
1.12	Maintaining gender statistics production framework	NISR	MIGEPROF, GMO	7,040,900	2,610,900	7,040,900	2,610,900	7,040,900	26,344,500	28,697.71
1.13	Prepare the Rwanda Demographic and Health Survey RDHS-VII	NISR	MoH, RBC	-	-	-	-	457,777,012	457,777,012	498,667.77
1.14	Quarterly Trade statistics Report, and External trade statistics harmonisation (NISR, BNR, RRA, NAEB, MINICOM, and MINECOFIN)	NISR	BNR, RRA, NAEB, MINICOM, and MINECOFIN	15,670,000	15,670,000	15,670,000	15,670,000	15,670,000	78,350,000	85,348.58
1.15	Rebase GDP by constructing SUT & SAM for base year (GDP rebasing exercise)	NISR	-	216,424,250	-	121,349,250	216,424,250	-	554,197,750	603,701.25
1.16	Support DHS 2020 (HIV and STIs testing)	RBC	NISR	121,760,000	-	-	-	-	121,760,000	132,636.17
1.17	To conduct Informal Cross Border Trade Survey	NISR	BNR	102,281,200	102,281,200	102,281,200	102,281,200	102,281,200	511,406,000	557,087.15
1.18	To conduct the Mortality Assessment Survey	NISR	RBC	-	-	948,665,674	-	-	948,665,674	1,033,404.87
1.19	To conduct Travel Expenditure Survey, and other trade related surveys to enhance BOP (services, construction, etc.)	NISR	BNR	250,995,170	250,995,170	250,995,170	250,995,170	250,995,170	1,254,975,850	1,367,076.09
1.20	To design and conduct the EICV7	NISR	-	-	-	-	2,940,062,757	1,239,492,542	4,179,555,299	4,552,892.48
1.21	To design and conduct the Integrated Business Enterprise Survey	NISR	MINICOM, BNR, RCA, PSF, MINALOC,	897,184,905	829,316,600	730,865,235	735,224,201	750,234,745	3,942,825,685	4,295,017.09
Strategic Objective 02: Enrich and expand data supply across the NSS				**2,758,570,504**	**1,887,315,321**	**2,118,755,106**	**2,257,260,444**	**1,507,649,804**	**10,529,551,179**	**11,468,412**
2.1	Mapping and surveying tools Modernised and operationalised	RLMUA	DFID	-	-	192,000,000	-	-	192,000,000	209,150.33
2.2	national study on PTSD and other mental health issues	RBC	-	5,300,000	-	-	-	-	5,300,000	5,773.42

WBS	Activities	Responsibility		Time frame & Costs					Total NSDS3 (in Frw)	Total NSDS3 (in USD)
Objective		Main	Partner	fy 2019/20	fy 2020/21	fy 2021/22	fy 2022/23	fy 2023/24		
2.3	Tracer surveys to establish the impact of National Employment Program interventions on Beneficiaries.	MIFOTRA	-	40,000,000	45,000,000	45,000,000	43,000,000	44,000,000	217,000,000	236,383.44
2.4	Assessment of alcohol and drug consumption behaviour among youth.	MINIYOUTH	NRC, RNP, MINALOC, Districts	45,000,000	-	-	-	45,000,000	90,000,000	98,039.22
2.5	Audience Survey	MHC	NISR	-	68,845,000	-	-	-	68,845,000	74,994.55
2.6	Strengthen administrative records in Climate change for data management and storage (hardware and software systems of data management)	Meteo-Rwanda	WMO and MINALOC	23,000,000	23,000,000	23,000,000	23,000,000	23,000,000	115,000,000	125,272.33
2.7	Conduct a domestic tourism survey	NISR	RDB	-	60,000,000	-	-	70,000,000	130,000,000	141,612.20
2.8	Conduct a research on the Rwanda Reconciliation Barometer	NURC	-	-	168,000,000	-	-	-	168,000,000	183,006.54
2.9	Conduct a research on the status of unity and reconciliation among the youth more specifically in schooling youth	NURC	-	-	80,000,000	-	-	-	80,000,000	87,145.97
2.10	Conduct an availability and gap assessment of basic infrastructure in planned site settlement	RHA	MINALOC, REG, RTDA, WASAC	-	-	100,000,000	100,000,000	100,000,000	300,000,000	326,797.39
2.11	Conduct an impact assessment on Home Grown Solutions	RGB	Citizens	60,000,000	60,000,000	60,000,000	60,000,000	60,000,000	300,000,000	326,797.39
2.12	Cooperative management information system	RCA	Cooperatives, NCCR, MINAGRI, MINICOM, MINI-SANTE, MINA-DEF, RURA, MIN-INFRA, MINI-RENA, WDA, RHA, BRD, MINALOC, MIGEPROF, MINI-YOUTH, RRA, NIRDA, RSB	-	-	-	50,000,000	50,000,000	100,000,000	108,932.46

WBS	Activities	Responsibility		Time frame & Costs					Total NSDS3 (in Frw)	Total NSDS3 (in USD)
Objective		Main	Partner	fy 2019/20	fy 2020/21	fy 2021/22	fy 2022/23	fy 2023/24		
2.13	Developing and maintaining a framework for gathering relevant statistics on justice and human rights	NISR	MINIJUST, COURTS, MINALOC, NCC, MIGEPROF, RNP	50,012,000	50,012,000	50,012,000	22,646,900	51,806,900	224,489,800	244,542.27
2.14	Establishing an institutionalised long-term system of collection, synthesis, and analysis of agricultural R&D investment, capacity, and output data in Rwanda	RAB	UR-CAVM, UNIK, ICK	2,975,000	3,272,500	3,599,750	3,959,725	4,140,000	17,946,975	19,550.08
2.15	Foreign Private Capital (FPC) Census	BNR	RDB, NISR, PSF	3,000,000	3,500,000	4,000,000	4,500,000	5,000,000	20,000,000	21,786.49
2.16	Gender Statistics	NISR	UN-Women	20,080,000	20,080,000	22,800,000	22,800,000	22,800,000	108,560,000	118,257.08
2.17	Education Statistical Year Book	MINEDUC	HEC, WDA	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	50,000,000	54,466.23
2.18	HIV Sero-surveillance survey Drug Resistance Monitoring	RBC	-	101,767,876	-	-	-	-	101,767,876	110,858.25
2.19	Impact of "Made in Rwanda" initiative of the emerging Rwandan Textile Industry	MIFOTRA	-	45,000,000	50,000,000	50,000,000	50,000,000	57,000,000	252,000,000	274,509.80
2.20	Strengthen Administrative statistics, MIS, Capacity Building and Data Dissemination	NAEB	-	25,000,000	25,000,000	25,000,000	25,000,000	25,000,000	125,000,000	136,165.58
2.21	Income strata of population living in urban area (town/city dwellers)	RHA	Private Sector, NISR	-	-	-	-	-	-	-
2.22	Industrial Research and Development Support	NIRDA	MINICOM	100,000,000	100,000,000	100,000,000	100,000,000	100,000,000	500,000,000	544,662.31
2.23	INGOs, NGOs and FBOs online registration system	RGB	INGOs, NGOs and FBOs	-	-	-	-	-	-	-
2.24	Inventory and assess socio-economic impact of HHs living in IDPs model	RHA	MINALOC, MINECOFIN, Reserve force, UN Habitat and District	-	-	200,000,000	300,000,000	-	500,000,000	544,662.31
2.25	Key Populations size estimation - FSW	RBC	-	75,401,000	-	-	-	-	75,401,000	82,136.17

WBS	Activities	Responsibility		Time frame & Costs					Total NSDS3 (in Frw)	Total NSDS3 (in USD)
Objective		Main	Partner	fy 2019/20	fy 2020/21	fy 2021/22	fy 2022/23	fy 2023/24		
2.26	Produce and publish Citizen Report card	RGB	Districts	200,000,000	205,000,000	210,000,000	215,000,000	220,000,000	1,050,000,000	1,143,790.85
2.27	Produce and publish Rwanda Governance Score card	RGB	Gov institutions	30,348,958	32,000,000	35,000,000	37,000,000	40,000,000	174,348,958	189,922.61
2.28	Produce and publish Rwanda Media Barometer	RGB	Media houses and Associations, Citizens	40,000,000	-	-	55,000,000	-	95,000,000	103,485.84
2.29	Re-Engineering of MIDIS System for the production of IDs for the citizens below 16 years of age	NIDA	-	4,359,000	3,500,000	-	-	-	7,859,000	8,561.00
2.30	Rwanda Population HIV Impact Assessment - RPHIA	RBC	-	600,722,009	-	-	-	-	600,722,009	654,381.27
2.31	Rwanda Public Service Barometer Report	MIFOTRA	PSC, NISR, MINECOFIN	15,000,000	15,000,000	14,000,000	13,500,000	13,000,000	70,500,000	76,797.39
2.32	Rwanda Youth Development Index	MINI-YOUTH	-	-	50,000,000	-	-	-	50,000,000	54,466.23
2.33	Strengthening Civil registration and vital statistics system	NISR	MINALOC, MINIJUST, MoH, NIDA	529,983,922	414,735,922	448,058,922	418,360,922	278,850,252	2,089,989,940	2,276,677.49
2.34	Strengthening health administrative statistics data collection framework	NISR	MoH, RBC	20,204,900	20,204,900	20,204,900	20,204,900	20,204,900	101,024,500	110,048.47
2.35	Strengthen administrative records in Education Sector (EDMIS)	NISR	MINEDUC	129,915,839	137,333,399	145,247,934	147,456,397	147,016,152	706,969,721	770,119.52
2.36	Survey on citizen's participation in legislative process	RLRC	JRLOS Institutions & CSOs	-	-	-	25,000,000	-	25,000,000	27,233.12
2.37	Survey on compliance, knowledge and understanding of construction laws and regulations in place.	RHA	Districts, RBS, Private Sector, IER (Institute of Engineers of Rwanda)	50,000,000	200,000,000	200,000,000	-	-	450,000,000	490,196.08
2.38	Survey on the access to and use of ICT by households and individuals in Rwanda	RURA/ MITEC	NISR	450,000,000	-	-	450,000,000	-	900,000,000	980,392.16

WBS	Activities	Responsibility		Time frame & Costs					Total NSDS3 (in Frw)	Total NSDS3 (in USD)
Objective		Main	Partner	fy 2019/20	fy 2020/21	fy 2021/22	fy 2022/23	fy 2023/24		
2.39	Tracer Study on employability of Graduates and Employers' satisfaction	HEC	MINEDUC, WDA	60,000,000	-	60,000,000	-	60,000,000	180,000,000	196,078.43
2.40	Elaboration of Environment Statistics Compendium	REMA	NISR, MoE, MINAGRI, MININFRA	-	-	40,000,000	-	-	40,000,000	43,572.98
2.41	Strengthen administrative records in Justice, reconciliation, law and order sector	Judiciary	NISR	4,500,000	4,500,000	4,500,000	4,500,000	4,500,000	22,500,000	24,509.80
2.42	Vulnerability and Risk Analysis & Mapping/ Disaster Risk Management for health sector	RBC	-	-	21,331,600	21,331,600	21,331,600	21,331,600	85,326,400	92,948.15
2.43	Publish Tax statistics in Rwanda, by RRA	RRA	NISR	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	10,000,000	10,893.25
2.44	Quarterly release of Rwanda Environment Statistics infographics	REMA	NISR, MoE, MINAGRI, MININFRA	-	-	18,000,000	18,000,000	18,000,000	54,000,000	58,823.53
2.45	Natural Capital Accounting	NISR	MoE	15,000,000	15,000,000	15,000,000	15,000,000	15,000,000	75,000,000	80,012.44
Strategic Objective 03: Leverage NSS data products to lead Imihigo indicator selection and performance evaluation				**322,451,559**	**333,355,718**	**344,259,877**	**355,164,036**	**366,068,195**	**1,721,299,385**	**1,875,054**
3.1	Support to processes of Planning and Evaluation of GoR Imihigo	NISR	-	322,451,559	333,355,718	344,259,877	355,164,036	366,068,195	1,721,299,385	1,875,053.80
Pillar II: Lead a national data revolution to deepen statistical impact				**3,098,376,494**	**2,074,661,852**	**1,789,365,814**	**874,968,602**	**602,162,237**	**8,464,534,999**	**9,217,815**
Strategic Objective 04: Harmonise best practices in data governance across the NSS				**2,211,261,994**	**1,636,263,352**	**1,357,539,314**	**596,442,102**	**234,635,737**	**6,061,142,499**	**6,599,740**
4.1	Develop and operationalise an Open Data Portal	MITEC	NISR	-	200,000,000	-	-	-	200,000,000	217,864.92
4.2	Climate information user satisfaction survey	Meteo-Rwanda	CIAT Rwanda	30,000,000	30,000,000	30,000,000	30,000,000	30,000,000	150,000,000	163,398.69
4.3	EDMIS and EDMS	REB	-	90,084,161	89,266,601	88,150,066	97,611,503	110,305,138	475,417,469	517,883.95
4.4	Hosting cost of HMIS servers hosted at NDC, SSL, etc. and users on central level staff	RBC	-	6,330,599	6,330,599	6,330,599	6,330,599	6,330,599	31,652,995	34,480.39

WBS	Activities	Responsibility		Time frame & Costs					Total NSDS3 (in Frw)	Total NSDS3 (in USD)
Objective		Main	Partner	fy 2019/20	fy 2020/21	fy 2021/22	fy 2022/23	fy 2023/24		
	using queries for data analysis									
4.5	Integrated and harmonised land information in a paperless land register for an optimised land management	RLMUA	DFID	-	-	-	354,500,000	-	354,500,000	386,165.58
4.6	Modernisation of Civil Registration System by putting in Place a National Centralised and Integrated CRVS System	NIDA	MINALOC, MoH, NISR, DGIE, MINAFFET, MoJ, RISA	1,629,438,434	925,051,152	868,558,649	-	50,000,000	3,473,048,235	3,783,276.94
4.7	Produce a Manual of Codes of Conduct for Statistical surveys	NISR	-	-	1,715,000	-	-	-	1,715,000	1,868.19
4.8	Purchase of software licenses and content such as satellite imagery	NISR	RLMUA, MININFRA	-	45,900,000	-	-	-	45,900,000	50,000.00
4.9	Regular monitoring of SSPs and conduct statistical audits	NISR	-	5,408,800	13,000,000	13,000,000	13,000,000	13,000,000	57,408,800	62,536.82
4.10	Re-operationalisation of Rwanda Environment Information System (RENVIS)	REMA	NISR, MoE, MINAGRI, MININFRA	-	-	55,000,000	-	-	55,000,000	59,912.85
4.11	Rwanda Economic Intelligence Data Centre	RDB	MINECOFIN	450,000,000	250,000,000	201,500,000	-	-	901,500,000	982,026.14
4.12	Upgrading & data migration through the climate change portal	REMA	NISR, MoE, MINAGRI, MININFRA	-	-	70,000,000	70,000,000	-	140,000,000	152,505.45
4.13	Rwanda tourism integrated data warehousing system	RDB	DGIE, RRA, NISR, BNR		50,000,000	-	-	-	50,000,000	54,466.23
4.14	iSP-MIS	MINALOC	DFID, UNICEF	25,000,000	25,000,000	25,000,000	25,000,000	25,000,000	125,000,000	133,354.07
Strategic Objective 05: Enable data openness, integration and interoperability through enhanced legal and policy frameworks				**26,207,500**	**1,207,500**	**4,507,500**	**1,207,500**	**1,207,500**	**34,337,500**	**37,405**
5.1	Strengthening the Legal framework for Data revolution	NISR	MINIJUST, RURA, BNR, UK-ONS	26,207,500	1,207,500	4,507,500	1,207,500	1,207,500	34,337,500	37,404.68
Strategic Objective 06: Equip and operationalise a public Data Science Campus to convene stakeholders and promote innovation				**860,907,000**	**437,191,000**	**427,319,000**	**277,319,000**	**366,319,000**	**2,369,055,000**	**2,580,670**

WBS	Activities	Responsibility		Time frame & Costs					Total NSDS3 (in Frw)	Total NSDS3 (in USD)
Objective		Main	Partner	fy 2019/20	fy 2020/21	fy 2021/22	fy 2022/23	fy 2023/24		
6.1	Capacity building in Data Science and related staff retention	NISR	-	96,600,000	96,600,000	96,600,000	96,600,000	96,600,000	483,000,000	526,143.79
6.2	Implement and maintain NISR big data lab and NISR private cloud data centre	NISR	ONS UK	450,760,000	15,120,000	15,120,000	15,120,000	15,120,000	511,240,000	556,906.32
6.3	Implement and maintain smart conference and modern AV system for the training centre	NISR	RISA	127,884,000	14,808,000	4,936,000	4,936,000	4,936,000	157,500,000	171,568.63
6.4	Set-up and operationalisation of NISR Data Science Campus	NISR	NISR, RISA, RDB, RURA, RRA	105,000,000	105,000,000	105,000,000	105,000,000	194,000,000	614,000,000	668,845.32
6.5	Big data competition	NISR	-	35,863,000	35,863,000	35,863,000	35,863,000	35,863,000	179,315,000	195,332.24
6.6	Data revolution awareness and advocacy (International conference on Big data)	NISR	-	4,850,000	4,850,000	4,850,000	4,850,000	4,850,000	24,250,000	26,416.12
6.7	Quick win projects (Institutional data warehouses and Dashboards (RDB, RSSB, RRA, BNR, NISR, RURA); National open data platform)	NISR	RISA, RDB, RURA, RRA	25,000,000	150,000,000	150,000,000	-	-	325,000,000	354,030.50
6.8	Exploration and use of economic administrative records (Business register, ITRS, RRA's PIT+CIT database)	NISR	MINECOFIN, BNR, RRA, RDB, PSF	14,950,000	14,950,000	14,950,000	14,950,000	14,950,000	74,750,000	81,427.02
6.9	Put up an SDGs Dissemination platform	NISR	-	-	-	-	-	-	-	-
Pillar III: Build statistical capability across the NSS to increase data uptake and use				**714,577,410**	**771,562,224**	**1,100,457,045**	**710,371,071**	**649,277,933**	**3,891,245,682**	**4,238,830**
Strategic Objective 07: Improve data uptake and statistical literacy through strategic communication, dissemination and advocacy				**222,844,492**	**316,072,165**	**592,092,445**	**334,159,007**	**399,440,223**	**1,864,608,331**	**2,031,164**
7.1	Statistical Literacy and Capacity building of journalists	MHC	NISR	-	14,500,000	27,500,000	30,450,000	14,500,000	86,950,000	94,716.78

WBS	Activities	Responsibility		Time frame & Costs					Total NSDS3 (in Frw)	Total NSDS3 (in USD)
Objective		Main	Partner	fy 2019/20	fy 2020/21	fy 2021/22	fy 2022/23	fy 2023/24		
7.2	Advocate for NISR products and sensitisation through Mass Media channels	NISR	-	32,255,332	14,159,332	7,359,332	32,359,332	47,739,332	133,872,660	145,830.78
7.4	Communication and general public awareness of the 5-RPHC	NISR	MINALOC, UNFPA, MINECOFIN	-	11,000,000	305,517,500	26,522,500	-	343,040,000	373,681.92
7.5	Conduct SDDS workshops	NISR	IMF, AfDB, WB	435,000	435,000	435,000	435,000	435,000	2,175,000	2,369.28
7.6	Conduct statistical advocacy through competitions	NISR	-	40,758,000	40,758,000	40,758,000	40,758,000	40,758,000	203,790,000	221,993.46
7.7	Data quality assurance of surveys authorised by NISR	NISR	-	8,340,000	8,340,000	8,430,000	8,430,000	8,430,000	41,970,000	45,718.95
7.8	Disseminate and advocate for NISR products through Mass Media and Social Media	NISR	RBC	41,983,200	43,483,200	41,983,200	41,983,200	43,483,200	212,916,000	231,934.64
7.9	Disseminate results from surveys and other statistical products	NISR	Media	15,082,209	80,105,882	88,918,662	19,280,014	122,743,940	326,130,706	355,262.21
7.10	Elaborate and disseminate annual health statistics report	RBC	-	4,058,951	4,058,951	4,058,951	4,058,951	4,058,951	20,294,755	22,107.58
7.11	Implement and maintain modern knowledge sharing network system for NSS	NISR	RISA/MITEC	2,540,000	2,040,000	2,040,000	2,040,000	2,040,000	10,700,000	11,655.77
7.12	Organisation of the African Statistics Day Celebration	NISR	NSS/private organisations	7,605,000	7,605,000	7,605,000	7,605,000	7,605,000	38,025,000	41,421.57
7.13	Organise the Reading data with Children event	NISR	UNICEF	33,127,500	20,827,500	20,827,500	33,127,500	20,827,500	128,737,500	140,236.93
7.14	Publication and Results Dissemination of the 5-RPHC	NISR	MINALOC, Media	-	-	-	16,250,210	50,160,000	66,410,210	72,342.28
7.15	Raising public awareness and sensitisation on CRVS	NISR	NIDA	36,659,300	36,659,300	36,659,300	36,659,300	36,659,300	183,296,500	199,669.39
7.16	User Satisfaction Survey (USS)	NISR	-	-	32,100,000	-	34,200,000	-	66,300,000	72,222.22
Strategic Objective 08: Enhance capacity for data management and statistical analysis				**336,945,418**	**230,662,559**	**275,787,100**	**186,974,564**	**177,130,210**	**1,152,499,851**	**1,255,446**

WBS	Activities	Responsibility		Time frame & Costs					Total NSDS3 (in Frw)	Total NSDS3 (in USD)
Objective		Main	Partner	fy 2019/20	fy 2020/21	fy 2021/22	fy 2022/23	fy 2023/24		
8.1	Academician trainings for data analysis	NISR	-	9,970,000	9,970,000	9,970,000	9,970,000	9,970,000	49,850,000	54,302.83
8.2	Build capacity of the NSS on data use and analysis of EICV Datasets	NISR	-	42,375,000	-	42,375,000	-	-	84,750,000	92,320.26
8.3	Capacity building for the 5th Rwanda Population and Housing Census	NISR	UNFPA	64,500,000	72,000,000	13,939,700	14,679,560	-	165,119,260	179,868.47
8.4	Capacity building in the analysis of Demographic and Health Survey	NISR	MoH, RBC, ICF Macro, UNFPA	13,484,592	-	12,132,000	-	-	25,616,592	27,904.78
8.5	Capacity building of MITEC staff on data collection/research, data analysis using different software	NISR	NISR	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000	20,000,000	21,786.49
8.6	Implement the special skills development programs through Short Courses for NISR staff capacity development	NISR	-	15,000,000	19,000,000	16,000,000	16,000,000	-	66,000,000	71,895.42
8.7	Museums statistical training	INMR	NISR AND MINISPOC	30,000,000	-	25,000,000	-	-		-
8.8	NISR and NSS Staff trainings on Statistical Software and Data Analysis	NISR	-	65,987,826	68,692,559	71,470,400	74,325,004	77,260,210	357,735,999	389,690.63
8.9	Strengthen capacity to use ANACoD for CRVS analysis	NISR	WHO	14,728,000	-	-	-	-	14,728,000	16,043.57
8.10	Support Capacity Development for NISR staff to pursue further studies	NISR	CESB, MIFOTRA	52,000,000	37,000,000	56,000,000	48,000,000	61,000,000	254,000,000	276,688.45
8.11	Training on climate data management (Increase data management, uptake of climate services available from maproom platform of Meteo Rwanda)	Meteo-Rwanda	IRI, CIAT and other research institutions	20,000,000	20,000,000	20,000,000	20,000,000	20,000,000	100,000,000	108,932.46
8.12	Training workshop on how to use classification manuals with researchers that apply for visa	NISR	-	4,900,000	-	4,900,000	-	4,900,000	14,700,000	16,013.07

WBS	Activities	Responsibility		Time frame & Costs					Total NSDS3 (in Frw)	Total NSDS3 (in USD)
Objective		Main	Partner	fy 2019/20	fy 2020/21	fy 2021/22	fy 2022/23	fy 2023/24		
Strategic Objective 09: Introduce new methods and techniques in data science and analytics				**154,787,500**	**224,827,500**	**232,577,500**	**189,237,500**	**72,707,500**	**874,137,500**	**952,220**
9.1	Train NSS statistics and ICT staff to master modern data capture software tools such as advanced CSPro for Android, Survey123 & Collector for ArcGIS, and Survey Solutions	NISR	US CENSUS BUREAU, UR CBE	31,020,000	41,360,000	31,020,000	25,380,000	21,150,000	149,930,000	163,322.44
9.2	Trainings and Technical support in Data science for RRA datasets	RRA	Architura	53,767,500	133,467,500	151,557,500	163,857,500	51,557,500	554,207,500	603,711.87
9.3	Statistical capacity building of MODA staff (including master's degree programs in Big Data Analytics Programs and trainings)	MoD	NISR/MoD (R&D)	70,000,000	50,000,000	50,000,000	-	-	170,000,000	185,185.19
Pillar IV: Strengthen the enabling environment for sustainable statistical development				**3,406,338,090**	**3,779,120,242**	**4,064,982,990**	**3,943,967,447**	**4,160,661,666**	**19,355,070,436**	**21,083,955**
Strategic Objective 10: Build and sustain a workforce to support sustainable statistical development				**1,499,795,636**	**1,680,261,215**	**1,753,790,689**	**1,785,095,006**	**1,837,250,511**	**8,556,193,057**	**9,320,472**
10.1	Formation of a professional group on statistics	NISR	PMO, MINECOFIN, MDA AND DISTRICTS	2,012,040	2,080,080	2,148,120	2,216,160	2,284,200	10,740,600	11,700.00
10.2	Implement the special skills development programs through Short Courses for NISR staff capacity development	NISR	-	10,000,000	11,000,000	8,000,000	11,000,000	8,000,000	48,000,000	52,287.58
10.3	Improve and maintain NISR organisational structure	NISR	MIFOTRA	1,427,983,596	1,638,381,135	1,689,842,569	1,743,078,846	1,798,166,311	8,297,452,457	9,038,619.23
10.4	Statistical capacity building of INMR (Recruitment of statistician and training)	INMR	NISR AND MINISPOC	31,000,000	-	25,000,000	-	-	56,000,000	61,002.18
10.5	Secondment of NISR Staff to priority sectors to oversee the implementation of Sector Statistical Plans	NISR	-	28,800,000	28,800,000	28,800,000	28,800,000	28,800,000	144,000,000	156,862.75

WBS	Activities	Responsibility		Time frame & Costs					Total NSDS3 (in Frw)	Total NSDS3 (in USD)
Objective		Main	Partner	fy 2019/20	fy 2020/21	fy 2021/22	fy 2022/23	fy 2023/24		
Strategic Objective 11: Invest in operational infrastructure, assets, logistics to support sustainable statistical development				**1,872,172,454**	**2,032,569,028**	**2,232,002,301**	**2,082,962,441**	**2,234,810,355**	**10,454,516,579**	**11,388,362**
11.1	Acquisition of tangible fixed assets (furniture & AC)	NISR	RHA	-	100,000,000	-	-	-	100,000,000	108,932.46
11.2	Acquisition of vehicles to support the RPHC	NISR	RHA, MININFRA, MINECOFIN	-	-	-	-	-	-	-
11.3	Maintain NISR core network and security infrastructure	NISR	RISA	5,232,000	5,232,000	5,232,000	10,272,000	10,272,000	36,240,000	39,477.12
11.4	Maintain smart electricity for NISR training centre power consistency	NISR		40,000,000	-	-	30,000,000	-	70,000,000	76,252.72
11.5	Maintain subscription to public cloud to host public facing data banks and publications	NISR	RISA	7,608,000	7,608,000	7,608,000	7,608,000	7,608,000	38,040,000	41,437.91
11.6	Maintain subscriptions to fibre and mobile connectivity to Internet for staff and data collectors	NISR	RISA	16,320,000	16,320,000	16,320,000	16,320,000	16,320,000	81,600,000	88,888.89
11.7	Provide effective operationalisation of administrative and logistical support systems for NSDS3 implementation	NISR	-	1,773,680,474	1,799,077,048	1,889,510,321	1,989,430,461	2,096,278,375	9,547,976,679	10,400,846.06
11.8	Refurbishment of NISR Building phase II	NISR	RHA	-	-	300,000,000	-	-	300,000,000	326,797.39
11.9	Upgrade and maintain NISR general corporate hardware and software systems (LAN, EDMS, Intego messenger) and promote its staff access and use through Internet	NISR	RISA	13,331,980	13,331,980	13,331,980	13,331,980	13,331,980	66,659,900	72,614.27
11.10	Upgrade of NISR staff end-user computing facilities	NISR		16,000,000	91,000,000	-	16,000,000	91,000,000	214,000,000	233,115.47
Strategic Objective 12: Mobilise resources and strategic partnerships to support sustainable statistical development				**34,370,000**	**34,190,000**	**79,190,000**	**41,710,000**	**88,600,800**	**278,060,800**	**302,898**

WBS	Activities	Responsibility		Time frame & Costs					Total NSDS3 (in Frw)	Total NSDS3 (in USD)
Objective		Main	Partner	fy 2019/20	fy 2020/21	fy 2021/22	fy 2022/23	fy 2023/24		
12.1	Adhere to the best practices of financial management and maintain appropriate financial planning and reporting	NISR	DPs, MDAs,	17,320,000	17,320,000	17,320,000	17,320,000	17,320,000	86,600,000	94,335.51
12.2	Annual Review of NSDS + end of NSDS evaluation	NISR	DPs, MDAs, CSOs, PSF			45,000,000		27,000,000	72,000,000	78,431.37
12.3	Establish letter of agreements, MOUs etc. to avail technical support and other resources for NISR activities	NISR	DPs, MDAs	2,745,000	2,745,000	2,745,000	2,745,000	2,745,000	13,725,000	14,950.98
12.4	Hold consultations sessions with partners	NISR	DPs, MDAs	10,230,000	10,050,000	10,050,000	10,050,000	10,050,000	50,430,000	54,934.64
12.5	Identify and liaise with organisations supporting statistical activities around the world	NISR	DPs, MDAs	4,075,000	4,075,000	4,075,000	4,075,000	4,075,000	20,375,000	22,194.99
12.6	NSDS4 Design initiated	NISR	DPs, MDAs, CSOs, PSF	-	-	-	7,520,000	27,410,800	34,930,800	38,050.98
	Grand Total								**97,216,853,099**	**105,896,213**

Annex 2. NSDS3 Logframe

IMPACT	Indicator	Baseline 2018/2019	Milestones					Target	Source
			2019/2020	2020/2021	2021/2022	2022/2023	2023/2024		
Users are satisfied with available official statistics	Overall satisfaction of adequacy of official statistics to priority needs of users	75 % in 2018/19			Above 75% in 2020/21		Above 75% in 2022/23	Maintain the user satisfaction Above 75%	User satisfaction surveys reports

OUTCOMES	Indicator	Baseline 2018/2019	Milestones					Target (date)	Source
			2019/2020	2020/2021	2021/2022	2022/2023	2023/2024		
Enhanced availability of Timely, Good quality and relevant official statistics for effective planning and decision making and M&E	World Bank Statistical Capacity Indicator	78.9 (2018)	>=75%	>=75%	82%	83%	84%		NSDS3 Mid and Final evaluation reports
	Meet and maintain the requirements for SDDS status	SDDS Rwanda subscription	National Data Summary pages updated according to timelines and Periodicity.	National Data Summary page updated according to timelines and Periodicity.	National Data Summary page updated according to timelines and Periodicity.	National Data Summary page updated according to timelines and Periodicity.	National Data Summary page updated according to timelines and Periodicity.	SDDS Datasets produced and National Data Summary pages updated according to timelines and Periodicity.	SDDS /IMF reports

OUTPUTS	Indicator	Baseline 2018/2019	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	Target	Source
PILLAR I: PRODUCE STATISTICS TO SUPPORT EVIDENCE-BASED DECISION-MAKING									
Strategic Objective 01: Sustain and enhance core data production at NISR	Censuses statistical indicators are updated on regular basis.	RPHC4 conducted in 2012 and EC conducted 2017/2018		EC conducted	Pilot RPHC5 conducted	RPHC5 conducted	EC conducted	RPHC5-2022 and Two (2) ECs Conducted	RPHC5 reports produced and disseminated EC Report
	Surveys statistical indicators are updated on regular basis	EICV5 conducted in 2016/2017 and DHS5 Conducted in 2014/2015		EICV6 and DHS6 conducted			EICV7 conducted	EICV6; EICV7 and DHS7 Conducted	EICV6&7 and DHS6 reports

OUTPUTS	Indicator	Baseline 2018/2019	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	Target	Source
		IBES conducted in 2018/2019 Seasonal Agriculture Survey (SAS) in 2018/2019	SAS and IBES conducted	SAS and IBES conducted	SAS and IBES conducted	SAS and IBES conducted	SAS and IBES conducted and reports disseminated	Five (5) SAS and five (5) IBESs conducted	SAS and IBES reports disseminated
		LFS Conducted in 2018/19,	LFS conducted every quarter (Q1, Q2, Q3 and Q4)	LFS conducted every quarter (Q1, Q2, Q3 and Q4) and	LFS conducted every quarter (Q1, Q2, Q3 and Q4)	LFS conducted every quarter (Q1, Q2, Q3 and Q4)	LFS conducted every quarter (Q1, Q2, Q3 and Q4)	Twenty LFSs conducted and	LFS quarterly and annual reports.
	Production and publication of regular Economic statistics	Monthly PPI and CPI Produced in 2018/2019	PPI, IIP, and CPI produced every month.	PPI, IIP, and CPI produced every month.	PPI, IIP, and CPI produced every month.	PPI, IIP, and CPI produced every month.	PPI, IIP, and CPI produced every month.	Maintain the monthly production of PPI, IIP and CPI regularly.	PPI, IIP and CPI monthly and annual reports.
		Quarterly Trade Statistics and GDP produced in 2018/2019.	Quarterly Trade Statistics produced Quarterly GDP produced	Quarterly Trade Statistics produced Quarterly GDP produced	Quarterly Trade Statistics produced Quarterly GDP produced	Quarterly Trade Statistics produced Quarterly GDP produced	Quarterly Trade Statistics produced Quarterly GDP produced	Maintain production of Trade Statistics and GDP regularly on quarterly basis.	Trade Statistics and GDP reports.
		Rebasing national accounts 2016/2017	Rebase National Accounts	.		Rebase National Accounts		Maintain rebasing NA, CPI, PPI at least once in 3 years	NA rebasing reports
Strategic Objective 02: Enrich and expand data supply across the NSS	Production and publication of Vital statistics through CRVS	90% of births registered	90% of births registered	90% of births registered	90% of births and 20% of deaths registered	90% of births produced and 30% of deaths	90% of births produced and 30% of deaths	Improve the vital statistics on regular basis through the CRVS.	CRVS annual reports

OUTPUTS	Indicator	Baseline 2018/2019	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	Target	Source
	Production and publication of Education Statistics through SDMS	Development of SDMS in progress		80% of student enrolments registered through SDMS	85% of student enrolments registered through SDMS	95% of student enrolments registered through SDMS through SDMS	95% of student enrolments registered through SDMS	SDMS updated regularly and 95% of education statistics produced	SDMS annual reports
	NST Statistics reports reviewed on regular basis	SSDS produced	Annual reviews of NST Statistics reports of all sectors	Annual reviews of NST Statistics reports of all sectors	Annual reviews of NST Statistics reports of all sectors	Annual reviews of NST Statistics reports of all sectors	Annual reviews of NST Statistics reports of all sectors	Improvement of administrative statistics	NISR and MDAs reports
Strategic Objective 03: Leverage NSS data products to lead Imihigo indicator selection and performance evaluation	Reliable statistics are used to effectively measure the Local and Central Government entities performance.	2018/19 Imihigo Evaluation report	2019/20 Imihigo Evaluation report is produced and published	2020/21 Imihigo Evaluation report is produced and published	2021/22 Imihigo Evaluation report is produced and published	2022/23 Imihigo Evaluation report is produced and published	2023/24 Imihigo Evaluation report is produced and published	Imihigo are evaluated on regular basis	Imihigo annual reports
OUTPUTS	**Indicator**	**Baseline 2018/2019**	**2019/2020**	**2020/2021**	**2021/2022**	**2022/2023**	**2023/2024**	**Target (date)**	**Source**
PILLAR II: LEAD A NATIONAL DATA REVOLUTION TO SCALE DATA UPTAKE AND IMPACT									
Strategic Objective 04: Harmonise best practices in data governance across the NSS	Data access policy available Data access space established	Data Science campus established	Data access policy developed and data access operational manual			Data access space in NISR established			NISR reports
Strategic Objective 05: Enable data openness, integration, and interoperability through enhanced legal and policy frameworks	Legal framework in place to ensure management and access of data.	Assessment of the Legal framework conducted in progress	Assessment of the Legal framework conducted in 2019/2020	Implementation of 30% of recommendations	Implementation of 60% of recommendations	Implementation of 100% of recommendations		New Law governing statistical	Legal framework document

OUTPUTS	Indicator	Baseline 2018/2019	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	Target	Source
			with recommendations						
Strategic Objective 06: Equip and operationalise a public Data Science Campus to facilitate and promote innovation	Data Science Campus operationalised	The Data Science Campus is established		50 users visited the NISR Data Science campus, accessed and used the datasets	100 users visited the NISR Data Science campus, accessed and used the datasets	150 users visited the NISR Data Science campus, accessed and used the datasets	150 users visited the NISR Data Science campus, accessed and used the datasets	450 users visited the NISR Data Science campus, accessed and used the datasets	Data Science Campus reports
PILLAR III: BUILD STATISTICAL CAPABILITY ACROSS THE NSS TO IMPROVE DATA UPTAKE AND USE									
Strategic Objective 07: Expand strategic communication and advocacy to improve data uptake and statistical literacy	Number of participants in statistical literacy and dissemination events, seminar and workshops (including ASD and etc.)	500 Participants in 2018	300 Participants in 2019	300 Participants in 2020	300 Participants in 2021	300 Participants in 2022	300 Participants in 2023	1500 Participants	Statistics events report
	Social media are used for NISR communication	Communication and Dissemination strategy is developed		At least three global social media active platforms	At least three global social media active platforms	At least three global social media active platforms	At least three global social media active platforms	NISR Communication is improved	Review Report
	Online platform for dissemination is used			SDGs Reporting platform	NST Reporting platform				Review Report
	Statistics hits on website (statistics report and microdata downloads)	1.4 million hits in December 2017	Hits on websites increased by 5%	Hits on websites increased by 5%	Hits on websites increased by 5%	Hits on websites increased by 5%	Hits on websites increased by 5%	Hits on websites increased by 25% (cumulative)	Website reports
Strategic Objective 08: Enhance capacity for data management and statistical analysis	Number of statisticians trained in Statistical packages	Manuals for Excel, SPSS and Stata trainings are available	Statisticians in local and central governments trained in	Statisticians in local and central governments trained in	Statisticians in local and central governments trained in	Statisticians in local and central governments trained in	Statisticians in local and central governments trained in	Statisticians in local and central government well trained in	Annual NSS Capacity building report

OUTPUTS	Indicator	Baseline 2018/2019	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	Target	Source
			Excel, SPSS and Stata, NADA	Excel, SPSS and Stata, NADA	Excel, SPSS and Stata, NADA	Excel, SPSS and Stata, NADA	Excel, SPSS and Stata, NADA	Excel, SPSS, and Stata	
Strategic Objective 09: Introduce new methods and techniques in data science and analytics	Number of data users and producers with improved skills on new methods and techniques in data science and analytics			A Handbook of documented methods and techniques in data science and analytics developed.	15 statistical cadres and staff from NSS with improved skills on methods and techniques in data science and analytics in 2021/2022		20 statistical staff from NSS with improved skills on methods and techniques in data science and analytics in 2022/2023	45 statistical cadres and staff from NSS trained	Annual Capacity building report
OUTPUTS	**Indicator**	**Baseline 2018/2019**	**2019/2020**	**2020/2021**	**2021/2022**	**2022/2023**	**2023/2024**	**Target**	**Source**
PILLAR IV: STRENGTHEN THE ENABLING ENVIRONMENT FOR SUSTAINABLE STATISTICAL DEVELOPMENT									
Strategic Objective 10: Build and sustain a workforce to support sustainable statistical development	Special and general skills for NISR and NSS staff provided.			Functional review of NISR and NSS done to restructure the NSS	30% of recommendations implemented	60% of recommendations implemented	100% of recommendations implemented	Improved NSS and NISR Structure with skilled and motivated staff.	Review Reports
Strategic Objective 11: Invest in operational infrastructure, assets, and logistics to support sustainable statistical development	NSDS3 mid and end term reviews conducted	NSDS3 approved		NSDS3 mid-term review conducted			End of NSDS3 evaluation feed into NSDS4	NSDS3 regular evaluation conducted	Annual Review Reports and Steering Committee Reports
Strategic Objective 12: Mobilise resources and strategic partnerships to support sustainable statistical development	Commitments for implementation of NSDS3	Full commitment during implementation of NSDS2	Full resources to implement the NSDS3 activities in FY 2019/2020 committed for	Full resources to implement the NSDS3 activities in FY 2020/2021	Full resources to implement the NSDS3 activities in FY 2021/2022 committed for	Full resources to implement the NSDS3 activities in 2022/2023 committed for	Full resources to implement the NSDS3 in FY 2023/2024 committed	Full resources to implement the NSDS3 committed for	NISR Reports

OUTPUTS	Indicator	Baseline 2018/2019	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	Target	Source
				committed for			for		
	NISR score by the Office of General Auditor	Unqualified Audit opinion on Audit report for FY ended June 2017	NISR is scored "unqualified opinion" by annual audit	NISR is scored "unqualified opinion" by annual audit	NISR is scored "unqualified opinion" by annual audit	NISR is scored "unqualified opinion" by annual audit	NISR is scored "unqualified opinion" by annual audit	NISR is scored "unqualified opinion" by annual audit	OAG Reports

Annex 3. Sector Statistical Plans: 2019/20-2023/24

PARIS21 guidance specifies that Sector Strategies for the Development of Statistics (SSDS) should form the 'building blocks' of the NSDS overall (PARIS21, 2017). The following sector statistical plans were developed following the same approach as the broader strategy, providing key insights that shaped the design of the NSDS3 strategic framework. The 15 plans (one for each NST-1 sector) are presented in alphabetical order:

1. Agriculture
2. Education
3. Energy
4. Environment & Natural Resources (ENR)
5. Finance
6. Governance & Decentralisation
7. Health
8. Information & Communications Technology (ICT)
9. Justice, Reconciliation, Law & Order (JRLO)
10. Private Sector Development & Youth Employment (PSDYE)
11. Social Protection
12. Sport & Culture
13. Transport
14. Urbanisation & Rural Settlement (URS)
15. WATSAN

Each plan provides an overview of statistical priorities and background for the sector, and tables for sector indicators[45] and costed sector statistical activities. Extended versions of the plans are available on the NISR website, which include assessments of current statistical practices and systems within each sector.

[45] As noted in Chapter 3, SDG indicators are prioritised based on applicability to the Rwandan context and availability of an established methodology (UNSD Tier 1 and Tier 2). Of the 150 priority indicators, 132 are covered in the 15 sector plans. The remaining 18 are assigned to MDAs in Disaster Risk Management, PFM and crosscutting areas.

A3.1 Agriculture Sector Statistical Plan

1. Sector background

Drawing on the development priorities identified in the National Strategy for Transformation (NST-1), Vision 2020 and Vision 2050, the fourth Plan for the Strategic Transformation of Agriculture (PSTA-4) highlights the sector's role in 'creating growth, exports, and livelihoods necessary to transform [Rwanda]...into a knowledge-based, middle-income economy' (PSTA-4, pg. 12). With 66% of the population engaged in agriculture and related industries (NISR, 2015), improvements in sector data quality and availability will be essential to effective program design to advance national development. The agriculture sector benefits from a wealth of data, including administrative records, geospatial data, and specialised surveys. However, there remain some significant data gaps relative to demand, particularly in cross-cutting policy areas such as environmental protection, forestry and food security, as well as in overall granularity and frequency of existing data products.

The PSTA-4 and NSDS3 work together to target sector data gaps through statistical partnerships, projects and systems development. Ongoing engagement with NISR to strengthen key agriculture data products, such as SAS, is complemented by significant investments in administrative systems, including an agriculture management information system (AMIS) and an Agriculture Land Information System (ALIS). Moreover, PSTA-4 objectives to expand agriculture research agendas and improve climate modelling and early warning systems motivate sector investments in statistical development, both to enhance data supply and improve analytical capability. The following strengths, weaknesses, opportunities and threats (SWOT) will shape progress in these areas throughout implementation of PSTA-4 and NSDS3:

Strengths	**Weaknesses**
1. Existence of administrative structure, at different levels, providing infrastructure for quality statistical data collection; 2. Upgraded Seasonal Agricultural Survey; 3. Importance of statistics promoted in PSTA-4; 4. Development of sector MIS', including AMIS and ALIS; 5. Strong partnerships with NISR and external stakeholders (e.g. FAO) to provide technical guidance.	1. Limited statistical staff, capacity and skills for data processing, analysis, and sub-sector products; 2. Absence of dedicated statistics units in key departments; 3. Poor coordination of statistical production activities; 4. Limited documentation of methodologies, data definitions and metadata; 5. Lack of systematic mechanisms for statistical data collection and quality assurance; 6. Topical data gaps, particularly in cross-cutting areas.
Opportunities	**Threats**
1. Development partners ready and willing to provide technical support and guidance; 2. Regional bodies (IGAD, EAC, CEPGI, COMESA, SADC, AU) and frameworks (FDES,	1. Inadequate financial and human resources to support statistical activities; 2. Lack of consultation and feedback from sector stakeholders perpetuates a disconnect between producers and users;

SDGs) increase momentum for statistical development; 3. National fora and committees established (e.g. ASWG, SWAP, JSR) to inform activities.	3. Limited awareness of the value of statistics for planning and MEL at central- and local-levels.

2. Agriculture Sector Data Requirements

This sector plan defines statistical needs and projects for the agriculture sector based on policy indicator frameworks outlined in Table 1, including the NST-1 (10 indicators), the PSTA-4 (58 indicators), the SDGs (9 indicators), AU Agenda 2063 (14 indicators) and EAC Vision 2050 (1 indicator). Calculating overlapping data requirements across frameworks, these 92 indicators translate to 82 unique data points, which are derived from a diffuse network of data producers, encompassing 14 institutions. 25% of indicators are drawn from NISR products, while 7 indicators currently lack baselines (9%), illustrating the pressure to both improve and expand data sources over the next 5 years.

Table 1: Agriculture Sector Indicators

No	Indicator	Agenda					Data source	Frequency	Responsible Institution
		SDG	AU 2063	EAC 2050	NST 1	SSP			
1	Prevalence of undernourishment	1	0	0	0	0	DHS	5 years	NISR
2	Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES)	1	0	0	0	1	EICV	3 years	NISR
3	Number of plant and animal genetic resources for food and agriculture secured in either medium or long-term conservation facilities	1	0	0	0	0	Rwanda National Gene bank (RNGB) Operational Plan	Annual	RAB
4	Proportion of local breeds classified as being at risk, not-at-risk or at unknown level of risk of extinction	1	0	0	0	0	MINAGRI Records	Annual	MINAGRI
5	The agriculture orientation index for government expenditures	1	0	0	0	0	Records MINAGRI, MINECOFIN	Annual	MINAGRI, MINECOFIN
6	Agricultural export subsidies	1	0	0	0	0	NATIONAL EXPORT STRATEGY; Records MINECOFIN	Annual	MINECOFIN
7	Indicator of food price anomalies	1	0	0	0	0	Consumer price indices	Quarterly and annual	NISR
8	(a) Proportion of total agricultural population with ownership or secure rights over agricultural land, by sex; and (b) share of women among owners or rights-bearers of agricultural land, by type of tenure	1	1	0	0	0	EICV, RNRA	3 years	NISR
9	Proportion of fish stocks within biologically sustainable levels	1	0	0	0	0	RAB Reports	Annual	RAB
10	a) % annual allocation of budget to the agriculture sector.	0	1	0	0	0	Admin	Annual	MINECOFIN
	b) % contribution of the agriculture sector to GDP	0	1	0	0	0	Admin	Annual	MINECOFIN
11	Share of households having less than two meals a day	0	1	0	0	0	CFSVA	3 Years	MINECOFIN/NISR

No	Indicator	Agenda					Data source	Frequency	Responsible Institution
		SDG	AU 2063	EAC 2050	NST 1	SSP			
12	The share of population living below minimal level of daily dietary energy	0	1	0	0	0	CFSVA	4 Years	MINECOFIN/NISR
13	Agricultural total production and productivity doubled	0	1	0	0	0	Admin/ SAS	Annually	NISR
14	% increase of youth and women participating in integrated agricultural value chain	0	1	0	0	0	SAS	Annually	NISR
15	% of reduction of post-harvest losses	0	1	0	0	0	Admin	Annually	FAO
16	% of pastoral and fisher households who are resilient to climate and weather-related risk	0	1	0	0	0	Admin	Annually	RAB
17	% growth of the Agricultural GDP produced by commercial farms	0	1	0	0	0	National Accounts	Annually	NISR
18	(a) % of small-scale farmers graduating into small-scale commercial farming. (b) % of women small-scale women farmers graduating into small-scale commercial farming.	0	1	0	0	0	SAS	Annually	NISR
19	Volume of intra- Africa Trade agricultural commodities and services in place	0	1	0	0	1	Admin	Annually	RDB
20	% of increase in value addition in the fishery sector	0	1	0	0	0	N.ACCOUNT	Quarterly	NISR/BNR
21	Diversity index (proportion of genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives including other socio-economically as well as cultural valuables species maintained)	0	1	0	0	0	Admin	Annually	RAB
22	Food production (million metric tonnes)	0	0	1	0	0	Admin	Annually	NAEB
23	Area of consolidated land	0	0	0	1	1	MINAGRI Reports	Annually	MINAGRI
24	Percentage of farm operations mechanised	0	0	0	1	0	MINAGRI Reports	Annually	MINAGRI
25	Quantity of fertilizer applied	0	0	0	1	0	Agriculture survey	Annually	NISR
26	Strategic reserves stored at district level	0	0	0	1	0	MINAGRI Reports	Annually	MINAGRI
27	Credit to agriculture sector as percentage of total loans	0	0	0	1	0	BNR	Annually	BNR
28	Percentage of agricultural production growth measured by production volumes and fixed 2014 prices	0	0	0	0	1	SAS	Annually	NISR
29	Export value: 356 (Million USD)	0	0	0	0	1	Export statistics	Annually	BNR
30	Number of jobs related to agriculture compared to baseline (gender disaggregated)	0	0	0	0	1	Labour force survey	Quarterly	NISR
31	Average income per smallholder farming household (gender disaggregated)	0	0	0	0	1	EICV	3 years	NISR
32	kcal production per capita	0	0	0	0	1	SAS, Population projections	Seasonal	NISR
33	Percentage of farmers adopting appropriate technology and improved practices (by gender and age)	0	0	0	0	1	SAS	Seasonal	NISR
34	Number of innovative start-ups / businesses created through research partnerships, trainings, extensions and financial grants (cum.)	0	0	0	0	1	Programme reports	Annual	MINAGRI
35	Women empowerment in Agriculture index	0	0	0	0	1	WEAI Resource Centre		IFPRI
36	Number of new technologies, crops varieties and breeds released	0	0	0	0	1	RAB Reports	Annual	RAB
37	Number of plant and animal genetic resources for food and agriculture secured in either medium or long-term conservation facilities	0	0	0	0	1	To be monitored by RAB	Annual	RAB
38	Percentage of farmers who received extension and/or advisory services in the previous year (disaggregate by gender) including climate smart and nutrition sensitive agriculture	0	0	0	0	1	EICV	3 years	NISR
39	Number of farmers accessing extension services through private sector incentive scheme	0	0	0	0	1	MINAGRI Reports	Annual	MINAGRI, RAB
40	Number of value chain actors (including farmers) trained and supported in business/cooperative management (disaggregated by age and gender) (cum.)	0	0	0	0	1	Project Document	Annual	MINAGRI, RAB
41	Number of women and youth supported in setting up an agri-business (cum.)	0	0	0	0	1	Project document	Annual	MINAGRI, RAB
42	Yield of major crops by type of crop	0	0	0	1	1	SAS, NAEB Reports	Season,	NISR, NAEB

No	Indicator	Agenda					Data source	Frequency	Responsible Institution
		SDG	AU 2063	EAC 2050	NST 1	SSP			
								Annual	
43	Percentage increase in water use efficiency	0	0	0	0	1	RAB Reports	Annual	RAB
44	Animal products produced (Meets, Eggs, Milk)	0	0	0	1	1	RAB Reports	Annual	RAB
45	Percentage of households that consume adequate micro-nutrient food	0	0	0	0	1	RAB, MINAGRI Reports	Annual	RAB, MINAGRI
46	Area of land under erosion control measures (cum.) by type of measure	0	0	0	1	1	RAB, MIS, Survey	Annual	RAB
47	Percentage of farmers using quality seeds on consolidated sites/large-scale farmers	0	0	0	1	1	RAB Reports	Annual	RAB
48	Percentage of farmers use quality seeds: agricultural operator/non- consolidated sites	0	0	0	0	1	RAB Reports	Annual	RAB
49	Percentage of farmers who practice integrated pest management	0	0	0	0	1	RAB Reports	Annual	RAB
50	Percentage of mechanised farm operations	0	0	0	0	1	RAB Reports	Annual	RAB
51	Ha of irrigation developed within an Integrated Water Resources Management Framework (cum.)	0	0	0	1	1	RAB, Districts Reports	Annual	RAB, Districts
52	Percentage of farmers using improved feed / fodder and technologies (hay, silage, improved pasture)	0	0	0	0	1	RAB Reports	Annual	RAB
53	Percentage of livestock owners accessing animal health services	0	0	0	0	1	RAB Reports, Districts, MIS	Annual	RAB, Districts
54	Improved local breed as a percentage of local breeds (by livestock type)	0	0	0	0	1	RAB Reports, Districts	Annual	RAB, Districts
55	Number of fingerlings production	0	0	0	0	1	RAB Reports	Annual	RAB
56	Percentage of farm households that produce micro-nutrient-rich food year around	0	0	0	0	1	MINAGRI Reports	Annual	MINAGRI
57	Percentage of farmers receiving weather and climate information products/services	0	0	0	0	1	Meteo Reports	Annual	MINAGRI, METEO RWANDA
58	Number of vulnerable farmers who have benefitted from asset building programmes (disaggregated by male/female headed HH)	0	0	0	0	1	RAB, Districts, MIS, surveys	Annual	RAB, Districts
59	Percentage of affected farmers receiving post-disaster packages	0	0	0	0	1	MIDIMAR	Annual	MIDIMAR
60	Food loss index (Proxy measure: post-harvest losses) by type of crop	0	0	0	0	1	Post-Harvest Loss (survey), M&E MINAGRI	Annual	RAB, MINAGRI
61	Percentage of men and women engaged in agriculture that have access to financial services to be able to transact agriculture business - CAADP Indicator	0	0	0	0	1	FinScope		NISR
62	Reduction rate of the gap between wholesale price and farm gate price	0	0	0	0	1	E-soko+ /value chain-based surveys		MINAGRI
63	Percentage of famers involved in agribusiness by gender and age	0	0	0	0	1	EICV	3 years	NISR
64	Number of other market infrastructure developed - constructed, rehabilitated, maintained (Cum) by type	0	0	0	0	1	Project document	Annual	MINAGRI, RAB
65	Number of farmers (male/female) accessing the Market Information Tool (E-soko+) (cum.)	0	0	0	0	1	MINAGRI Reports	Annual	MINAGRI
66	Number of formalised out-grower schemes and similar modalities implemented with GoR support (cum.)	0	0	0	0	1	RAB/NAEB Reports	Annual	RAB, NAEB
67	Number of agricultural financial services and insurance products provided through SACCOS and coops	0	0	0	0	1	MINAGRI Reports	Annual	MIANAGRI

No	Indicator	Agenda					Data source	Frequency	Responsible Institution
		SDG	AU 2063	EAC 2050	NST 1	SSP			
68	Kcal stored in Rwandan Strategic Grain Reserve (cum.) by national and district levels.	0	0	0	0	1	MINAGRI Reports	Annual	MINAGRI
69	Grain storage facilities (cum.)	0	0	0	0	1	RAB Reports	Annual	RAB
70	Quality assurance and regulation mechanisms established	0	0	0	0	1	MINAGRI Reports	Annual	MINAGRI
71	Level of satisfaction in services delivery (public & private) in agriculture (effectiveness & efficiency)	0	0	0	0	1	MINAGRI score card	Annual	MINAGRI
72	Percentage of private Investment to public Investment in agriculture	0	0	0	0	1	RDB/MINECOFIN Financial reports	Annual	RDB, MINECOFIN
73	Percentage of FDI to Public Investment in agriculture	0	0	0	0	1	Foreign Capital Census, Fin reports	Annual	MINECOFIN
74	Share of new authorised agriculture loans	0	0	0	0	1	MONETARY POLICY AND FINANCIAL	Annual	BNR
75	Scores in the Enabling the Business of Agriculture report (to be customised to the Rwanda's context) - average score by type	0	0	0	0	1	WB report		WB
76	Land for coffee and tea	0	0	0	0	1	NAEB	Annual	NAEB
77	Number of registered private investment and PPPs in agricultural sector	0	0	0	0	1	National PPP Committee, MINAGRI	Annual	MINAGRI
78	Number of domestic private seed and fertiliser production and extension services companies (cum.)	0	0	0	0	1	RAB Reports	Annual	RAB
79	Percentage of operationalised agricultural investment eligible for investment certificate	0	0	0	0	1	Agricultural investment plans	Annual	RAB
80	Percentage of budget executed at districts level	0	0	0	0	1	National Budget	Annual	MINECOFIN
81	Percentage of decentralised project integrating cross-cutting components	0	0	0	0	1	Project/district reports	Annual	RAB
82	Number of Information System applications developed and integrated into agricultural information platform	0	0	0	0	1	SMART reports, M&E reports	Annual	SMART RWANDA

3. Agriculture Sector: Five-year Statistical Plan

The following table provides a summary of the key activities for the agriculture sector statistical plan. It flows directly from the data needs articulated in Table 1, and includes budget and partnership information based on consultations and input from key sector stakeholders.

Table 2: Agriculture Sector Statistical Activities

WBS	Activities	Responsibility		Time frame & Costs (in thousands Frw)					Total NSDS3 (in thousands Frw)	Total NSDS3 (in USD)
		Main	Partner	2019/20	2020/21	2021/22	2022/23	2023/24		
Pillar I: Produce statistics to support evidence-based decision-making				**2,975**	**3,273**	**3,600**	**3,960**	**4,140**	**17,947**	**19,550**
Strategic Objective 02: Enrich and expand data supply across the NSS				**2,975**	**3,273**	**3,600**	**3,960**	**4,140**	**17,947**	**19,550**
2.1	Establishing an institutionalised long-term system of collection, synthesis, and analysis of agricultural R&D investment capacity, and output data in Rwanda	IFPRI	UR-CAVM, UNIK, ICK	2,975	3,273	3,600	3,960	4,140	17,947	19,550
	Grand Total: Agriculture Statistics			**2,975**	**3,273**	**3,600**	**3,960**	**4,140**	**17,947**	**19,550**

A3.2 Education Sector Statistical Plan

1. Sector background

Drawing on the national development priorities identified in the National Strategy for Transformation (NST-1), Vision 2020 and Vision 2050, the Education Sector Strategic Plan (ESSP) aims to capitalise on Rwanda's emerging 'demographic dividend' to foster human capital formation and facilitate a transition to a 'service-led, knowledge-based economy' (ESSP, 2018). The education sector interacts with national statistical development on a programmatic dimension, through academic initiatives to build technical skills in key areas such as data science, as well as an operational dimension, through the production of statistics to track educational progress in Rwanda.

Policy-driven demand for education data in Rwanda has intensified in both volume and complexity. Responding to the global SDG mandate, national targets to 'enhance the quality of learning outcomes', 'increase equitable access' to education, meet 'minimum requirements' for infrastructure, and 'strengthen teacher professional development' place an enormous burden on sector administrative systems to capture metrics of educational quality at more granular levels. Current data products and systems, including the Education Statistical Yearbook and the School Data Management System (SDMS), as well as new initiatives such as the triennial LARS survey, provide a strong foundation to strengthen education statistics, but also highlight an ongoing need to establish strong frameworks for data governance and invest in sector statistical capacity. The following strengths, weaknesses, opportunities and threats (SWOT) will shape progress in these areas throughout implementation of the ESSP and NSDS3:

Strengths	**Weaknesses**
1. The existence of the SDMS provides a strong starting point for integrated data management in the sector. 2. Full integration of national, continental, regional and international initiatives within the SSP. Rwanda was a pilot country in SDG 4 (education), and has already appointed an SDG 4 coordinator. 3. The statistical yearbook currently captures some required disaggregation, and provides a strong foundation for administrative data production. 4. A decentralised management structure will make developing and accessing disaggregated data more feasible. 5. Current organisational structures, including education offices at the district level and an education statistics unit at MINEDUC, provide a strong foundation for continued institutional development	1. Limited coordination across national MDAs and decentralised management (ESSP Challenge 4) creates a disconnect between the SSP, DDS, and Imihigo, weakening monitoring and accountability. 2. Lack of unified data governance or a data management plan for the sector, especially in administrative statistics, creates a heavy burden to reconcile data across sources. 3. A significant number of new indicators (no baselines) require new methods, quality assurance, data management with limited underlying guidance (ESSP Challenge 3). 4. The use of the SDMS is not yet comprehensive, and it should be utilised more effectively to provide the majority of data for the sector. 5. Limited staff dedicated to statistics continues to limit the timeliness and quality of data, and suppresses engagement in more complex analytical tasks.
Opportunities	**Threats**
1. The use of web-based systems, such as SDMS, provides a foundation for	1. Limitations of current technical capacity are felt more acutely at lower levels of

technology-enabled data sharing. 2. The ESSP emphasis on measures of educational quality creates demand for improvements statistical capacity. 3. Expanding ICT training and use builds capacity for data revolution activities in the education sector. 4. Ongoing partnerships with DPs (funding streams and technical support) can enhance the statistical capacity of the education sector. 5. The launch of the NISR training centre will provide improved access to capacity building, especially in data science. 6. The existence of training programs (PhD, Masters and Short Courses) in data science create options for statistical upskilling.	administration, where the data production burden is increasing. 2. Current mechanisms and tools to monitor 'are not strong' (ESSP Challenge 3). This is a particular concern on monitoring equitable access and quality metrics, as these require more complex assessments and statistical techniques. 3. Misalignment of data sources (e.g. EMIS, LARS, other agencies) risks data quality, and consumes staff time and capacity. 4. New initiatives require early monitoring while systems, methods and indicator formulation remains nascent. 5. Weaknesses in data flows across core education institutions threatens effective MEL practice. 6. Multiple Information Management Systems could precipitate duplication and a lack of harmonisation.

2. Sector Data Requirements

This sector plan defines statistical needs and projects for the education sector based on policy indicator frameworks outlined in Table 1, including the NST-1 (8 indicators), the ESSP (57 indicators), the SDGs (9 indicators), AU Agenda 2063 (15 indicators) and EAC Vision 2050 (5 indicators). Calculating overlapping data requirements across frameworks, these 94 indicators translate to 80 unique data points, derived from a diffuse network of data producers in the education sector, encompassing 8 institutions. Only 4 indicators are drawn from NISR products (5%), and 12 currently do not have baselines (15%), illustrating a need to improve and expand data supply over the next 5 years.

Table 1: Education Sector Indicators

No	Indicator	Agenda					Data source	Frequency	Responsible institution
		SDG	AU2063	EAC2050	NST1	SSP			
1	Proportional of Children and young people: (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) Mathematics, by sex	1	0	0	0	0	LARS	2 Years	MINEDUC
2	Participation rate in organised learning (one year before the official primary entry age), by sex	1	0	0	0	0	Statistical year book	Annually	MINEDUC
3	Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex	1	0	0	0	0	Statistical year book	Annually	MINEDUC
4	Parity indices (female/male, rural/urban, bottom/top wealth quantile and others such as disability status, indigenous peoples and conflict-affected, as data become available) for all education indicators on this list that can be disaggregated	1	0	0	0	1	EICV/Report	Annually	NISR/ MINEDUC
5	Proportion of population in a given age group achieving at least a fixed level of proficiency in functional (a) literacy and (b) numeracy skills, by sex	1	0	0	0	0	EICV/Report	3years	NISR/ MINEDUC
6	Net Enrolment Rate in pre- primary.	0	0	0	1	0	Statistical year book	Annually	MINEDUC

No	Indicator	Agenda					Data source	Frequency	Responsible institution
		SDG	AU2063	EAC2050	NST1	SSP			
7	Proportion of schools with access to: (a) electricity; (b) the internet for pedagogical purposes; (c) computers for pedagogical purposes; (d) adapted infrastructure and materials for students with disabilities; (e) basic drinking water; (f) single-sex basic sanitation facilities; (g) basic hand-washing facilities (WASH definitions)	1	0	0	1	1	Statistical year book	Annually	MINEDUC
8	Proportion of teachers in: (a) pre-primary; (b) primary; (c) lower secondary; and (d) upper secondary education who have received at least the minimum organised teacher training (e.g. pedagogical training) pre-service or in-service required for teaching at the relevant level in a given country.	1	1	0	0	1	Statistical year book	Annually	MINEDUC
9	Research and development expenditure as a proportion of GDP.	1	0	0	0	0	Report	Annually	National Council for Sci and Tech
10	Researchers (in full-time equivalent) per million inhabitants	1	0	0	0	0	Report	Annually	National Council for Sci and Tech
11	% children entering P1 having completed 3 years of pre-primary	0	0	0	0	1	MINEDUC	Annual	MINEDUC
12	Proportion of expenditure on network space research to national budget	0	1	0	0	0	ADMIN	Annual	Unspecified
13	R&D spending as a % of GDP	0	1	0	0	0	ADMIN	Annual	Unspecified
14	Proportion of primary and secondary schools with content in educational curriculum on indigenous African culture, values and language	0	1	0	0	0	ADMIN	Annual	MINEDUC
15	% of population who perceive quality improvements in education at all levels	0	1	0	0	0	ADMIN	Annual	MINEDUC
16	% of students who are enrolled in tertiary education out of those who have passed secondary	0	1	0	0	0	Admin	Annually	REB/WDA
17	% of students who are enrolled in skill development programmes out of those who have passed secondary and did not enter the tertiary sector	0	1	0	0	0	Admin	Annually	REB/WDA
18	% of budget allocated to Science, technology and innovation, research and STI driven entrepreneurship development	0	1	0	0	0	Research and Dev. Survey	Annually	MINEDUC
19	% contribution of the Marine- biotechnology to GDP	0	1	0	0	0	Admin	Annually	MINEDUC/ MINECOFIN
20	Proportion of technical and vocational institutions that have programmes on the creation and generation of cultural artefacts, skills development for the generation	0	1	1	0	0	Admin	Annually	MINEDUC
21	Gross enrolment rate at primary, secondary, tertiary and technical and vocational institutions	0	1	0	0	1	Admin	Annually	MINEDUC
22	Proportion of youth who have not been to university and are provided with TVET	0	1	0	0	0	EICV	3 YEARS	NISR
23	Enrolment Rate Childhood Education	0	1	1	0	0	LARS, ADMIN	2 years/ Annually	REB
24	Enrolment Rate in Primary, and Secondary	0	1	1	0	1	LARS, ADMIN	2 years/ Annually	REB
25	Net Primary completion rate in Primary, and Secondary	0	1	1	0	1	LARS, ADMIN	2 years/ Annually	REB
26	TVET Enrolment in numbers (000)	0	0	1	0	0	Admin	Annual	WDA
27	Pupil: Trained Teacher ratio (primary)	0	0	0	1	0	EMIS report	Annual	Ed Sector
28	Percentage of learners achieving minimum proficiency in numeracy in S3	0	0	0	1	0	MINEDUC	Annual	Ed Sector
29	Percentage of students enrolled in STEM related courses as proportion of total students in higher ed and TVET	0	0	0	1	0	MINEDUC reports	Annual	Ed Sector

No	Indicator	Agenda					Data source	Frequency	Responsible institution
		SDG	AU2063	EAC2050	NST1	SSP			
30	% learners at or above basic proficiency in Kinyarwanda, English, and Maths in P3	0	0	0	0	1	LARS	Annual	Ed Sector
31	% learners at or above basic proficiency in Kinyarwanda, English, and Maths in P6	0	0	0	0	1	LARS	Annual	Ed Sector
32	% learners achieving at least minimum proficiency in Kinyarwanda, English, and numeracy in S3	0	0	0	0	1	LARS	Annual	Ed Sector
33	Dropout rate	0	0	0	1	1	EMIS	Annual	Ed Sector
34	Primary repetition rates (national average of all grades)	0	0	0	0	1	EMIS	Annual	Ed Sector
35	% transition from primary to lower secondary education	0	0	0	0	1	EMIS	Annual	Ed Sector
36	% transition from lower secondary to upper secondary	0	0	0	0	1	EMIS	Annual	Ed Sector
37	Upper secondary repetition rate	0	0	0	0	1	EMIS	Annual	Ed Sector
38	% employers satisfied with TVET graduates	0	0	0	0	1	TVET tracer study	Annual	Ed Sector
39	Employability of TVET Graduates	0	0	0	1	1	TVET tracer study	Annual	Ed Sector
40	% of HEI graduates participating in the labour force	0	0	0	0	1	HEC tracer study	Annual	Ed Sector
41	% employers satisfied with HEI graduates	0	0	0	0	1	HEC tracer study	Annual	Ed Sector
42	% HEI graduates employed within 6 months of graduation (female/male)	0	0	0	0	1	HEC tracer study	Annual	Ed Sector
43	% of HEI programmes officially benchmarked against regional and international standards	0	0	0	0	1	HEC	Annual	Ed Sector
44	Average, primary and secondary pupil- qualified teacher ratio (PQTR)	0	0	0	0	1	EMIS	Annual	Ed Sector
45	% of HEI staff qualified to PhD level	0	0	0	0	1	HEC	Annual	Ed Sector
46	% of learners enrolled in STEM related subjects	0	0	0	0	1	EMIS	Annual	Ed Sector
47	% of Science teachers who are qualified	0	0	0	0	1	EMIS	Annual	Ed Sector
48	% of female research and development personnel in Science field in higher education	0	0	0	0	1	DSTR	Annual	Ed Sector
49	% of pre-primary, primary, secondary, TVET and higher education institutions with internet connectivity	0	0	0	0	1	EMIS	Annual	Ed Sector
50	% of HEI programmes available through ODeL	0	0	0	0	1	HEC	Annual	Ed Sector
51	Student-computer ratio at levels of education	0	0	0	0	1	EMIS	Annual	Ed Sector
52	% of secondary schools with computer labs	0	0	0	0	1	EMIS	Annual	Ed Sector
53	% of schools and TVET institutions equipped with at least 2 SMART classrooms	0	0	0	0	1	REB	Annual	Ed Sector
54	% of schools, TVET and higher education institutions with digital content	0	0	0	0	1	EMIS	Annual	Ed Sector
55	% of primary schools having pre-primary level	0	0	0	0	1	EMIS	Annual	Ed Sector
56	Formal and informal enrolment in TVET (all categories all levels)	0	0	0	0	1	EMIS	Annual	Ed Sector
57	Enrolment in HEI per 100,000 inhabitants	0	0	0	0	1	EMIS	Annual	Ed Sector
58	% of the population aged 15 years plus who are literate	0	0	0	0	1	EICV	3 YEARS	NISR
59	% schools, TVET and higher education institutions meeting minimum quality assurance standards	0	0	0	0	1	REB	Annual	Ed Sector
60	% pre-primary schools meeting standard PCR: 32:1	0	0	0	0	1	EMIS	Annual	Ed Sector
61	% primary schools meeting standard PCR: 40:1	0	0	0	0	1	EMIS	Annual	Ed Sector
62	% lower secondary schools meeting standard PCR: 40:1	0	0	0	0	1	EMIS	Annual	Ed Sector
63	% upper secondary schools meeting standard PCR: 38:1	0	0	0	0	1	EMIS	Annual	Ed Sector
64	% of TVET institutions meeting standard trainer-classroom ratio 25:1	0	0	0	0	1	WDA	Annual	Ed Sector
65	% pre-primary, primary, lower secondary, upper secondary and TVET with electricity	0	0	0	0	1	EMIS	Annual	Ed Sector
66	% pre-primary, primary, secondary and TVET with improved water	0	0	0	0	1	EMIS	Annual	Ed Sector
67	% pre-primary, primary, secondary and TVET with improved toilets	0	0	0	0	1	EMIS	Annual	Ed Sector
68	% pre-primary, primary, secondary and TVET with handwashing facilities	0	0	0	0	1	EMIS	Annual	Ed Sector

No	Indicator	Agenda					Data source	Frequency	Responsible institution
		SDG	AU2063	EAC2050	NST1	SSP			
69	Girls national examination pass rates in primary and secondary education	0	0	0	0	1	Natl examination results	Annual	Ed Sector
70	National examination pass rates of LwD at P6, S3 and S6	0	0	0	0	1	Natl examination results	Annual	Ed Sector
71	Number of collaborative research projects undertaken between national HEIs	0	0	0	0	1	DSTR	Annual	Ed Sector
72	Number of collaborative research projects between national and international HEIs	0	0	0	0	1	DSTR	Annual	Ed Sector
73	Number of highly ranked international HEIs operating in Rwanda	0	0	0	0	1	HEC	Annual	Ed Sector
74	% of TVET institutions meeting quality assurance standards	0	0	0	0	1	WDA	Annual	Ed Sector
75	% of HEIs independently monitored against international benchmarks	0	0	0	0	1	HEC	Annual	Ed Sector
76	% of head teachers trained and mentored in leadership and management	0	0	0	0	1	REB	Annual	Ed Sector
77	Number of PPPs at pre-primary	0	0	0	0	1	MINEDUC	Annual	Ed Sector
78	% of TVET trainees accessing private industrial attachments	0	0	0	0	1	WDA	Annual	Ed Sector
79	% of income raised by public TVET and HEIs compared to total budget	0	0	0	0	1	WDA	Annual	Ed Sector
80	Percentage of students enrolled in TVET as proportion of total students	0	0	0	1	0	ADMIN	Annual	MINEDUC

3. Education Sector: Five-year Statistical Plan

The following table provides a summary of the key activities for the education sector statistical plan. It flows directly from the data needs articulated in Table 1, and includes budget and partnership information based on consultations and input from key sector stakeholders.

Table 2: Education Sector Statistical Activities

WBS	Activities	Responsibility		Time frame & Costs (in thousands Frw)					Total NSDS3 (in thousands Frw)	Total NSDS3 (in USD)
		Main	Partner	2019/20	2020/21	2021/22	2022/23	2023/24		
Pillar I: Produce statistics to support evidence-based decision-making				**122,500**	**65,125**	**116,856**	**49,828**	**103,854**	**458,163**	**499,088**
Strategic Objective 02: Enrich and expand data supply across the NSS				**122,500**	**65,125**	**116,856**	**49,828**	**103,854**	**458,163**	**499,088**
2.1	Higher Education Statistical Year Book Report	HEC	MINEDUC, WDA	10,000	10,000	10,000	10,000	10,000	50,000	54,466
2.2	Robust electronic M&E of the Education Sector framework	MINEDUC	REB, WDA, HEC, NISR, UR, RP, districts	52,500	55,125	46,856	39,828	33,854	228,163	248,543
2.4	Tracer Study on employability of Graduates and Employers' satisfaction	HEC	MINEDUC, WDA	60,000	-	60,000	-	60,000	180,000	196,078
Pillar II: Facilitate a data revolution to deepen statistical impact				**220,000**	**220**	**233,398**	**245,068**	**257,321**	**956,007**	**1,058,920**
Strategic Objective 04: Harmonise best practices in data governance across the NSS				**220,000**	**220**	**233,398**	**245,068**	**257,321**	**956,007**	**1,058,920**
4.1	EDMIS and EDMS	REB	-	220,000	220	233,398	245,068	257,321	956,007	1,058,920
	Grand Total: Education Statistics			**342,500**	**65,345**	**350,254**	**294,896**	**361,175**	**1,414,170**	**1,558,008**

A3.3 Energy Sector Statistical Plan

1. Sector background

Drawing on the three pillars of the National Strategy for Transformation (NST-1), and the aspirations articulated in Rwanda Vision 2020 and Vision 2050, the Energy Sector Strategic Plan (ESSP) aims to support the linkage between energy and economic development by 'expanding access to electricity, ensuring sustainability in biomass supply, and securing supplies of petroleum'. An aim to achieve NST-1 and SDG7 aspirations to 'provide affordable clean energy for all' requires high-precision data, covering both rural and urban areas, to optimise intervention targeting and minimise duplication. To enable such analysis, the ESSP highlights current sector data gaps as a particularly important issue to address during strategy implementation.

A need for new metrics to identify service outages and manage the transmission network demands significant investments in statistical capacity. The ESSP aspires to adopt a 'demand-driven approach' to energy policy and programming, one that recognises linkages to other NST-1 sectors, including natural resource management, agriculture, ICT and private sector development. However, new patterns of data sharing and cooperation must emerge to optimise cross-sectoral alignment. These objectives are supported by plans captured in the ESSP to develop an energy sector database and improve institutional MIS' at REG and MININFRA. Together, these priorities highlight a need for significant expansion of statistical capacity in the energy sector. The following strengths, weaknesses, opportunities and threats (SWOT) will shape progress in these areas throughout implementation of the ESSP and NSDS3:

Strengths	**Weaknesses**
1. Clear use cases at national, district and local level motivate investments in sector statistical development. 2. Ongoing efforts to develop MIS' in key stakeholder MDAs provide frameworks for improvements to data management and accuracy. 3. Analytical products link to project planning and budgeting cycles,	1. Limited existing systems undermine effective data governance 2. Lack of formalised policies and standards for data access, data curation and data management across the sector. 3. Weak linkages to complementary sectors, such as ENR, threaten complete data coverage.
Opportunities	**Threats**
1. 100% electricity coverage target requires granular data and analytical capacity. 2. Plans to recruit GIS analysts and expand IT infrastructure at lead secretariat (MININFRA) strengthens the enabling environment for statistical development. 3. DRP engagement to support data dissemination (e.g. NDP) and capacity building for analysis.	1. Limited mechanisms for coordination across national, district and local levels threaten effective data production and data uptake. 2. Lack of centralised sector MIS reinforces data silos and increases risks of institutional fragmentation.

2. Sector Data Requirements

This sector plan defines statistical needs and projects for the energy sector based on policy indicator frameworks outlined in Table 1, including the NST-1 (2 indicators), the ESSP (7 indicators), the SDGs (4 indicators), AU Agenda 2063 (6 indicators) and EAC Vision 2050 (2 indicators). Calculating overlapping data requirements across frameworks, these 21 indicators translate to 16 unique indicators, which are derived from a diffuse network of producers, encompassing 5 institutions. The sector is supported directly by NISR survey products (6 indicators), but 4 indicators lack baselines (25%), illustrating an increase in demand for energy data over the next 5 years.

Table 1: Energy Sector Indicators

No	Indicator	Agenda					Data source	Frequency	Responsible Institution
		SDG	AU 2063	EAC 2050	NST 1	SSP			
1	Proportion of population with access to and using electricity	1	1	1	1	1	EICV	3 years	NISR
2	Proportion of population with primary reliance on clean fuels and technology	1	0	0	0	0	EICV	3 years	NISR
3	Renewable energy share in the total final energy consumption	1	0	0	0	0	REG Report	Annual	REG
4	Energy intensity measured in terms of primary energy and GDP	1	0	0	0	0	REG Report	Annual	REG
5	Per capita energy consumption (KWH)	0	1	0	0	0	Admin	Annual	MININFRA
6	Increase in % of renewable energy sourced from the wave energy	0	1	0	0	0	EICV	3 years	NISR
7	% reduction of fossil fuel in total energy production	0	1	0	0	0	Admin	Annually	MoE
8	Number of additional Mega Watts into the national grid	0	1	0	0	0	Admin	3 years	NISR
9	% of connectivity to electricity by consumers disaggregate by type	0	1	0	0	0	EICV	3 years	NISR
10	Energy Production (Megawatts) by type	0	0	1	0	0	Admin	Annually	MININFRA
11	Percentage of households using firewood for cooking	0	0	0	1	1	EICV	3 years	NISR
12	Generation capacity increased to ensure that all demand is met and a 15% reserve margin is maintained	0	0	0	0	1	REG Report	Annual	REG
13	Reliability of electricity supply improved: average number of power interruptions per year reduced to 16 and average number of hours without power to 9	0	0	0	0	1	RURA assessment	Annual	RURA
14	Productive user access to electricity increased to 100%	0	0	0	0	1	electrification report	Annual	REG
15	Losses in the transmission and distribution networks reduced to 15%	0	0	0	0	1	RURA assessment	Annual	RURA
16	Petroleum strategic reserves increased to cover three months' supply	0	0	0	0	1	MININFRA reporting	Annual	MININFRA

A3.4 Environment & Natural Resources Sector Statistical Plan

1. Sector Background

Drawing on the three pillars of the National Strategy for Transformation (NST-1), and the aspirations articulated in Rwanda Vision 2020 and Vision 2050, the Environment and Natural Resources (ENR) Sector Strategic Plan (ENR-SSP) aims to 'promote, coordinate and enable the sustainable management of Rwanda's natural resources to safeguard green and climate resilient growth and achieve high standards of living across generations' (ENR-SSP, 2017). The ENR-SSP represents a critical component of Rwanda's development and growth, 'contributing to Rwanda's vision of sustainable economic development by safeguarding the natural capital that underpins it' (ENR-SSP, pg. 8).

The ENR-SSP identifies 'innovative solutions to systemic and crosscutting issues' as a particular focus, including a new partnership with NISR in natural capital accounting, which targets the link between data availability and effective planning, monitoring and evaluation. A need for 'quality weather and climate information' demands capability to produce and analyse high frequency data flows, including the development of effective early warning systems (EWS) that link to other NST-1 sectors, such as agriculture. Plans to upgrade and scale the Land Administration Information System (LAIS), develop a sector-wide Integrated Natural Resource Management Information System (INRMIS) and introduce a climate 'map room' portal will strengthen frameworks for data management and dissemination. Together, these priorities highlight a need for significant expansion of statistical capacity in the ENR sector. The following strengths, weaknesses, opportunities and threats (SWOT) will shape progress in these areas throughout implementation of the ENR-SSP and NSDS3:

Strengths	**Weaknesses**
1. Data platforms and information systems, including LAIS and the climate 'maproom', provide a strong foundation for improved data management. 2. Highly skilled IT unit at MINILAF provides strong statistical capacity for systems development. 3. Development of sector metadata and methods documentation provides a foundation for harmonised data governance and management. 4. SSP outlines an ambitious agenda to build up not only data governance	1. Low coordination across institutions engaged in data production. 2. Lack of a TWG with a specific focus on sector statistics hampers effective coordination and identification of data use cases. 3. Minimal standards for regular data publication or consistent analytical products. 4. Plans to restrict access to INRMIS reinforces data silos.
Opportunities	**Threats**
1. Development of an integrated MIS (INRMIS) creates opportunities to improve data integration and harmonise data management across the sector. 2. Existing SWG and TWGs provide networks for outreach and facilitate coordination. 3. Cross-cutting sector portfolio creates opportunities to increase broader NSS engagement	1. Uneven levels of statistical capacity (high in MINILAF, low elsewhere) may lead to uneven compliance with sector systems and standards. 2. Lack of publications and a closed MIS hampers data access and uptake, 3. Decline in external investment following the development of the INRMIS

on statistics and analysis.	may compromise sustainability.

2. Sector Data Requirements

This sector plan defines statistical needs and projects for the ENR sector based on policy indicator frameworks outlined in Table 1, including the NST-1 (4 indicators), the ENR-SSP (41 indicators), the SDGs (18 indicators) and AU Agenda 2063 (12 indicators). Calculating overlapping data requirements across frameworks, these 75 indicators translate to 71 unique data points, which are derived from a complex network of producers, encompassing 22 institutions. The sector draws only limited support from NISR survey products (1 indicator) and 27 indicators currently lack baselines (38%), illustrating a need to improve and expand data supply over the next 5 years.

Table 1: ENR Sector Indicators

No	Indicator	Agenda					Data source	Frequency	Responsible Institution
		SDG	AU 2063	EAC 2050	NST 1	SSP			
1	Proportion of total adult population with secure tenure rights to land, with legally recognised documentation and who perceive their rights to land as secure, by sex and by type of tenure	1	0	0	0	0	Land Administration Information System (LAIS)	Annual	RNRA
2	Proportion of bodies of water with good ambient water quality	1	0	0	0	0	Water Quality Monitoring in Rwanda I,II & III	Annual	IWRM
3	Change in water-use efficiency over time	1	0	0	0	0	MININFRA Records	Annual	MININFRA
4	Level of water stress: freshwater withdrawal as a proportion of available freshwater resources	1	0	0	0	0	MININFRA Records	Annual	MININFRA
5	Degree of integrated water resources management implementation (0-100)	1	0	0	0	0	Records of MINIREMA; Consistency analysis for IWRM; pilot survey	Annual	MoE
6	Proportion of transboundary basin area with an operational arrangement for water cooperation	1	0	0	0	0	Nile Basin Initiative; Congo Basin	Annual	MoE
7	Change in the extent of water-related ecosystems over time	1	0	0	0	0	Rwanda State of the environment Report	Annual	RWFA
8	CO2 emission per unit of value added	1	0	0	1	0	(TNC) report on Climate Change	Annual	MoE
9	Ratio of land consumption rate to population growth rate.	1	0	0	0	0	Admin	Annual	RNRA
10	Annual mean levels of fine particulate matter in cities	1	0	0	0	0	MoE Reports	Annual	MoE
11	Number of parties to international multilateral environmental agreements on hazardous waste, and other chemicals that meet their commitments and obligations in transmitting information as required by each relevant agreement	1	0	0	0	0	MoE Reports	Annual	MoE
12	Progress by countries in the degree of implementation of international instruments aiming to combat illegal, unreported and unregulated fishing	1	0	0	0	0	MINAGRI	Annual	MINAGRI
13	Progress by countries in the degree of application of a legal/regulatory/policy/institutional framework which recognises and protects access rights for small-scale fisheries	1	0	0	0	0	MINAGRI/RAB Records	Annual	MINAGRI, RAB

No	Indicator	Agenda					Data source	Frequency	Responsible Institution
		SDG	AU 2063	EAC 2050	NST 1	SSP			
14	Forest coverage of total surface areas	1	0	0	1	1	Records of MINRENA, Rwanda State of Environment and outlook Report	Annual	MoE
15	Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas, by ecosystem type	1	0	0	0	0	National Biodiversity Strategies and Action Plans (NBSAPs)	Annual	MoE
16	Progress towards sustainable forest management	1	0	0	0	0	District forest management plan; Forest management strat	Annual	RWFA
17	Proportion of land that is degraded over total land area	1	0	0	0	0	RNRA Reports	Annual	RNRA
18	Coverage by protected areas of important sites for mountain biodiversity	1	0	0	0	0	RNRA Reports	Annual	RNRA
19	Proportion of waste recycled	0	1	0	0	0	Adm/Specific survey	Annual	REMA
20	% of agricultural land placed under sustainable land management practice	0	1	0	0	0	Admin	Annually	REMA
21	a) % of terrestrial and inland water areas preserved; b) % of coastal and marine areas preserved	0	1	0	0	0	Admin	Annually	RLMU
22	Proportion of national parks and protected areas managed on the basis of master and national plan	0	1	0	0	0	Admin	Annually	RDB
23	% of water demand satisfaction	0	1	0	0	0	Admin	Annually	RNRA
24	% in water productivity used in rain-fed agriculture and irrigation	0	1	0	0	0	Admin	Annually	RNRA
25	% of rain water harvested for productive use	0	1	0	0	0	Admin	Annually	RNRA
26	% of farmers, pastoralist and fisher folks practicing climate resilient production systems	0	1	0	0	0	Admin	Annually	REMA
27	Levels of emissions arising from agriculture bio-diversity loss, land use and deforestation	0	1	0	0	0	Admin	Annually	RAB
28	Number of Cities meeting the WHO's Ambient Air Quality Standards (AAQS)	0	1	0	0	0	Admin	Annually	REMA
29	The level of satisfaction of local authorities on the share of the exploitation of natural resources for the benefit of all.	0	1	0	0	0	Admin	Annually	RGB
	The proportion of revenue generated from exploitation of natural resources retained in the local communities.	0	1	0	0	0	Admin	Annually	RGB
30	Value of mineral exports per annum	0	0	0	1	0	RMB Reports	Annually	RMPGB
31	% of public forest plantation allocated to private operators	0	0	0	1	0	RWFA reports	Annually	RWFA
32	Number of ha of land under agro forestry	0	0	0	0	1	RWFA report /Ground survey	Annually	RWFA
33	% of public forest plantations allocated to private women and men operators	0	0	0	0	1	RWFA report/Contracts/ MoU	Annually	RWFA
34	Number of ha of small natural forests under participatory management	0	0	0	0	1	RWFA reports /MoUs	Annually	RWFA
35	% of improved seeds provided to women and men farmers	0	0	0	0	1	RWFA reports	Annually	RWFA
36	% of charcoal produced by certified "green charcoal" of women and men's companies and cooperatives	0	0	0	0	1	MINILAF and RWFA reports	Annually	MoE
37	Number of Ha of degraded forests rehabilitated	0	0	0	0	1	RWFA reports	Annually	RWFA
38	Renewable water resources availability per capita per annum (m3/capita/annum	0	0	0	0	1	WRM reports	Annually	WRM
39	% of catchments with management committees Task Forces of women and men	0	0	0	0	1	WRM reports	Annually	WRM
40	Number of shared basins/catchments with cooperation frameworks	0	0	0	0	1	WRM reports	Annually	WRM
41	Percentage of implementation of approved catchment management plans	0	0	0	0	1	WRM reports	Annually	WRM

No	Indicator	Agenda					Data source	Frequency	Responsible Institution
		SDG	AU 2063	EAC 2050	NST 1	SSP			
42	Percentage of degraded areas in 4 priority catchments rehabilitated	0	0	0	0	1	Reports from WRMD/REMA/MINAGRI/ FONERWA and Districts	Annually	REMA, MINAGRI, FONERWA
43	Percentage of water bodies with ambient water quality	0	0	0	0	1	WRM/ REMA/ WASAC reports	Annually	WRM
44	Percentage of Floods control investment measures implemented	0	0	0	0	1	WRM reports	Annually	WRM
45	% of women and men water users with water permits	0	0	0	0	1	WRM reports	Annually	WRM
46	Artificial water storage per capita	0	0	0	0	1	WRM reports	Annually	WRM
47	Proportion of households with RWH systems	0	0	0	0	1	EICV, National census	3 years	NISR
48	Number of Sector and district land plans (Cumulatively) integrated into a paperless Land register	0	0	0	0	1	LAIS	Annually	RNRA
49	% of Land use plan harmonised with NLUDMP	0	0	0	0	1	DLUP, LUDP, CoK harmonised	Annually	DLUP
50	Number of administrative entities with annual reference prices and market value integrated	0	0	0	0	1	LAIS	Annually	RNRA
51	% of compliance of land use development plans to the NLUDMP	0	0	0	0	1	Assessment report on district land use master plan	Annually	RNRA
52	% of agriculture and premium land protected	0	0	0	0	1	Assessment report on district land use master plan	Annually	RNRA, Districts
53	% of increased coverage in surveying and mapping	0	0	0	0	1	CORS Rwanda geo net platform	Annually	CORS Rwanda
54	% of National Spatial Data Infrastructure established and operational	0	0	0	0	1	NSDI platform in place	Annually	NSDI
55	Number of weather and climate products and services produced and disseminated by type of channel	0	0	0	0	1	QMS Audit report	Annually	QMS
56	% of occurred extreme weather events for which advance warning was provided at least 30 min in advance	0	0	0	0	1	Feedback for various platforms and internal forecast verification	Annually	METEO RWANDA, RNRA
57	% of polled women and men users of weather & climate information from Meteo Rwanda who are satisfied or very satisfied with the service	0	0	0	0	1		Annual sector Satisfaction report	METEO RWANDA, RNRA
58	% of demand of Meteo Rwanda weather data by channels	0	0	0	0	1	Climate Data requests served	Annually	METEO RWANDA, RNRA
59	% of forecasts by level of accuracy	0	0	0	0	1	Forecast verification report	Annually	METEO RWANDA, RNRA
60	Number of sectors with approved SEA monitored	0	0	0	0	1	Annual monitoring reports	Annually	MoE
61	% of approved EIA and EA certified projects in compliance (75% or above) with EIAs, EAs Studies and Conditions of approval	0	0	0	0	1	REMA reports	Annually	REMA
62	% of hazardous/toxic waste safely managed	0	0	0	0	1	REMA reports	Annually	REMA
63	Number of circular economy initiatives supported	0	0	0	0	1	REMA, FONERWA, MoE Reports	Annually	REMA
64	% of air quality monitoring stations with Good , Moderate , Unhealthy Air Quality Index	0	0	0	0	1	Station readings; REMA reports	Annually	REMA

No	Indicator	Agenda					Data source	Frequency	Responsible Institution
		SDG	AU 2063	EAC 2050	NST 1	SSP			
65	Number of degraded wetlands ecosystems rehabilitated (fully protected wetlands and complex wetlands)	0	0	0	0	1	REMA and RWFA reports	Annually	REMA
66	% of Nationally Determined Contributions (NDC) programmatic targets achieved	0	0	0	0	1	NDC monitoring report	Annually	NDC
67	Volume of Finance Mobilised (in USD Millions)	0	0	0	0	1	Financing agreements	Annually	MoE
68	Increased knowledge of the available minerals, petroleum and gas in the country	0	0	0	0	1	RMPGB reports	Annually	RMPGB
69	Value of Annual contributions of mining sector to export revenues in USD ($).	0	0	0	0	1	RMPGB Reports	Annually	RMPGB
70	Level of grade for exported Minerals.	0	0	0	0	1	RMPGB Reports and grade reports of exported minerals	Annually	RMPGB
71	Number of mines complying with environmental and modernised practices	0	0	0	0	1	RMPGB and REMA Reports	Annually	RMPGB

3. ENR Sector: Five-year Statistical Plan

The following table provides a summary of the key activities for the ENR sector statistical plan. It flows directly from the data needs articulated in Table 1, and includes budget and partnership information based on consultations and input from key sector stakeholders.

Table 2: ENR Sector Statistical Activities

WBS	Activities	Responsibility		Time frame & Costs (in thousands Frw)					Total NSDS3 (in thousands Frw)	Total NSDS3 (in USD)
		Main	Partner	2019/20	2020/21	2021/22	2022/23	2023/24		
Pillar I: Produce statistics to support evidence-based decision-making				**521,540**	**45,000**	**45,000**	**45,000**	**45,000**	**701,540**	**766,498**
Strategic Objective 02: Enrich and expand data supply across the NSS				**521,540**	**45,000**	**45,000**	**45,000**	**45,000**	**701,540**	**766,498**
2.1	Mapping and surveying tools Modernised and operationalised	RLMUA	DFID	192,000	-	-	-	-	192,000	209,150
2.2	Climate data management and storage (hardware and software systems of data management)	Meteo-Rwanda	WMO	20,000	20,000	20,000	20,000	20,000	100,000	108,932
2.3	Efficient implementation and monitoring of land use plans to ensure sustainable development	RLMUA	DFID	284,540	-	-	-	-	284,540	309,956
2.4	Natural Capital Accounting	NISR	World Bank, MoE	15,000	15,000	15,000	15,000	15,000	75,000	80,012
Pillar II: Facilitate a data revolution to deepen statistical impact				**552,500**	**103,000**	**73,000**	**33,000**	**73,000**	**834,500**	**909,041**
Strategic Objective 04: Harmonise best practices in data governance across the NSS				**552,500**	**103,000**	**73,000**	**33,000**	**73,000**	**834,500**	**909,041**

WBS	Activities	Responsibility		Time frame & Costs (in thousands Frw)					Total NSDS3 (in thousands Frw)	Total NSDS3 (in USD)
		Main	Partner	2019/20	2020/21	2021/22	2022/23	2023/24		
4.1	Develop baseline of climate information user satisfaction	Meteo-Rwanda	CIAT Rwanda	30,000	30,000	30,000	30,000	30,000	150,000	163,399
4.2	Elaboration of Environment Statistics Compendium	REMA	NISR, MoE, MINAGRI, MININFRA	40,000	-	40,000	-	40,000	120,000	130,719
4.3	Integrated and harmonised land information in a paperless land register for an optimised land management	RLMUA	DFID	354,500	-	-	-	-	354,500	386,166
4.5	Re-operationalisation of Rwanda Environment Information System (RENVIS)	REMA	NISR, MoE, MINAGRI, MININFRA	55,000	-	-	-	-	55,000	59,913
4.6	Research and document sector, district, provincial and national level of socio-economic exposure and vulnerability to climate extreme including climate change	Meteo-Rwanda	MINALOC	3,000	3,000	3,000	3,000	3,000	15,000	16,340
4.7	Upgrading & data migration through the climate change portal	REMA	NISR, MoE, MINAGRI, MININFRA	70,000	70,000	-	-	-	140,000	152,505
Pillar III: Build statistical capability across the NSS to increase data uptake and use				**68,000**	**68,000**	**86,000**	**86,000**	**86,000**	**394,000**	**429,194**
Strategic Objective 07: Improve data uptake and statistical literacy through strategic communication, dissemination and advocacy				**48,000**	**48,000**	**66,000**	**66,000**	**66,000**	**294,000**	**320,261**
7.1	Essay writing and youth competition on ECC mainstreaming barometer	REMA	NISR, MoE, MINAGRI, MININFRA	48,000	48,000	48,000	48,000	48,000	240,000	261,438
7.2	Quarterly release of Rwanda Environment Statistics infographics	REMA	NISR, MoE, MINAGRI, MININFRA	-	-	18,000	18,000	18,000	54,000	58,824
Strategic Objective 08: Enhance capacity for data management and statistical analysis				**20,000**	**20,000**	**20,000**	**20,000**	**20,000**	**100,000**	**108,932**
8.2	Training on climate data management (Increase data management, uptake of climate services available from maproom platform of Meteo Rwanda)	Meteo-Rwanda	IRI, CIAT and other research institutions	20,000	20,000	20,000	20,000	20,000	100,000	108,932
	Grand Total: Environment and Natural Resources Statistics			**1,142,040**	**216,000**	**204,000**	**164,000**	**204,000**	**1,930,040**	**2,104,733**

A3.5 Finance Sector Statistical Plan

1. Sector Background

Drawing on the three pillars of the National Strategy for Transformation (NST-1), and the aspirations articulated in Rwanda Vision 2050, the Financial Sector Strategic Plan (FSSP) aims to 'deepen, broaden and develop the financial system' and facilitate 'an inclusive and financially literate population' as part of a broader effort to 'accelerate economic growth' and 'move toward a poverty free Rwanda'. The financial sector has a strong foundation in statistical data production, driven by the NISR economic statistics unit and high-capability MDAs, such as BNR and RRA. Building on this foundation, the FSSP will require a continuous flow of data to improve financial inclusiveness and access to finance while building Rwanda's potential as a centre for financial services.

Improving inclusiveness and access necessarily requires granular data to target interventions and analyse financial decision-making at all levels of society. Likewise, creating an attractive environment for investment demands strong norms for transparency and high-frequency information flows to create a climate of trust and draw in investment. Under the FSSP, the finance sector is poised to significantly enhance statistical development during NSDS3 implementation, with interventions in electronic payments and digital financial services, as well as through the expansion of institution-level data systems and the development of a sector management information system (FMIS). New sources of high-frequency transaction data increase demands on sector statistical capability, which will be addressed (in part) through a partnership with NISR under the DRP to build data science capacity in finance sector MDAs. The following strengths, weaknesses, opportunities and threats (SWOT) will shape progress in these areas throughout implementation of the FSSP and NSDS3:

Strengths	**Weaknesses**
1. The Sector Working Group Monitoring Mechanism for coordination and accountability in statistics. 2. Established partnership with NISR in data production and statistical capacity building. 3. Track record of financial system supervision creates a demand high-quality data and established patterns of data governance. 4. Clear linkages across the results framework, FSSP, and JSR process sets the stage for effective impact evaluation.	1. Diffuse systems across institutions not yet unified under an MIS. 2. District ownership of interventions increases pressure on local data collection and analysis, where capacity gaps are more durable.
Opportunities	**Threats**
1. Strong history of innovation and ICT use creates demand for improvements in	1. Cross-cutting character of interventions increases coordination burden and risks

data availability, and an opportunity to engage with the DRP. 2. Linkages to NIDs, electronic payments etc. jump-started a flow of big data in the sector creates demand for upskilling. 3. Financial inclusiveness targets require disaggregated data to identify and reach citizens. 4. Demand for 'extensive financial analysis' requires high-quality data and analytical capacity.	of data inconsistencies. 2. Limitations of transparency and access to information across institutions threaten strategic objectives to draw in investment. 3. Analysis of sensitive individual financial records requires appropriate safeguards.

2. Sector Data Requirements

This sector plan defines statistical needs and projects for the finance sector based on policy indicator frameworks outlined in Table 1 (below), including the NST-1 (3 indicators), the FSSP (15 indicators), the SDGs (5 indicators), AU Agenda 2063 (15 indicators) and EAC Vision 2050 (6 indicators). Calculating overlapping data requirements across frameworks, these 44 indicators translate to 38 unique data points derived from a diffuse network of producers, encompassing 9 institutions. The sector draws on NISR data products (5 indicators, 13%) and 20 indicators currently lack baselines, illustrating increasing demand for finance sector data.

Table 1: Finance Sector Indicators

No	Indicator	Agenda					Data source	Frequency	Responsible institution
		SDG	AU2063	EAC2050	NST1	SSP			
1	Number of (a) commercial bank branches per 100,000 adults and (b) number of automated teller machines (ATMs) per 100,000 adults	1	0	0	0	1	FSDD/ Financial Sector	Annually	MINECOFIN
2	Proportion of adults (15 years and older) with an account at a bank or other financial institution or with a mobile-money-service provider	1	0	0	0	1	FSDD/ Financial Sector	Annually	MINECOFIN
3	Remittance costs as a proportion of the amount remitted	1	0	0	0	0	MACRO-ECONOMICS	Annual	BNR
4	Volume of remittances (in United States dollars) as a proportion of total GDP	1	0	0	0	0	MACRO-ECONOMICS	Annual	BNR
5	Debt service as a proportion of exports of goods and services	1	0	0	0	0	MACRO-ECONOMICS	Annual	MINECOFIN/ BNR
6	Amount of philanthropic funds mobilised	0	1	0	0	0	Admin	Annual	Unspecified
7	% of loan portfolios disbursed to women by size of portfolio (R/U)	0	1	0	0	0	Admin	Annual	
8	% growth rate in increase in real GDP	0	1	0	0	0	N.ACCOUNT	Annually	NISR
9	Number of commodities exchanges functional	0	1	0	0	0	Admin	Annually	BNR
10	% expenditure R&D as a percentage of GDP	0	1	0	0	0	Admin	Annually	BNR
11	% improvement in diversification index	0	1	0	0	0	Admin	Annually	BNR
12	Proportion of women with a savings account	0	1	0	0	0	FINSCOPE SURVEY	3 YEARS	NISR

No	Indicator	Agenda					Data source	Frequency	Responsible institution
		SDG	AU2063	EAC2050	NST1	SSP			
13	Proportion of population with an account at a formal financial institution	0	1	0	0	1	FINSCOPE SURVEY	3 YEARS	NISR
14	Proportion of development expenditure contributed by national capital markets	0	1	0	0	0	N.ACCOUNT	Quarterly	NISR
15	Total tax revenue/GDP	0	1	0	0	0	N.ACCOUNT	Quarterly	NISR
16	% of firms paying tax	0	1	0	0	0	Admin	Annually	MINECOFIN
17	Percentage of population paying direct tax	0	1	0	0	0	Admin	Annually	MINECOFIN
18	Share of the recurrent and development expenditure funded by tax and non-tax revenue	0	1	0	0	0	Admin	Quarterly	MINECOFIN
19	% decrease of total ODA as a percentage of the national budget	0	1	0	0	0	Admin	Annually	MINECOFIN
20	% Volume of remittances (USD/GDP)	0	1	0	0	0	Admin	Quarterly	BNR
21	Average Regional Economic Growth (%)	0	0	1	0	0	Admin	Annually	MINICOM
22	Gross Capital Formation (as a % of Total Export)	0	0	1	0	0	Admin	Annually	BNR
23	Raising Local Value Addition (%)	0	0	1	0	0	Admin	Annually	MINECOFIN
24	Contribution to GDP (%) [Agriculture, Industry and Service]	0	0	1	1	0	Admin	Annually	BNR/ NAEB
25	Manufactured Export (as % of total Export)	0	0	1	0	0	Admin	Annually	MINICOM
26	FDI net inflows (% of GDP)	0	0	1	0	0	Admin	Annually	BNR
27	Gross domestic Savings as a share of GDP	0	0	0	1	1	MINECOFIN reports		Fin Sector
28	Percentage of payments done electronically as a share of GDP	0	0	0	1	1	Monetary Policy and Financial Stability Statement reports		Fin Sector
29	Domestic Credit to private sector as percentage (%) of GDP	0	0	0	0	1	Admin	Annually	MINECOFIN, RDB, BNR
30	Total new authorised loans to the private sector	0	0	0	0	1	Admin	Annually	MINECOFIN, RDB, BNR
31	Credit to Agriculture sector (primary farming and agro processing in agriculture, fisheries & livestock) as percentage of total loans (all sectors)	0	0	0	0	1	Admin	Annually	MINECOFIN, BNR
32	Proportion of small-scale industries with a loan/loans to the SMEs	0	0	0	0	1	Admin	Annually	MINECOFIN, BNR
33	Number of Adult Rwandans financially Included	0	0	0	0	1	Admin	Annually	MINECOFIN, BNR
34	Total value of inward and outward illicit financial flows (in current United States dollars)	0	0	0	0	1	Admin	Annually	MINECOFIN
35	Number of Active Mobile Money Holders (Subscribers)	0	0	0	0	1	Admin	Annually	MINECOFIN
36	Number POS terminals	0	0	0	0	1	Admin	Annually	MINECOFIN, BNR
37	Number of international financial services institutions in the market	0	0	0	0	1	Admin	Annually	MINECOFIN, BNR
38	Value of foreign investments made in the financial services (FDIs)	0	0	0	0	1	Admin	Annually	MINECOFIN, RDB, BNR

3. Finance Sector: Five-year Statistical Plan

The following table provides a summary of the key activities for the finance sector statistical plan. It flows directly from the data needs articulated in Table 1, and includes budget and partnership information based on consultations and input from key sector stakeholders.

Table 2: Finance Sector Statistical Activities

WBS	Activities	Responsibility		Time frame & Costs (in thousands Frw)					Total NSDS3 (in thousands Frw)	Total NSDS3 (in USD)
		Main	Partner	2019/20	2020/21	2021/22	2022/23	2023/24		
Pillar I: Produce statistics to support evidence-based decision-making				**260,613**	**248,113**	**253,032**	**262,952**	**253,693**	**1,278,403**	**1,392,596**
Strategic Objective 01: Sustain and enhance core data production at NISR				**260,613**	**248,113**	**253,032**	**262,952**	**253,693**	**1,278,403**	**1,392,596**
1.2	To conduct Informal Cross Border Trade Survey	NISR	BNR	142,281	142,281	142,281	142,281	142,281	711,406	774,952
1.4	Maintain and develop the system of Price Statistics Compilation /Collecting and analysing Consumer Price Statistics	NISR	BNR	82,912	72,992	77,754	87,674	77,754	399,086	434,734
1.5	Maintain and develop the system of Price Statistics Compilation /Collecting and analysing Producer Price Statistics	NISR	BNR	35,420	32,840	32,997	32,997	33,658	167,911	182,910
Strategic Objective 02: Enrich and expand data supply across the NSS				**3,000**	**3,500**	**4,000**	**4,500**	**5,000**	**20,000**	**21,786**
2.1	FPC Census	BNR	RDB, NISR, PSF	3,000	3,500	4,000	4,500	5,000	20,000	21,786
	Grand Total: Financial Sector Development Statistics			**263,613**	**251,613**	**257,032**	**267,452**	**258,693**	**1,298,403**	**1,414,382**

A3.6 Governance & Decentralisation Sector Statistical Plan

1. Sector Background

Drawing on the three pillars of the National Strategy for Transformation (NST-1), and the aspirations articulated in Rwanda Vision 2020 and Vision 2050, the Governance & Decentralisation (G&D) Sector Strategic Plan (GD-SSP) aims to 'strengthen further the institutions of accountability and governance, foster citizen participation' as well as 'civil society and media involvement', while also 'promoting Rwandan core values'. Alignment between the GD-SSP and NSDS3 is unique. In addition to key projects in data production, programmatic objectives to strengthen transparency, accountability and citizen participation support efforts to increase data uptake and promote statistical literacy.

The G&D sector has developed a number of innovative instruments for data production, including governance scorecards and citizen report cards, which provide a consistent flow of governance data that must be sustained and improved. The GD-SSP includes plans to develop the sector Abunzi Management Information System (AMIS) and an integrated case management system to support coordination across stakeholders. However, these efforts to leverage technology and enhance data quality will require strategic investments and engagement to improve sector statistical capacity. The following strengths, weaknesses, opportunities and threats (SWOT) will shape progress in these areas throughout implementation of the GD-SSP and NSDS3:

Strengths	**Weaknesses**
1. Strong stakeholder participation in sector coordination mechanisms including the SWG. 2. Mandate for adaptation as a part of M&E creates demand for timely data, and paths to respond to it. 3. Key stakeholder institutions hold a strong legal framework/organisational structure to support M&E operations. 4. Plans to improve an existing MIS will optimise data collection and coordination across stakeholders.	1. Limited engagement with NISR survey products places a significant burden on administrative systems. 2. Substantive policy-driven data gaps require a significant expansion of data production and statistical coordination during GD-SSP implementation.
Opportunities	**Threats**
1. Concept of 'decentralisation of knowledge' and an emphasis on 'transparency and accountability' motivates improvements in data literacy, dissemination and ICT-based interventions. 2. Focus on 'centralisation of data and decentralisation of operations' recognises the importance of data as a tool for governance, and the need to enhance capability at local levels. 3. Plans to 'enhance coordination in planning and implementation' through	1. Cross-cutting character of the sector places significant demands on efficient stakeholder coordination and cooperation for success. 2. Lack of an integrated sector MIS presents threats to data integration and interoperability.

capacity development will support evidence-based approaches.	

2. Sector Data Requirements

This sector plan defines statistical needs and projects for the G&D sector based on policy indicator frameworks outlined in Table 1 (below), including the NST-1 (2 indicators), the GD-SSP (50 indicators), the SDGs (5 indicators), AU Agenda 2063 (14 indicators) and EAC Vision 2050 (3 indicators). Calculating overlapping data requirements across frameworks, these 79 indicators translate to 66 unique data points drawn from a highly diffuse network of producers, encompassing 18 institutions. Only 2 indicators are sourced from NISR products, and 8 indicators lack baselines (9%), illustrating the pressure to both improve and expand data sources over the next 5 years.

Table 1: Governance & Decentralisation Sector Indicators

No	Indicator	Agenda					Data source	Frequency	Responsible Institution
		SDG	AU 2063	EAC 2050	NST 1	SSP			
1	Proportion of seats held by (a) women in national parliaments and (b) local governments	1	1	1	0	1	Admin	Annual	GMO
2	Proportion of women in managerial positions	1	1	0	0	0	LFS	Quarterly, Annual	NISR
3	Proportion of countries with systems to track and make public allocations for gender equality and women's empowerment	1	0	0	0	0	Admin		GMO
4	Proportion of local administrative units with established and operational policies and procedures for participation of local communities in water and sanitation management	1	0	0	0	0	National Policy & Strategy for WATSAN	Annual	MINALOC
5	Proportion of children under 5 years of age whose births have been registered with a civil authority, by age	1	0	0	0	0	Civil Registration and Vital Statistics; DHS:	Annual, 5 years	NISR
6	% of opportunities offered to RECs citizen extended to non-RECs citizens	0	1	0	0	0	Admin	Annual	MIGRATION OFFICE
7	% of people who believe that there is free access to information	0	1	0	0	1	Admin	Annually	RGB
8	% of people who perceive that there is freedom of the press.	0	1	0	0	1	Admin	Annually	RGB
9	% of people who believe that the elections are free, fair and transparent.	0	1	0	0	0	Admin	Annually	RGB
10	% of the accredited electoral observers who certifies elections to be free and fair	0	1	0	0	0	Admin	Annually	RGB
11	Percentage of countries: - Signed - Ratified - Integrated	0	1	0	0	0	Admin	Annually	RGB
12	Proportion of women owned and managed businesses that were awarded public procurement at national and subnational level	0	1	0	0	0	Admin	Annually	GMO
13	Gender parity index in political and managerial	0	1	0	0	0	Admin	Annually	GMO
14	Existence systems to track and make public allocations for gender equality and women's empowerment, existence of gender-based budgeting	0	1	0	0	0	Admin	Annually	GMO
15	Transparency index (reduced corruption)	0	0	1	0	0	Admin	Annually	Transparency Rw
16	Gender adjusted development index	0	0	1	0	0	Admin	Annually	GMO
17	% of citizens satisfaction in their participation in planning/budgeting processes, by gender, age, disability	0	0	0	0	1	CRC	Annually	RGB
18	% of non-state actors satisfaction in citizen participation and empowerment	0	0	0	0	1	CRC/Imihigo	Annually	RGB

No	Indicator	Agenda					Data source	Frequency	Responsible Institution
		SDG	AU 2063	EAC 2050	NST 1	SSP			
19	Proportion of youth enrolled in Voluntary National Service (Urugerero) by village, age, gender, disability	0	0	0	0	1	Districts/NIC Reports	Annually	NIC
20	% of citizens' complaints and demands addressed during community outreach programs	0	0	0	0	1	MINALOC Reports	Annually	MINALOC
21	% of impact value from Citizen participation and CSO inclusiveness in national development	0	0	0	0	1	PPP District report Rwanda Civil Society Barometer(RCSDB)	Annually	RGB
22	% of citizens satisfied with community outreach programs	0	0	0	0	1	RGB and MINALOC	Annually	RGB
23	% level of transparency and accountability in public sector	0	0	0	0	1	RGS (RGB, OAG, Ombudsman, RPPA)	Annually	RGB
24	% of population that perceive the district administration as transparent, accountable and citizen oriented	0	1	0	0	1	Perceptions surveys like CRC&CSOs RGB	Annually	RGB
25	Number of public accountability days conducted at District level	0	0	0	0	1	MINALOC reports.	Annually	MINALOC
26	Level of JADF participation in Local Governance and planning	0	0	0	0	1	CSDB	Annually	RGB
27	% level of feedback to citizen by local government councils	0	0	0	0	1	CRC/Assessments	Annually	RGB
28	% level of CSOs performance in transparency and accountability promotion	0	0	0	0	1	Civil Society Influencing Public Policy Report (CSDB)/ TI Rwanda	Annually	RGB
29	Citizens satisfied with service delivery	0	0	0	1	1	RGS	Annually	RGB
30	Percentage of citizen satisfaction in their participation in decision- making.	0	0	0	1	0	RGS	Annually	RGB
31	Level of citizens' satisfaction with service delivery in Local Administration	0	0	0	0	1	CRC/Inspection reports	Annually	RGB
32	Level (%) of SD standards implementation in all sectors	0	0	0	0	1	CRC	Annually	RGB
33	% of digitised services out of total services in G&D Sector institutions and in local governments	0	0	0	0	1	MINICT Reports /District ICT reports	Annually	MINICT
34	% of people per cell trained in the use of online services	0	0	0	0	1	MINICT report	Annually	MINICT
35	% of services delivered at cell level compared to LG services	0	0	0	0	1	Service delivery inspection reports	Annually	RGB
36	% cells with required infrastructures and equipment to become centres of service delivery	0	0	0	0	1	Service delivery inspection reports	Annually	RGB
37	% of districts budget financed by own revenues	0	0	0	0	1	Financial Report	Annually	MINECOFIN
38	% of locally generated revenues allocated to the district development budget	0	0	0	0	1	RRA revenues reports	Annually	RRA
39	Number of Districts with unqualified audit opinion on financial statements	0	0	0	0	1	AG Report	Annually	AOG
40	% of budget over which Districts have discretionary powers	0	0	0	0	1	MINECOFIN Reports	Annually	MINECOFIN
41	Number of jobs created (disaggregated)	0	0	0	0	1	Implementation report of NST 1	Annually	RDB
42	% of local businesses paying corporate income tax	0	0	0	0	1	RRA/RDB reports	Annually	RRA, RDB
43	Number of businesses per district developed around local potentialities	0	0	0	0	1	Assessment reports	Annually	RDB
44	Amount invested in exploiting potentialities outlined in LED Strategies (in Rwf) per district	0	0	0	0	1	Assessment reports	Annually	RDB
45	Amount of funds raised per district through municipal bonds	0	0	0	0	1	District Reports/Kigali CapitFinancial reports	Annually	CoK, Districts
46	% of Public-Private Partnership projects successfully implemented at District Level	0	0	0	0	1	LODA Reports/Districts Reports or NISR Survey	Annually	LODA

No	Indicator	Agenda					Data source	Frequency	Responsible Institution
		SDG	AU 2063	EAC 2050	NST 1	SSP			
47	Proportion of sectoral services decentralised compared to all services to be decentralised	0	0	0	0	1	Sector Decentralization Report	Annually	RGB
48	Number of projects implemented with fully involvement of LG	0	0	0	0	1	Sector Decentralization Report	Annually	RGB
49	% of sectors with updated inventory	0	0	0	0	1	Sector Decentralization Report	Annually	RGB
50	% of districts budget financed by earmarked funds required for implementation of decentralised services	0	0	0	0	1	National Budget, FDU	Annually	MINECOFIN
51	% of services decentralised as agreed upon by concerned line ministries	0	0	0	0	1	Decentralization Report	Annually	RGB
52	% of LG budget for CD development	0	0	0	0	1	District budget/CESB Report	Annually	RDB, RGB
53	% of activities of new CD strategy that have been implemented	0	0	0	0	1	Reports of GD Sector; CESB Report (State of Capacity Development)	Annually	MINALOC
54	% of CD provided by certified and quality assured institutions	0	0	0	0	1	CESB/RALGA/LGI Report	Annually	CESB, RALGA, RGB
55	% of institutions applying HGS and innovations impacting the livelihood and welfare of citizens	0	0	0	0	1	annual report on HGs	Annually	RGB
56	% of HGS and innovations developed in comparison to the problems encountered by different categories of the society	0	0	0	0	1	annual report on HGS	Annually	RGB
57	Number of HGSs documented and assessed	0	0	0	0	1	HGS Assessment reports	Annually	RGB
58	Number of HGSs certified and protected	0	0	0	0	1	Certificates of protected HGSs	Annually	RGB
59	Amount of revenues generated from commercialisation of HGSs (Frw)	0	0	0	0	1	Report on revenues generated from commercialization of HGSs	Annually	RGB,RRA
60	Proportion of citizens per district disaggregated by age, gender and disability aware of Rwandan values and HGS	0	0	0	0	1	Survey by RGB NIC	Annually	RGB, NIC
61	% of villages in which "Itorero" is operational	0	0	0	0	1	Districts and NIC reports	Annually	NIC
62	% of schools per district in which Itorero is operational	0	0	0	0	1	Districts and NIC reports	Annually	NIC
63	Number of TV & Radio (public and private) programs promoting Rwandan values per week and per media house	0	0	0	0	1	# of contracts signed with media houses on programs promoting Rwandan values	Annually	MHC
64	Number of protectors of Rwandan values trained and certified per cell	0	0	0	0	1	# of trainings & retreats organised for the selected Rwandan values	Annually	MINISPOC, MINALOC
65	% of reporting obligations with respect to compliance to AU shared instruments met	0	1	0	0	0			
66	Number of protests against unconstitutional change in government. Number of unconstitutional or undemocratic changes done on the continent.	0	1	0	0	0			

3. G&D Sector: Five-year Statistical Plan

The following table provides a summary of all the key activities for the G&D sector statistical plan. It flows directly from the data needs articulated in Table 1, and includes budget and partnership information based on consultations and input from key sector stakeholders.

Table 2: G&D Sector Statistical Activities

WBS	Activities	Responsibility		Time frame & Costs (in thousands Frw)					Total NSDS3 (in thousands Frw)	Total NSDS3 (in USD)
		Main	Partner	2019/20	2020/21	2021/22	2022/23	2023/24		
Pillar I: Produce statistics to support evidence-based decision-making				**2,019,100**	**866,738**	**1,164,793**	**1,438,500**	**524,000**	**6,013,130**	**6,550,251**
Strategic Objective 02: Enrich and expand data supply across the NSS				**2,019,100**	**866,738**	**1,164,793**	**1,438,500**	**524,000**	**6,013,130**	**6,550,251**
2.1	Tracer surveys to establish the impact of National Employment Program interventions on Beneficiaries.	MIFOTRA	-	40,000	45,000	45,000	43,000	44,000	217,000	236,383
2.2	Audience Survey	MHC	NISR	-	68,845	-	-	-	68,845	74,995
2.3	Baseline on the status of service delivery in selected sectors	MIFOTRA	NISR	250,000	-	-	-	-	250,000	272,331
2.4	Conduct an assessment of the education level of journalists	MHC	NISR, ARJ	-	-	29,500	-	-	29,500	32,135
2.5	Conduct impact assessment on Home Grown Solutions	RGB	Citizens	60,000	60,000	60,000	60,000	60,000	300,000	326,797
2.6	Conducting applied research to ascertain the role of home-grown solutions in steering Public Service delivery for Transformational Agenda.	MIFOTRA	-	15,000	13,000	11,000	10,000	30,000	79,000	86,057
2.7	Cooperative management information system	RCA	Cooperatives, Partner MDAs	329,393	329,393	329,393	-	-	988,178	1,076,446
2.8	Establish online system for Researchers applying for pre-authorisation of studies	RGB	Researchers	30,000	10,000	10,000	10,000	10,000	70,000	76,253
2.9	Gender Audit in media sector	MHC	NISR, GMO, MIGEPROF	-	-	30,900	-	-	30,900	33,660
2.1	Impact of "Made in Rwanda" initiative of the emerging Rwandan Textile Industry	MIFOTRA	-	45,000	50,000	50,000	50,000	57,000	252,000	274,510
2.11	INGOs, NGOs and FBOs online registration system	RGB	INGOs, NGOs and FBOs	40,000	10,000	10,000	10,000	10,000	80,000	87,146
2.13	Local Government Profile centre	RGB	LGs institutions	20,000	25,000	30,000	35,000	40,000	150,000	163,399

WBS	Activities	Responsibility		Time frame & Costs (in thousands Frw)					Total NSDS3 (in thousands Frw)	Total NSDS3 (in USD)
		Main	Partner	2019/20	2020/21	2021/22	2022/23	2023/24		
2.14	Produce and publish Citizen Report card	RGB	Districts	200,000	205,000	210,000	215,000	220,000	1,050,000	1,143,791
2.15	Produce and publish Rwanda Governance Score card	RGB	Gov institutions	30,349	32,000	35,000	37,000	40,000	174,349	189,923
2.16	Produce and publish Rwanda Media Barometer	RGB	Media houses and Associations, Citizens	40,000	-	-	55,000	-	95,000	103,486
2.17	Re-Engineering of MIDIS System for the production of IDs for the citizens below 16 years of age	NIDA	-	4,359	3,500	-	-	-	7,859	8,561
2.18	Rwanda National Child Labour Survey	MIFOTRA	NISR, MIGEPROF, NCC	900,000	-	-	900,000	-	1,800,000	1,960,784
2.19	Rwanda Public Service Barometer Report	MIFOTRA	PSC, NISR, MINECOFIN	15,000	15,000	14,000	13,500	13,000	70,500	76,797
2.2	To develop a Database and Statistical welfare of personnel	MoD	NISR/MoD	-	-	300,000	-	-	300,000	326,797
Pillar II: Facilitate a data revolution to deepen statistical impact				**7,603,827**	**159,000**	**53,000**	**-**	**50,000**	**7,865,827**	**8,568,439**
Strategic Objective 04: Harmonise best practices in data governance across the NSS				**7,603,827**	**159,000**	**53,000**	**-**	**50,000**	**7,865,827**	**8,568,439**
4.1	Modernisation of Civil Registration System by putting in Place a National Centralised and Integrated CRVS System	NIDA	MINALOC, MoH, NISR, DGIE, MINAFFET, MoJ, RISA	7,603,827	159,000	53,000	-	50,000	7,865,827	8,568,439
Pillar III: Build statistical capability across the NSS to increase data uptake and use				**528,450**	**114,500**	**-**	**30,450**	**14,500**	**687,900**	**749,346**
Strategic Objective 07: Improve data uptake and statistical literacy through strategic communication, dissemination and advocacy				**77,500**	**50,000**	**-**	**30,450**	**14,500**	**172,450**	**187,854**
7.1	Advanced training of journalists on data analysis and interpretation	MHC	NISR	27,500	-	-	-	-	27,500	29,956
7.2	Training of journalists on the use of infographics and data visualisation	MHC	NISR	-	-	-	30,450	-	30,450	33,170
7.3	Training on data information management and data dissemination	MoD	NISR/MoD (R&D)	50,000	50,000	-	-	-	100,000	108,932
7.4	Training staff on data information management and data dissemination	MHC	NISR	-	-	-	-	14,500	14,500	15,795
Strategic Objective 08: Enhance capacity for data management and statistical analysis				**100,950**	**64,500**	**-**	**-**	**-**	**165,450**	**180,229**

WBS	Activities	Responsibility		Time frame & Costs (in thousands Frw)					Total NSDS3 (in thousands Frw)	Total NSDS3 (in USD)
		Main	Partner	2019/20	2020/21	2021/22	2022/23	2023/24		
8.3	To develop the data management system on media capacity building	MHC	-	50,950	-	-	-	-	50,950	55,501
8.4	Training on data collection, data entry, data analysis and interpretation	MoD	NISR/MoD (R&D)	50,000	50,000	-	-	-	100,000	108,932
8.5	Training staff on data collection, data entry, data analysis and interpretation	MHC	NISR	-	14,500	-	-	-	14,500	15,795
Strategic Objective 09: Introduce new methods and techniques in data science and analytics				**350,000**	**-**	**-**	**-**	**-**	**350,000**	**381,264**
9.1	Short Courses and Master's Degree programs in Big Data Analytics Programs	MoD	NISR/MoD (R&D)	350,000	-	-	-	-	350,000	381,264
	Grand Total: Governance and Decentralisation Statistics			**10,151,377**	**1,140,238**	**1,217,793**	**1,468,950**	**588,500**	**14,566,857**	**15,868,036**

A3.7 Health Sector Statistical Plan

1. Sector Background

Drawing on the three pillars of the National Strategy for Transformation (NST-1), Vision 2020 and Vision 2050, the fourth Health Sector Strategic Plan (HSSP4) aims to 'ensure universal accessibility of equitable and affordable quality health services' to 'improve the quality of life for all Rwandans'. In particular, HSSP4 anticipates an 'epidemiological transition' associated with economic transformation, as increases in life expectancy change the demographic composition of the population and the landscape of healthcare needs.

To understand and interpret the healthcare needs of Rwanda's evolving demography, the health sector will require a continuous flow of data and evidence throughout HSSP4 implementation. Ambitious objectives to 'strengthen all levels of service delivery' while 'ensuring effective governance in the sector' require significant efforts to sustain and enhance existing data systems, including the Health Management Information System (HMIS) and Civil Registration and Vital Statistics (CRVS). Responding to the global SDG mandate, an objective to reach 'universal health coverage' implies an ability to clearly identify systematic gaps in health services and outcomes, and target interventions to respond to those gaps. This exercise demands accurate, granular data and a high capacity for monitoring, evaluation and learning (MEL) across health sector MDAs. With these issues in mind, current data gaps and emerging systems, including a Health Data Observatory and an e-logistics MIS (e-LMIS), highlight a need to invest in statistical capability. The following strengths, weaknesses, opportunities and threats (SWOT) will shape progress in these areas throughout implementation of the HSSP4 and NSDS3:

Strengths	**Weaknesses**
1. Annual monitoring based on a 'robust existing M&E system', with plans to improve. 2. Clear articulation of plans to develop a meta-data dictionary, and build out/improve SOPs for data management. 3. Ongoing support to align with international standards (WHO/IHR) provides a mechanism for standardising data flows. 4. Strong leadership mandate in MoH, with demonstrated history of coordinating data production and management activities through to the local level.	1. Mechanisms for data dissemination across health sector stakeholders are largely informal (on request and/or through the SWG/TWG). 2. Limitations of capacity at lower levels of administration requires regular training to ensure quality data production and analysis flowing into new/updated systems. 3. Diffuse data systems introduce additional complexity in data management, and may increase risks of data gaps and inconsistencies.
Opportunities	**Threats**
1. Emphasis on 'health systems research' creates demand for improving statistical capacity, and reinforces a culture of data use. 2. Plans to focus on 'health systems strengthening', including improvements in workforce, infrastructure, and service delivery systems provide statistical	1. Cross-cutting areas (NCDs and HIV) present challenges for cross-sectoral monitoring, subject to limitations of data sharing across sectors. 2. Loss of qualified personnel following capacity building efforts at all levels of health data governance (Challenge 1).

capacity building. 3. Plans to develop a 'unified data observatory' to link health data across systems, will be an open access 'one-stop-shop' for health data. 4. Plans to use dashboards for evaluation provides a mechanism to consolidate data in the observatory, and an opportunity for DRP engagement. 5. Ongoing efforts to link health sector data with the national data warehouse (RISA) and the NISR DSC provides a foundation for DRP engagement. 6. Plans to develop an open platform to facilitate knowledge sharing provides a path to improve data dissemination and coordination.	3. Limited coordination across levels of administration weaken best practices around data production, analysis, and dissemination (Challenge 3). 4. Dependence on external financing could short-circuit some planned developments in statistics and data production, particularly on establishing baselines for new indicators early (Challenge 4).

2. Sector Data Requirements

This sector plan defines statistical needs and projects for the health sector based on policy indicator frameworks outlined in Table 1 (below), including the NST-1 (5 indicators), HSSP (88 indicators), the SDGs (26 indicators), AU Agenda 2063 (18 indicators) and EAC Vision 2050 (7 indicators). Calculating overlaps across frameworks, these 144 indicators translate to 121 unique data points drawn from a diffuse network of producers, encompassing 7 institutions. The sector is supported directly by NISR survey products (38 indicators, 31%), but 13 indicators currently lack baselines (11%), illustrating a continuing acceleration in demand for health sector data.

Table 1: Health Sector Indicators

No	Indicator	Agenda					Data source	Frequency	Responsible institution
		SDG	AU2063	EAC2050	NST1	SSP			
1	Prevalence of stunting among children under 5 years of age	1	1	0	1	1	RDHS	5 years	NISR
2	Prevalence of malnutrition among children under 5 years of age, by type (wasting and overweight)	1	0	0	0	0	RDHS	5 years	NISR
3	Maternal mortality ratio	1	1	1	1	1	RDHS	5 years	NISR
4	Proportion of births attended by skilled health personnel	1	1	0	0	1	RDHS	5 years	NISR
5	Under-five mortality rate	1	1	0	1	1	RDHS	5 years	NISR
6	Neonatal mortality rate	1	1	0	0	1	RDHS	5 years	NISR
7	Number of new HIV infections per 1,000 uninfected population, by sex, age and key populations	1	1	0	0	1	RDHS	5 years	NISR
8	Tuberculosis incidence per 100,000 population	1	0	0	0	1	HMIS	Annually	RBC
9	Malaria incidence per 1,000 population	1	1	0	0	1	HMIS	Annually	RBC
10	Hepatitis B incidence per 100,000 population	1	0	0	0	1	studies on Hepatitis		RBC
11	Number of people requiring interventions against neglected tropical diseases	1	0	0	0	0	HMIS	Annually	RBC
12	Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease	1	0	0	0	0	HMIS	Annually	MOH; Vital Event Registration Authority

No	Indicator	Agenda					Data source	Frequency	Responsible institution
		SDG	AU2063	EAC2050	NST1	SSP			
13	Harmful use of alcohol, defined according to the national context as alcohol per capita consumption (aged 15 years and older) within a calendar year in litres of pure alcohol	1	0	0	0	0	Rwanda STEP Survey, NCD Risk Factors Report		MOH
14	Proportion of women of reproductive age (aged 15-49 years) who have their need for family planning satisfied with modern methods	1	0	0	0	0	RDHS	5 years	NISR
15	Adolescent birth rate (aged 10-14 years; aged 15-19 years) per 1,000 women in that age group	1	0	0	0	1	RDHS	5 years	NISR
16	Coverage of essential health services	1	0	0	0	0	RDHS	5 years	RBC;MOH, NISR
17	Proportion of population with large household expenditures on health as a share of total household expenditure or income	1	0	0	0	0	EICV,RDHS	5 years	NISR, MOH
18	Mortality rate attributed to household and ambient air pollution	1	0	0	0	0			MOH
19	Mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene	1	0	0	0	0	HMIS		MOH; REMA
20	Mortality rate attributed to unintentional poisoning	1	0	0	0	0	HMIS		MOH
21	Age-standardised prevalence of current tobacco use among persons aged 15 years and older	1	0	0	0	0	RDHS	5 years	NISR;MOH
22	Proportion of the target population covered by all vaccines included in their national programme	1	0	0	0	0	DHS, HMIS	5 years	NISR; MOH
23	Health worker density and distribution	1	0	0	0	0	Human Resource for Health Information System (iHRIS)		MoH
24	International Health Regulations (IHR) capacity and health emergency preparedness	1	0	0	0	0	National Disaster Risk Management Plan; National Disaster Manage Policy	Annually	MoH; MIDMAR
25	Proportion of ever-partnered women and girls aged 15 years and older subjected to physical, sexual or psychological violence by a current or former intimate partner in the previous 12 months, by form of violence and by age	1	1	0	0	0	RDHS	5 years	MIGEPROF, NISR
26	Proportion of women aged 15-49 years who make their own informed decisions regarding sexual relations, contraceptive use and reproductive health care	1	0	0	0	0	RDHS	5 years	NISR
27	Prevalence of underweight among children under 5	0	1	0	0	0	DHS	5 YEARS	NISR
28	% of population with access to quality primary health care	0	1	0	0	0	DHS	5 YEARS	NISR
29	% of women in the reproductive age 15-49 who have access to sexual and reproductive health care service	0	1	0	0	0	DHS	5 YEARS	NISR
30	Disease specific mortality rate (HIV/AIDS, Malaria and TB)	0	1	0	0	0	admin	Annually	RBC
31	% of children under 5 dying of malaria	0	1	0	0	0	admin	Annually	RBC
32	% of population below minimum level of dietary and energy consumption	0	1	0	0	0	CFSVA	3 years	NISR
33	Proportion of deaths attributed to dengue fever and chikungunya	0	1	0	0	0	Admin	Annually	MoH
34	% of eligible population with HIV having access to ARV	0	1	0	0	0	DHS	5 YEARS	NISR
35	Percentage of women aged 18-24 who were married or in a union before age 18	0	1	0	0	0	DHS	5 YEARS	NISR
36	The proportion of children whose births are registered within the first year	0	1	0	0	0	CRVS	Annual	NISR
37	Life Expectancy at birth (Years)	0	0	1	0	0	DHS	5 Years	NISR
38	Infant Mortality rate (per 1000 births)	0	0	1	0	1	DHS	5 Years	NISR
39	Total Fertility rate (live births per woman)	0	0	1	0	0	DHS	5 Years	NISR
40	Access to Health services (%)	0	0	1	0	0	EICV	3years	NISR

No	Indicator	Agenda					Data source	Frequency	Responsible institution
		SDG	AU2063	EAC2050	NST1	SSP			
41	HIV prevalence rate (%)	0	0	1	0	0	HMIS	Annually	RBC
42	Communicable diseases (%)	0	0	1	0	0	HMIS	Annually	RBC
43	Ratio of medical practitioners, general specialists, nurses and qualified midwives per population	0	0	0	1	0	MoH reports	Annually	MoH
44	Prevalence of modern contraceptive use among women in reproduction age (15-49)	0	0	0	1	0	DHS, MoH	5 Years	NISR
45	Premature Mortality rate attributed to cancer, diabetes and HTA	0	0	0	0	1	HSASB/CVRS		MoH
46	Premature Mortality rate from road traffic accidents	0	0	0	0	1	HSASB/CVRS		MoH
47	ANC coverage (4 standards visits)	0	0	0	0	1	RPHC	5 Years	NISR
48	% New-borns with at least one PNC visit within the first two days of birth	0	0	0	0	1	RPHC	5 Years	NISR
49	Modern contraceptive prevalence rate (mCPR)	0	0	0	0	1	RPHC	5 Years	NISR
50	Unmet need for Family Planning	0	0	0	0	1	RPHC	5 Years	NISR
51	% Children 12-23 months fully immunised	0	0	0	0	1	RPHC	5 Years	NISR
52	% Exclusive Breastfeeding < 6 months	0	0	0	0	1	RPHC	5 Years	NISR
53	Teenage pregnancy rate (15-19 years)	0	0	0	0	1	RPHC	5 Years	NISR
54	Adolescent birth rate (aged 10-14 years; aged 15-19 years) per 1,000 women in that age group	0	0	0	0	1	RPHC	5 Years	NISR
55	Proportion of children with diarrhoea receiving oral rehydration solution (ORS)	0	0	0	0	1	RPHC	5 Years	NISR
56	HIV prevalence among people aged 15–49 years	0	0	0	0	1	Annual Statistical Booklet	Annually	MoH
57	Proportion of persons diagnosed with HIV infection receiving sustained ART	0	0	0	0	1	Annual Statistical Booklet	Annually	MoH
58	HIV incidence/1000 population	0	0	0	0	1	Annual Statistical Booklet	Annually	MoH
59	Percentage of infants born to HIV + mothers free from HIV by 18 months	0	0	0	0	1	Annual Statistical Booklet	Annually	MoH
60	TB treatment coverage rate	0	0	0	0	1	Annual Statistical Booklet	Annually	MoH
61	Treatment success rate (TSR) for all forms of TB cases (DS & DR-TB cases)	0	0	0	0	1	Annual Statistical Booklet	Annually	MoH
62	Proportion of newly diagnosed leprosy with grade 2 disability	0	0	0	0	1	Annual Statistical Booklet	Annually	MoH
63	Proportion Households with at least one LLIN	0	0	0	0	1	DHS,HMIS as a proxy estimation	Annually	MoH
64	Malaria proportional mortality rate	0	0	0	0	1	Annual Statistical Booklet	Annually	MoH
65	Proportion of children under five years old who slept under a LLIN the previous night	0	0	0	0	1	RDHS	5 Years	NISR
66	Proportion of targeted population who received MDA	0	0	0	0	1	Annual Statistical Booklet	Annually	MoH
67	Prevalence of soil transmitted helminthiasis (STH)	0	0	0	0	1	Mapping report	Annually	MoH
68	Prevalence of Schistosomiasis (SCH)	0	0	0	0	1	Mapping report	Annually	MoH
69	Percentage of NCD combined high risk factors in the population aged between 15-64 years	0	0	0	0	1	STEP Survey	Annually	MoH
70	Percentage of reduction of premature mortality (under 40 years old) due to NCDs (cancer, HTA, diabetes)	0	0	0	0	1	CVRS/Annual Statistical Booklet	Annually	MoH
71	Percentage of reduction of premature mortality (under 40 years old) due to NCDs due to road traffic accidents (RTA) as the leading cause in non-intentional injuries	0	0	0	0	1	CVRS/Annual Statistical Booklet	Annually	MoH
72	Teeth and gum diseases morbidity rate at health facility level	0	0	0	0	1	Annual Statistical Booklet	Annually	MoH
73	Eye diseases problem morbidity rate at health facility level	0	0	0	0	1	Annual Statistical Booklet	Annually	MoH

No	Indicator	Agenda					Data source	Frequency	Responsible institution
		SDG	AU2063	EAC2050	NST1	SSP			
74	Prevalence of Uncorrected refractive Error disaggregated by age, sex and socioeconomic status	0	0	0	0	1	Annual Statistical Booklet/ DHS	Annually	MoH
75	Cataract Surgical Rate (number of cataract surgeries per million population per year)	0	0	0	0	1	Annual Statistical Booklet	Annually	MoH
76	Age-standardised prevalence of current tobacco use among persons aged 15 years and older (outcome)	0	0	0	0	1	DHS and STEP Study	Annually	MoH
77	Age-standardised prevalence of overweight and obesity in persons aged 18+ years	0	0	0	0	1	STEP Survey	Annually	MoH
78	Proportion of new cases treated in health facilities (HC+DH+PH+RH) for mental disorders	0	0	0	0	1	Annual Statistical Booklet	Annually	MoH
79	Percentage of Health centres without water	0	0	0	0	1	Annual Statistical Booklet	Annually	MoH
80	% Public Health Facilities (RH,PH,DH and HC) with effective waste management systems according to MOH / WHO standards	0	0	0	0	1	Annual Statistical Booklet	Annually	MoH
81	Proportion of outbreaks with a case fatality rate below recommended thresholds	0	0	0	0	1	Annual Statistical Booklet	Annually	MoH
82	International Health Regulations (IHR) core capacity index	0	0	0	0	1	Joint External Evaluation Report (JEE)	Annually	MoH
83	Percentage of the population satisfied with health services	0	0	0	0	1	RGB Score Card	Annually	MoH
84	Independent accreditation body in place and functional	0	0	0	0	1	Annual Statistical Booklet	Annually	MoH
85	% Malpractice cases assessed and addressed	0	0	0	0	1	Annual Statistical Booklet	Annually	MoH
86	Number of National referral and teaching Hospitals accredited	0	0	0	0	1	Annual Statistical Booklet	Annually	MoH
87	Number of newly upgraded referral hospitals that have achieved level three of the national accreditation process	0	0	0	0	1	Annual Statistical Booklet	Annually	MoH
88	Number of Provincial Hospitals that have achieved level three of the national accreditation process	0	0	0	0	1	Annual Statistical Booklet	Annually	MoH
89	Number of DH that have achieved level two of the national accreditation process	0	0	0	0	1	Annual Statistical Booklet	Annually	MoH
90	Number of laboratories reaching 5-star (Five Star) accreditation	0	0	0	0	1	Annual Statistical Booklet	Annually	MoH
91	% Private HFs (polyclinics and hospitals) enrolled and pursuing level 1 of accreditation process	0	0	0	0	1	Annual Statistical Booklet	Annually	MoH
92	Doctor/pop ratio (GP and Specialists as well)	0	0	0	0	1	Health Professional Bodies Statistics, Report, Annual Statistical Booklet	Annually	MoH
93	Nurse/pop ratio	0	0	0	0	1	Health Professional Bodies Statistics, Report, Annual Statistical Booklet	Annually	MoH
94	Midwife/pop ratio (women aged from 15-49)	0	0	0	0	1	Health Professional Bodies Statistics, Report, Annual Statistical Booklet	Annually	MoH
95	Pharmacist /pop ratio	0	0	0	0	1	Health Professional Bodies Statistics, Report, Annual Statistical Booklet	Annually	MoH
96	Lab Technicians /pop ratio	0	0	0	0	1	Health Professional Bodies Statistics, Report, Annual Statistical Booklet	Annually	MoH
97	Doctor attrition rate	0	0	0	0	1	Survey	Annually	MoH
98	Number of sectors without a health centre	0	0	0	0	1	Annual Statistical Booklet	Annually	MoH

No	Indicator	Agenda					Data source	Frequency	Responsible institution
		SDG	AU2063	EAC2050	NST1	SSP			
99	Number of health posts constructed/rehabilitated in a cell previously without any other health post	0	0	0	0	1	Annual Statistical Booklet	Annually	MoH
100	Number of super specialised health facilities (to reduce the referrals abroad and promote medical tourism)	0	0	0	0	1	Annual Statistical Booklet	Annually	MoH
101	Surgical procedures per 100,000 population	0	0	0	0	1	Annual Statistical Booklet	Annually	MoH
102	Peri-operative mortality rate (due to surgical procedure)	0	0	0	0	1	Annual Statistical Booklet	Annually	MoH
103	Ratio ground ambulance / population	0	0	0	0	1	Annual Statistical Booklet	Annually	MoH
104	Average time to walk to a nearby HF (in minutes)	0	0	0	0	1	EICV	3 years	NISR
105	Number of hospitals with functional basic maintenance system (trained manpower, available tools and space for operations)	0	0	0	0	1	Annual Statistical Booklet	Annually	MoH
106	Number of referral hospitals with functional telemedicine facilities	0	0	0	0	1	Annual Statistical Booklet	Annually	MoH
107	Percentage of health centres without electricity (not connected to a nearby grid)	0	0	0	0	1	Annual Statistical Booklet	Annually	MoH
108	Percentage of Health centres with functional internet and local area network connectivity	0	0	0	0	1	Annual Statistical Booklet	Annually	MoH
109	National Service availability readiness score (including emergency services)	0	0	0	0	1	ISS/SARA Reports	Annually	MoH
110	% of health products and health technologies available at the Central Medical Warehouse	0	0	0	0	1	e-LMIS Report	Annually	MoH
111	% HFs with < 5% of medical products stock-outs	0	0	0	0	1	e-LMIS Report	Annually	MoH
112	% causes of deaths are reported according to ICD10	0	0	0	0	1	Annual Statistical Booklet	Annually	MoH
113	% births registered according to the CRVS	0	0	0	0	1	Annual Statistical Booklet	Annually	MoH
114	% of public health facilities (DH,PH and RH) using EMR full package system	0	0	0	0	1	Annual Statistical Booklet	Annually	MoH
115	% private HF (dispensaries, clinics, polyclinics and hospitals) regularly reporting through national data collection systems (DHIS-2 and e-IDSR)	0	0	0	0	1	Annual Statistical Booklet	Annually	MoH
116	% Household expenditure on health as a share of total household income	0	0	0	0	1	EICV, HRTT Report	Annually	MoH
117	Proportion of population covered by health insurance	0	0	0	0	1	EICV and HRTT Report	Annually	MoH
118	Percentage of NCD combined high risk factors in the population aged between 15-64 years	0	0	0	0	1	STEP Survey	Annually	MoH
119	Percentage of reduction of premature mortality (under 40 years old) due to NCDs (cancer, HTA and diabetes)	0	0	0	0	1	CVRS/Annual Statistical Booklet	Annually	MoH
120	Percentage of reduction of premature mortality (under 40 years old) due to NCDs due to road traffic accidents (RTA) as the leading cause in non-intentional injuries	0	0	0	0	1	CVRS/Annual Statistical Booklet	Annually	MoH
121	Percentage of infants born to HIV + mothers free from HIV by 18 months	0	0	0	0	1	HMIS/Annual Statistical Booklet	Annually	MoH

3. Health Sector: Five-year Statistical Plan

The following table provides a summary of all the key activities for the HSSP4. It flows directly from the data needs identified in Table 1, and includes budget and partnership information based on consultations and input from key sector stakeholders.

Table 2: Health Sector Statistical Activities

WBS	Activities	Responsibility		Time frame & Costs (in thousands Frw)					Total NSDS3 (in thousands Frw)	Total NSDS3 (in USD)
		Main	Partner	2019/20	2020/21	2021/22	2022/23	2023/24		
Pillar I: Produce statistics to support evidence-based decision-making				**898,403**	**113,936**	**113,936**	**113,936**	**113,936**	**1,354,147**	**1,475,105**
Strategic Objective 01: Sustain and enhance core data production at NISR				**121,760**	**-**	**-**	**-**	**-**	**121,760**	**132,636**
1.3	Support DHS 2020 (HIV and STIs testing)	RBC	NISR	121,760	-	-	-	-	121,760	132,636
Strategic Objective 02: Enrich and expand data supply across the NSS				**776,643**	**113,936**	**113,936**	**113,936**	**113,936**	**1,232,387**	**1,342,469**
2.1	national study on PTSD and other mental health issues	RBC	-	5,300	-	-	-	-	5,300	5,773
2.2	PLHIV internal movement study	RBC	-	129,268	-	-	-	-	129,268	140,815
2.3	Conduct a study KAP	RBC	-	41,892	-	-	-	-	41,892	45,634
2.4	Field visit for data quality audit (DQA), record verification and integrated supportive supervision	MoH	-	93,731	93,731	93,731	93,731	93,731	468,655	510,518
2.5	KAP survey for community Health Workers	RBC	-	47,029	-	-	-	-	47,029	51,230
2.6	Key Populations size estimation - FSW	RBC	-	75,401	-	-	-	-	75,401	82,136
2.7	PEP cohort follow up study	RBC	-	74,865	-	-	-	-	74,865	81,552
2.8	Pilot study on transfusion activities outcomes	RBC	-	1,401	-	-	-	-	1,401	1,527
2.1	SCH/STH MDA Impact survey in 20 selected sentinel schools	RBC	-	22,196	-	-	-	-	22,196	24,179
2.12	Strengthening health administrative statistics data collection framework	NISR	MoH, RBC	20,205	20,205	20,205	20,205	20,205	101,025	110,048
2.13	study on gap analysis of upgrading District Hospitals to Referral and Provincial Hospitals	RBC	-	200,000	-	-	-	-	200,000	217,865
2.14	study on Long term outcomes of former MDR TB patients who have been successfully tr	RBC	-	28,521	-	-	-	-	28,521	31,069
2.15	UPID infrastructure assessment at health facilities	RBC	-	36,833	-	-	-	-	36,833	40,123
Pillar II: Facilitate a data revolution to deepen statistical impact				**24,933**	**3,602**	**3,602**	**3,602**	**3,602**	**39,341**	**42,855**
Strategic Objective 04: Harmonise best practices in data governance across the NSS				**24,933**	**3,602**	**3,602**	**3,602**	**3,602**	**39,341**	**42,855**
4.1	Hosting cost of HMIS servers hosted at NDC, SSL, etc.	RBC	-	3,602	3,602	3,602	3,602	3,602	18,009	19,618

WBS	Activities	Responsibility		Time frame & Costs (in thousands Frw)					Total NSDS3 (in thousands Frw)	Total NSDS3 (in USD)
		Main	Partner	2019/20	2020/21	2021/22	2022/23	2023/24		
4.3	Vulnerability and Risk Analysis & Mapping/ Disaster Risk Management for health sector	RBC	-	21,332	-	-	-	-	21,332	23,237
Pillar III: Build statistical capability across the NSS to increase data uptake and use				**6,788**	**4,059**	**4,059**	**4,059**	**4,059**	**23,023**	**25,080**
Strategic Objective 07: Improve data uptake and statistical literacy through strategic communication, dissemination and advocacy				**4,059**	**4,059**	**4,059**	**4,059**	**4,059**	**20,295**	**22,108**
7.1	Elaborate and disseminate annual health statistics report	RBC	-	4,059	4,059	4,059	4,059	4,059	20,295	22,108
Strategic Objective 08: Enhance capacity for data management and statistical analysis				2,729	-	-	-	-	2,729	2,972
8.2	R-HMIS users on central level staff using queries for data analysis	RBC	-	2,729	-	-	-	-	2,729	2,972
	Grand Total: Health Statistics			**930,124**	**121,597**	**121,597**	**121,597**	**121,597**	**1,416,511**	**1,543,040**

A3.8 Information Communications Technology Sector Statistical Plan

1. Sector Background

Drawing on the three pillars of the National Strategy for Transformation (NST-1) and the aspirations articulated in Rwanda Vision 2020 and 2050, the ICT Sector Strategic Plan (ICT-SSP) aims to 'establish a service-oriented, modern, accountable, and real-time government' and 'to be a catalyst for rapid and sustained economic growth, equitable social development, and employment creation' (ICT-SSP, 2018). The ICT-SSP is strongly aligned with NSDS3 objectives to create an enabling environment for data-driven policy coordination and evidence-based decisions, connecting technology and data access to broader social and economic development targets.

An emphasis on improving connectivity, digital literacy and localising content create conditions where stakeholders and citizens can access and use data. Nevertheless, data production within the ICT sector remains nascent. Generally, the sector depends on data flows from complementary sectors, with minimal capacity to expand or customise data production to respond to international initiatives. The lack of a dedicated management information system (MIS) also poses challenges for data governance. With ambitious sector objectives to 'deliver services and knowledge to all', it will be vital for stakeholders to produce and leverage data to define needs and effectively target programming. With this in mind, building up statistical systems and capacity in the ICT sector should be a priority throughout ICT-SSP implementation. The following strengths, weaknesses, opportunities and threats (SWOT) will shape progress in these areas throughout implementation of the ICT-SSP and NSDS3:

Strengths	**Weaknesses**
1. Strong linkages of sector objectives to improving data access, including building up connectivity. 2. Mandate to support implementation of DRP. 3. Plans to develop the National Data Portal will provide a platform to support data integration and interoperability across government. 4. Established SWG provides a mechanism to improve coordination and mobilise resources to support statistical capacity building and identify needs. 5. New institutions (e.g. RISA) and reorganisation (e.g. MINICT and Innovation) to strengthen frameworks for governance and policy implementation.	1. Lack of data production capability and MIS within the lead secretariat institution (MITEC) compromises capability and data governance. 2. Tendency to rely on qualitative information undermines demand for statistics and quantitative evidence in the sector. 3. Inconsistent, informal norms for data access weaken flows of information to inform programming.
Opportunities	**Threats**
1. Launch of the new NISR Training Centre and data science campus creates opportunities to build capacity and access new technology. 2. Emphasis on improving data literacy in the ICT-SSP serves as a complement to	1. Limited activities in custom data production threatens incentives to invest in statistical capacity in the sector, compromising opportunities to align (and report) to international standards regimes.

NSDS3 objectives. 3. Plans to establish policies for open data in government supports the effort to increase data access.	2. Limitations of data availability threatens effective program targeting, leading to unforeseen gaps in service delivery.

2. Sector Data Requirements

This sector plan defines statistical needs and projects for the ICT sector based on policy indicator frameworks outlined in Table 1 (below), including the NST-1 (2 indicators), ICT-SSP (43 indicators), the SDGs (5 indicators), AU Agenda 2063 (4 indicators) and EAC Vision 2050 (1 indicator). Calculating overlapping data requirements across frameworks, these 55 indicators translate to 49 unique data points drawn from a diffuse network of producers, encompassing 10 institutions. The sector is supported directly by NISR survey products (7 indicators), and 3 indicators currently lack baselines (6%), illustrating a need to improve and expand data sources over the next 5 years.

Table 1: ICT Sector Indicators

No	Indicator	Agenda					Data source	Frequency	Responsible Institution
		SDG	AU 2063	EAC 2050	NST 1	SSP			
1	Proportion of youth and adults with information and communications technology (ICT) skills, by skill	1	0	0	0	0	EICV	3 years	NISR
2	Proportion of individuals who own a mobile telephone, by sex	1	0	0	0	0	EICV	3 years	NISR
3	Proportion of population covered by a mobile network, by technology	1	0	1	0	0	MINICT Records	Annually	MINICT
4	Fixed Internet broadband subscriptions per 100 inhabitants, by speed	1	0	0	0	0	Records of the RURA, MINICT	Annually	RURA, MINICT
5	Proportion of individuals using the Internet	1	0	0	0	0	EICV	3 years	NISR
6	Internet penetration rate	0	1	0	0	1	EICV	3 years	NISR
7	Mobile penetration rate	0	1	0	0	1	EICV	3 years	NISR
8	% of ICT contribution to GDP	0	1	0	0	1	Admin	3 years	NISR
9	% increase in broadband accessibility	0	1	0	0	0	Admin	Annually	RURA
10	Percentage of digital literacy	0	0	0	1	1	EICV Survey	3 years	NISR
11	Mobile-broadband internet subscriptions	0	0	0	1	1	MINICT Reports and RURA	Annually	RURA, MINICT
12	ICT Development Index	0	0	0	0	1	GITR	Annually	GITR
13	E-Government Index	0	0	0	0	1	GITR	Annually	GITR
14	Network Readiness Index	0	0	0	0	1	GITR	Annually	GITR
15	Global Competitiveness Development Index	0	0	0	0	1	GITR	Annually	GITR
16	% of ICT Contribution to GDP	0	0	0	0	1	Admin	Annually	MINICT
17	Number of new Technology Companies valued between 100K- One Million USD in Rwanda	0	0	0	0	1	Admin	Annually	MINICT
18	Number of new Technology Companies valued between one Million – Twenty Million USD in Rwanda	0	0	0	0	1	Admin	Annually	MINICT
19	Number of new Technology Companies valued at over $20 Million in Rwanda (including FDIs)	0	0	0	0	1	Admin	Annually	MINICT
20	% of business/companies participating in e-commerce	0	0	0	0	1	Admin	Annually	MINICT
21	ICT Export as % to total export	0	0	0	0	1	Admin	Annually	MINICT

No	Indicator	Agenda					Data source	Frequency	Responsible Institution
		SDG	AU 2063	EAC 2050	NST 1	SSP			
22	ICT Capital Investment (Amount in Millions USD)	0	0	0	0	1			
23	ICT jobs as % of formal total employment	0	0	0	0	1	Admin	Annually	MINICT
24	Number of jobs created through BPO	0	0	0	0	1	Admin	Annually	MINICT
25	Number of Elite IT professional	0	0	0	0	1	Admin	Annually	MINICT
26	% graduates with ICT professional certificates by gender	0	0	0	0	1	Admin	Annually	MINICT
27	% Elite IT professional owning commercialised Innovation, IT operational Business company, jobs	0	0	0	0	1	Admin	Annually	MINICT
28	ICT labour productivity (FRW/hour; Av or Med)- 11,969Frw:OECD Av (2015)	0	0	0	0	1	Admin	Annually	MINICT
29	School with smart classroom as % of total schools (internet, computer and digital content)	0	0	0	0	1	Admin	Annually	MINEDUC, MINICT
30	Fully digitised services as % of total online services	0	0	0	0	1	Admin	Annually	MINICT
31	% of Public Institutions connected to 4G or faster Internet (Education, Health, Justice, Local Government)	0	0	0	0	1	Admin	Annually	MINEDUC, MoH, MINIJUST, MINICT
32	% of digitised services out of total services	0	0	0	0	1	Admin	Annually	MINICT
33	% of government Integration and interoperability	0	0	0	0	1	Admin	Annually	MINICT
34	% of websites that use the .RW domain hosted in Rwanda	0	0	0	0	1	Admin	Annually	MINICT
35	% of MIS integrated with GCC	0	0	0	0	1	Admin	Annually	MINICT
36	% of ICT projected managed and updated into Smart Dashboard/Automation	0	0	0	0	1	Admin	Annually	MINICT
37	% of public institutions using electronic signature (PKI)	0	0	0	0	1	Admin	Annually	MINICT
38	Proportion of smart phone as % of mobile subscribers	0	0	0	0	1	Admin	Annually	MINICT
39	Cost of broadband access as a percentage of average monthly GNI per capita (average monthly income)	0	0	0	0	1	Admin	Annually	MINICT
40	% of Households with access to high speed internet	0	0	0	0	1	Admin	Annually	MINICT
41	% of citizens with digital single ID	0	0	0	0	1	Admin	Annually	NIDA
42	% of Smart buses	0	0	0	0	1	Admin	Annually	RDB
43	Number of innovation Centres established	0	0	0	0	1	Admin	Annually	MINICT
44	Number of innovations (intellectual property/patent) commercialised	0	0	0	0	1	Admin	Annually	MINICT
45	Value of electronic payment as % of GDP	0	0	0	0	1	Admin	Annually	MINICT
46	Smart households as % of total households in cities	0	0	0	0	1	Admin	Annually	MINICT
47	Amount earned from digital exports ('000s' USD)	0	0	0	0	1	Admin	Annually	MINICT
48	Total sales from ICT local manufacturing-Million in USD	0	0	0	0	1	Admin	Annually	MINICT
49	Number of highly skilled people in cyber-security	0	0	0	0	1	Admin	Annually	MINICT

3. ICT Sector: Five-year Statistical Plan

The following table provides a summary of all the key activities for the ICT sector statistical plan. It flows directly from the data needs articulated in section two, and includes budget and partnership information based on consultations and input from key sector stakeholders.

Table 2: ICT Sector Statistical Activities

WBS	Activities	Responsibility		Time frame & Costs (in thousands Frw)					Total NSDS3 (in thousands Frw)	Total NSDS3 (in USD)
		Main	Partner	2019/20	2020/21	2021/22	2022/23	2023/24		
Pillar I: Produce statistics to support evidence-based decision-making				**450,000**	**-**	**-**	**450,000**	**-**	**900,000**	**980,392**
Strategic Objective 02: Enrich and expand data supply across the NSS				**450,000**	**-**	**-**	**450,000**	**-**	**900,000**	**980,392**
2.2	SURVEY ON THE ACCESS TO AND USE OF ICTs BY HOUSEHOLDS AND INDIVIDUALS IN RWANDA	RURA/MINICT	NISR	450,000	-	-	450,000	-	900,000	980,392
Pillar II: Facilitate a data revolution to deepen statistical impact				200,000	-	-	-	-	200,000	217,865
Strategic Objective 04: Harmonise best practices in data governance across the NSS				200,000	-	-	-	-	200,000	217,865
4.3	Open data portal	MINICT	NISR	200,000	-	-	-	-	200,000	217,865
Pillar III: Build statistical capability across the NSS to increase data uptake and use				**45,983**	**45,983**	**45,983**	**45,983**	**45,983**	**229,916**	**250,453**
Strategic Objective 07: Improve data uptake and statistical literacy through strategic communication, dissemination and advocacy				**41,983**	**41,983**	**41,983**	**41,983**	**41,983**	**209,916**	**228,667**
7.3	Disseminate NISR products through Mass Media and Social Media	NISR	NISR	41,983	41,983	41,983	41,983	41,983	209,916	228,667
Strategic Objective 08: Enhance capacity for data management and statistical analysis				**4,000**	**4,000**	**4,000**	**4,000**	**4,000**	**20,000**	**21,786**
8.1	Capacity building of MITEC staff on data collection/research, data analysis using different software	NISR/MINICT	NISR	4,000	4,000	4,000	4,000	4,000	20,000	21,786
	Grand Total: ICT Statistics			**695,983**	**45,983**	**45,983**	**1,487,950**	**45,983**	**1,329,916**	**1,448,710**

A3.9 Justice Reconciliation Law and Order Sector Statistical Plan

1. Sector Background

Drawing on the three pillars of the National Strategy for Transformation (NST-1), and the aspirations articulated in Rwanda Vision 2020 and Vision 2050, the Justice, Reconciliation, Law and Order (JRLO) Sector Strategic Plan (JSSP) aims to 'enhance rule of law to promote accountable governance, [and] a culture of peace for poverty reduction'. The JSSP is closely linked to statistical development objectives, not solely in the production of data to support sector operations and implementation, but also in programmatic goals and targets. Key JRLO policy themes — such as access to information, transparency and accountability — are all related to timely, efficient data production and publication.

The sector will undertake a range of efforts during JSSP implementation to support statistical development, both within the sector and across government. This includes sustaining and expanding the production of administrative data and special surveys, as well as the development of legal frameworks to support accountability and openness (with strong linkages to Rwanda's DRP). Increasing demands for JRLO sector data are complemented by planned improvements in data platforms and systems, including the Integrated Electronic Case Management System (IECMS), an Abunzi program MIS (A-MIS) and a Justice Data Dashboard (JDD), to support 'the modernisation of justice' envisioned in the JSSP. These projects highlight a growing need for statistical capability in the JRLO sector. The following strengths, weaknesses, opportunities and threats (SWOT) will shape progress in these areas throughout implementation of the JSSP and NSDS3:

Strengths	**Weaknesses**
1. Development of technical working groups (TWG), including an ICT activities coordination unit, indicates prioritisation of data and technology-based solutions in the sector. 2. Existing reporting mechanisms including the IECMS and GCC, as well as ongoing data collection efforts provide a strong foundation for sector statistical development. 3. Strong mandate in the JSSP linking strategic priorities in transparency and accountability to data and ICT interventions. 4. Existing plans to improve sector M&E capacity.	1. Current gaps in IT infrastructure compromise the effectiveness of existing data systems, and may threaten improvement under the JSSP. 2. Limited staff capacity for statistics constrains efforts to monitor data quality and expand data availability. 3. Lack of a single, unified MIS system for the sector creates barriers to improvements in data management, integration and interoperability.
Opportunities	**Threats**
1. Plans to develop the A-MIS to strengthen coordination in the ABUNZI program employs data- driven solutions to programmatic challenges. 2. Plans to scale up IECMS and internet connectivity to all JRLO institutions facilitates improved data sharing and coordination across stakeholders. 3. Plans to link the JDD with the GCC will streamline reporting and improve data governance.	1. Limitations of funding streams may compromise the development of effective data management systems or their sustainability. 2. Underdeveloped data management infrastructure limits data quality and hampers new data product development. 3. Disconnect between statistical coordination and production functions in the sector institutional structure reinforce fragmented data production patterns.

2. Sector Data Requirements

This sector plan defines statistical needs and projects for the justice sector based on policy indicator frameworks outlined in Table 1 (below), including the NST-1 (8 indicators), JSSP (101 indicators), the SDGs (21 indicators) and AU Agenda 2063 (15 indicators). Calculating overlapping data requirements across frameworks, these 145 indicators translate to 131 unique data points derived from a diffuse network of producers, encompassing 13 institutions. The sector is supported directly by NISR survey products (8 indicators, 6%), but 18 indicators currently lack baselines (14%), illustrating the pressure to both improve and expand data sources over the next 5 years.

Table 1: JRLO Sector Indicators

No	Indicator	Agenda					Data source	Frequency	Responsible institution
		SDG	AU2063	EAC2050	NST1	SSP			
1	Suicide mortality rate	1	0	0	0	0	HMIS	Annual	MOH
2	Death rate due to road traffic injuries	1	0	0	0	0	HMIS	Annual	MoH, MINIJUST, RNP
3	Whether or not legal frameworks are in place to promote, enforce and monitor equality and non-discrimination on the basis of sex	1	1	0	0	0	Existing legal frameworks	Annual	MIGEPROF, MINIJUST
4	Proportion of women and girls aged 15 years and older subjected to sexual violence by persons other than an intimate partner in the previous 12 months, by age and place of occurrence	1	0	0	0	0	DHS	5 years	MIGEPROF, NISR
5	Proportion of women aged 20-24 years who were married or in a union before age 15 and before age 18	1	0	0	0	0	DHS	5 years	NISR
6	Proportion of countries where the legal framework (including customary law) guarantees women's equal rights to land ownership and/or control	1	0	0	0	1	Law N° 43/2013 of 16/06/2013	Annual	MINIJUST
7	Number of victims of intentional homicide per 100,000 population, by sex and age	1	0	0	0	1	Records MINJUST	Annual	MINIJUST, RNP
8	Proportion of population subjected to physical, psychological or sexual violence in the previous 12 months	1	0	0	0	1	DHS	5 years	NISR
9	Proportion of population that feel safe walking alone around the area they live	1	0	0	0	0	Victimisation survey; Justice Sector User Perception and Victimisation Study:	Annual	NISR; National Public Prosecution Authority(NPPA)
10	Proportion of children aged 1-17 years who experienced any physical punishment and/or psychological aggression by caregivers in the past month	1	0	0	0	0	Not clear		Not clear
11	Number of victims of human trafficking per 100,000 population, by sex, age and form of exploitation	1	0	0	0	0	Admin	Annual	MINIJUST, RNP, NPPA
12	Proportion of young women and men aged 18-29 years who experienced sexual violence by age 18	1	0	0	0	0	DHS	5 years	NISR
13	Proportion of victims of violence in the previous 12 months who reported their victimisation to competent authorities or other officially recognised conflict resolution mechanisms	1	0	0	0	1	Records of RNP; JRLO One stop	Annual	RNP, GMO
14	Unsentenced detainees as a proportion of overall prison population	1	0	0	0	1	Records JLROS	Annual	Admin data from JRLOS,RNP
15	Proportion of persons who had at least one contact with a public official and who paid a bribe to a public official, or were asked for a bribe by those public officials, during the previous 12 months	1	0	0	0	1	Records of the JLROS	Annual	Office of the Ombudsman; RGB

No	Indicator	Agenda					Data source	Frequency	Responsible institution
		SDG	AU2063	EAC2050	NST1	SSP			
16	Proportion of businesses that had at least one contact with a public official and that paid a bribe to a public official, or were asked for a bribe by those public officials during the previous 12 months	1	0	0	0	0	Records of the JLROS	Annual	OMBUDSMAN/RDB /MINEACOM; RGB
17	Number of verified cases of killing, kidnapping, enforced disappearance, arbitrary detention and torture of journalists, associated media personnel, trade unionists and human rights advocates in the previous 12 months	1	0	0	0	0	MINIJUST reports	Annual	MINIJUST; RNP
18	Number of countries that adopt and implement constitutional, statutory and/or policy guarantees for public access to information	1	0	0	0	0	Rwanda Access to Information ACT	Annual	Ministry of Justice
19	Existence of independent national human rights institutions in compliance with the Paris Principles	1	0	0	0	0	MINIJUST reports	Annual	MINIJUST, National Commission for Human Rights
20	Number of countries that have national statistical legislation that complies with the Fundamental Principles of Official Statistics	1	0	0	0	0	NISR	Annual	NISR
21	Proportion of countries that (a) have conducted at least one population and housing census in the last 10 years; and (b) have achieved 100 per cent birth registration and 80 per cent death registration	1	0	0	0	0	RPHC	Annual	NISR
22	1. No. of laws enacted/Protocols signed (National) 2. No of countries within the RECs that domesticated laws/protocols (Regional) 3. Number of obstacles on free movement of persons and goods and services reported	0	1	0	0	0	Admin	Annual	MINIJUST
23	1. Percentage of citizens who believe that the judiciary is independent, 2. Percentage of citizens who believe that the judicial system renders righteous judgments	0	1	0	0	0	Admin	Annual	MINIJUST, RGB
24	% of people who perceive they have free access to justice	0	1	0	0	0	Admin	Annual	MINIJUST, RGB
25	1. Percentage of citizens who believe that the culture of respect for human rights is rooted, 2. Percentage of citizens who believe that the rule of law is established 3. Percentage of citizens who believe that procedures are followed.	0	1	0	0	0	Admin	Annual	MINIJUST, RGB
26	Percentage of citizens who recognise that utilities are professionals (effective, responsive, accountable, impartial and honest)	0	1	0	0	0	Admin	Annually	NISR
27	Proportion of the population who acknowledge the relevance and good functioning of the legislature as a key component of the democracy	0	1	0	0	0	Admin	Annually	OMBUDSMAN
28	The number of local conflicts that occurred in a year	0	1	0	0	0	Admin	Annually	RNP
29	The number of conflicts emanating from ethnicity, all forms of exclusion, religious and political difference	0	1	0	0	0	Admin	Annually	RNP
30	Number of armed conflicts	0	1	0	0	0	Admin	Annually	RNP
31	Number of children who are victims of human trafficking per 100 000 people	0	1	0	0	0	Admin	Annually	RNP
32	Number of reported cases of violence by intimate or non-intimate partner	0	1	0	0	0	Admin	Annually	RGB
33	% of law enforcement officers and judicial personnel trained to adequately deal with issues of discrimination against women and girls	0	1	0	0	0	Admin	Annually	MINIJUST
34	Number of reported cases, amendment of laws	0	1	0	0	0	Admin	Annually	MINIJUST
35	Percentage of population with confidence in safety and security	0	0	0	1	1	RGB Reports/ RGS	Annually	JRLO Sector
36	The level of citizen satisfaction with property security	0	0	0	1	1	RGB Reports/ CRC	Annually	JRLO Sector
37	Performance of Judiciary increased	0	0	0	1		RGS	Annually	JRLO Sector
38	Percentage of backlog cases reduced	0	0	0	1	1	Annual Reports of the judiciary/ Supreme	Annually	JRLO Sector

No	Indicator	Agenda					Data source	Frequency	Responsible institution
		SDG	AU2063	EAC2050	NST1	SSP			
							Court report		
39	Percentage of citizens satisfaction with fighting corruption and injustice	0	0	0	1	1	RGB reports/ RGS	Annually	JRLO Sector
40	Rate of public fund recovered	0	0	0	1	1	MINIJUST Annual Report	Annually	JRLO Sector
41	Proportion of population with confidence in the control of corruption, transparency and accountability	0	0	0	1	1	RGS	Annually	JRLO Sector
42	Rate of overturned judgments reduced	0	0	0	0	1	Annual Reports of the judiciary	Annually	JRLO Sector
43	Performance of the Prosecution increased	0	0	0	0	1	RGS	Annually	JRLO Sector
44	% of criminal cases (human trafficking, terrorism, SGBV cases; corruption cases, drugs abuse and trafficking; genocide ideology & denial cases) prosecuted and convicted disaggregated by type, gender and age	0	0	0	0	1	NPPA annual report	Annually	JRLO Sector
45	Number of genocide fugitives' cases handled	0	0	0	0	1	NPPA annual report	Annually	JRLO Sector
46	Number of extradition treaties negotiated and signed	0	0	0	0	1	MINIJUST annual report	Annually	JRLO Sector
47	Rate of cases closed by NPPA due to the lack of evidences against those submitted by RIB	0	0	0	0	1	NPPA reports	Annually	JRLO Sector
48	Level of satisfaction (arrest and detention)	0	0	0	0	1	TI-Rw report RGB Score Card	Annually	JRLO Sector
49	Level of access to legal aid (KPI)	0	0	0	0	1	RGS	Annually	JRLO Sector
50	Level of satisfaction for access to legal aid	0	0	0	0	1	Civil Society Development Barometer (CSDB)	Annually	RGB
51	Increase of cases(disaggregated by gender, disability , age and type) received by MAJ	0	0	0	0	1	MINIJUST	Annually	JRLO Sector
52	Number of legal aid cases duly assisted and represented by RBA disaggregated by gender, age and type.	0	0	0	0	1	RBA Reports	Annually	JRLO Sector
53	Number of legal aid cases duly assisted and referred by CSOs	0	0	0	0	1	1. LAF reports 2. MINIJUST reports	Annually	JRLO Sector
54	Number of legal aid cases duly enforced by professional bailiffs	0	0	0	0	1	Professional Bailiff Association	Annually	JRLO Sector
55	Disposal pace to try vulnerable people (children, persons with disability, breastfeeding and pregnant women) related criminal cases	0	0	0	0	1	Annual Reports of the judiciary	Annually	JRLO Sector
56	Number of specialised criminal justice actors in juvenile justice disaggregated by judges, prosecutors, lawyers, police officers and prison staff	0	1	0	0	1	Judiciary, NPPA, RNP, RBA and RCS reports.	Annually	JRLO Sector
57	Number of cases of minors handled in full compliance with child friendly justice standards	0	0	0	0	1	RIB, NPPA, RCS	Annually	JRLO Sector
58	% of cases handled by Abunzi committees at both sector and cell level (KPI indicator)	0	0	0	0	1	MINIJUST annual report	Annually	JRLO Sector
59	Rate of Abunzi decisions appealed to courts	0	0	0	0	1	Judiciary Report	Annually	JRLO Sector
60	% of Abunzi decisions overturned by courts	0	0	0	0	1	Judiciary Report	Annually	JRLO Sector
61	% of Abunzi decisions overturned by Abunzi appeal level	0	0	0	0	1	MINIJUST	Annually	JRLO Sector
62	Level of citizen's satisfaction with Abunzi performance	0	0	0	0	1	RGB RGS	Annually	JRLO Sector
63	Number of cases processed through KIAC	0	0	0	0	1	KIAC reports	Annually	JRLO Sector
64	% of awards from KIAC Arbitrators' set aside by court (compared to the awards taken to court)	0	0	0	0	1	KIAC performance	Annually	JRLO Sector

No	Indicator	Agenda					Data source	Frequency	Responsible institution
		SDG	AU2063	EAC2050	NST1	SSP			
							eval,supreme court repts		
65	% in number of cases disaggregated by gender and age receiving alternative penalties from a judge	0	0	0	0	1	Judiciary report	Annually	JRLO Sector
66	% of eligible cases in which Prosecution requested for alternative penalties compared to total eligible cases.	0	0	0	0	1	NPPA reports	Annually	JRLO Sector
67	Level of citizen's satisfaction with the quality of laws.	0	0	0	0	1	RLRC/RGB reports	Annually	JRLO Sector
68	% of Existing Rwandan laws Revised	0	0	0	0	1	RLRC/RGB reports	Annually	JRLO Sector
69	Level of citizens including non-State actors' satisfaction with their involvement in law-making and review processes	0	0	0	0	1	RGB Score card report	Annually	JRLO Sector
70	Rate of judgments executed within the required legal timeline	0	0	0	0	1	MINIJUST reports	Annually	JRLO Sector
71	Level of citizen's satisfaction with execution of court decisions	0	0	0	0	1	CRC/RGB	Annually	JRLO Sector
72	Level of citizen's satisfaction with CPCs	0	0	0	0	1	RGB	Annually	JRLO Sector
73	Level of citizen's satisfaction of personal security disaggregated by gender and age	0	0	0	1	1	RGB	Annually	JRLO Sector
74	Number of Community Policing Committee members trained and anti-crime clubs established and sensitised	0	0	0	0	1		Annually	JRLO Sector
75	Number of Joint Targeted operations by RNP and RDF to detect drugs	0	0	0	0	1		Annually	JRLO Sector
76	Number of SGBV victims disaggregated by age, sex and settings reported, handled by the prosecution and convicted	0	0	0	0	1	RNP reports	Annually	JRLO Sector
77	Response time to critical incidence.	0	0	0	0	1	RNP report	Annually	JRLO Sector
78	Number of investigators trained	0	0	0	0	1	RIB report	Annually	JRLO Sector
79	Number of modern Police Stations constructed	0	0	0	0	1		Annually	JRLO Sector
80	Level of construction and operationalisation of Automated Driving License Testing Centre (ADLTC) constructed	0	0	0	0	1		Annually	JRLO Sector
81	Accommodation space of inmates per inmate maintained	0	0	0	0	1	RCS	Annually	JRLO Sector
82	Sleeping space in prison per inmate	0	0	0	0	1	RCS	Annually	JRLO Sector
83	Number of inmates with standard BMI disaggregated by category	0	0	0	0	1	RCS Reports	Annually	JRLO Sector
84	Number of prisons where convicts and non-convicts are detained separately.	0	0	0	0	1	RCS/NHRC Reports	Annually	JRLO Sector
85	% of juveniles living in prisons equipped with minor friendly facilities	0	0	0	0	1	RCS Reports	Annually	JRLO Sector
86	% of children accompanying their mother accessing special need services	0	0	0	0	1	RCS Reports	Annually	JRLO Sector
87	% Pregnant and Breastfeeding mothers benefiting from special need services	0	0	0	0	1	RCS Reports	Annually	JRLO Sector
88	% of inmates with disabilities living in prisons with disability friendly facilities.	0	0	0	0	1	RCS reports	Annually	JRLO Sector
89	% of inmates benefiting from correctional and rehabilitation programmes including psychosocial support disaggregated by age and gender	0	0	0	0	1	RCS	Annually	JRLO Sector
90	Cumulative Percentage of construction works of RCS Headquarters.2	0	0	0	0	1	Tender documents and construction reports	Annually	JRLO Sector
91	Cumulative Percentage of construction of RCS Training School.	0	0	0	0	1	Tender documents Construction reports	Annually	JRLO Sector
92	Number of researches conducted on genocide perpetrated against Tutsi	0	0	0	0	1	CNLG reports	Annually	JRLO Sector
93	% of genocide proof conservation modernised	0	0	0	0	1	CNLG reports	Annually	JRLO Sector
94	Number of Gacaca documents /files digitised and indexed.	0	0	0	0	1	CNLG Reports,	Annually	JRLO Sector

No	Indicator	Agenda					Data source	Frequency	Responsible institution
		SDG	AU2063	EAC2050	NST1	SSP			
95	Number of genocide ideology cases decreased.	0	0	0	0	1	CNLG Reports	Annually	JRLO Sector
96	Proportion of population with confidence in the control of corruption, transparency and accountability	0	0	0	0		RGS	Annually	JRLO Sector
97	% of citizens reporting personal experience of corruption	0	0	0	0	1	RBI	Annually	JRLO Sector
98	Reduction of corruption, court judgement review and injustice backlog cases in the Office of Ombudsman.	0	0	0	0	1	Ombudsman Reports	Annually	JRLO Sector
99	Conviction rate in prosecuting financial and economic crimes	0	0	0	0	1	Judiciary NPPA Reports	Annually	JRLO Sector
100	Conviction rate of public officials who cause loss to the Government	0	0	0	0	1	Judiciary reports NPPA Reports	Annually	JRLO Sector
101	% of public officials whose declared assets are verified	0	0	0	0	1	Office of Ombudsman	Annually	JRLO Sector
102	% 0f legal opinions/Advices Provided to public institutions	0	0	0	0	1	annual reports	Annually	MINIJUST
103	% of recommendations related to transparency and accountability implemented	0	0	0	0	1	Office of Ombudsman	Annually	JRLO Sector
104	Status of Unity and reconciliation among Rwandan (RRB)	0	0	0	0	1	RRB	Annually	JRLO Sector
105	% of Rwandans that judge each other based on ethics stereotypes	0	0	0	0	1	Rwanda Reconciliation Barometer Report	Annually	JRLO Sector
106	Level of individual proudness of a shared identity	0	0	0	0	1	RRB	Annually	JRLO Sector
107	Level of trust among Rwandans	0	0	0	0	1	RRB	Annually	JRLO Sector
108	Level of fairness, equal rights and opportunities	0	0	0	0	1	RRB	Annually	JRLO Sector
109	Proportion of Population with confidence in respect of Human Rights	0	0	0	0	1	RGS	Annually	JRLO Sector
110	Level of implementation of the 2015 UPR recommendations (accepted by Rwanda)	0	0	0	0	1	MINIJUST/NCHR	Annually	JRLO Sector
111	Number of UN international Human rights Conventions ratified against total number of conventions to be ratified	0	0	0	0	1	MINIJUST/NCHR	Annually	JRLO Sector
112	Rate of implementation of recommendations from treaty bodies	0	0	0	0	1	MINIJUST/NHRC	Annually	JRLO Sector
113	Rate of implementation of recommendations from NHRC as an oversight institution	0	0	0	0	1	NHRC	Annually	JRLO Sector
114	Number of duty bearers and rights holders sensitised and trained on human rights disaggregated by gender and age.	0	0	0	0	1	NHRC,CSO reports	Annually	JRLO Sector
115	% of cases of Human Rights violations addressed against those reported disaggregated by gender, age and region	0	0	0	0	1	NHRC	Annually	JRLO Sector
116	Disposal rate in handling SGBV cases	0	0	0	0	1	Judiciary, NPPA, RIB	Annually	JRLO Sector
117	Level of NHAP implemented	0	0	0	0	1	NHRC	Annually	JRLO Sector
118	Level of satisfaction of service delivery in the Justice Sector	0	0	0	0	1		Annually	JRLO Sector
119	Level of implementing Sector CDS	0	0	0	0	1	Reports on impact of CDS	Annually	JRLO Sector
120	Level of implementing Sector communication strategy	0	0	0	0	1	Communication reports	Annually	JRLO Sector
121	Level of implementing Sector Change Management Strategy recommendations	0	0	0	0	1	JSCS REPORTS	Annually	JRLO Sector
122	Level of Implementation of JRLOS gender Strategy recommendations.	0	0	0	0	1	MINIJUST	Annually	JRLO Sector
123	Number of ILPD graduates from public and private sector trained in DLP and DLD	0	0	0	0	1	ILPD reports	Annually	JRLO Sector
124	Number of public and private sector lawyers trained in specialised courses	0	0	0	0	1	ILPD reports	Annually	JRLO Sector
125	Number of public and private sector lawyers trained in critical and rare skills	0	0	0	0	1	ILPD reports	Annually	JRLO Sector
126	Level of self-reliance of MUHABURA Multi choice Company Ltd	0	0	0	0	1		Annually	JRLO Sector

No	Indicator	Agenda					Data source	Frequency	Responsible institution
		SDG	AU2063	EAC2050	NST1	SSP			
127	The contribution of MMC ltd to RCS self-reliance (feeding inmates)	0	0	0	0	1	MMC Ltd reports	Annually	JRLO Sector
128	ILPD Self reliance	0	0	0	0	1	ILPD Report	Annually	JRLO Sector
129	Number of civil society organisation registered in the sector and contributing actively in various thematic working groups of the JRLOS	0	0	0	0	1	JRLOS reports	Annually	JRLO Sector
130	Number of trainees from the RBA, Professional bailiffs and the civil society, media benefiting from capacity building trainings disaggregated by gender.	0	0	0	0	1	JRLOS reports	Annually	JRLO Sector
131	Number of consultation forums/symposiums held bringing together all justice sector chain actors from GoR and stakeholders to build mutual trust and shared vision.	0	0	0	0	1	JRLOS reports	Annually	JRLO Sector

3. JRLO Sector: Five-year Statistical Plan

The following table provides a summary of all the key activities for the JRLO sector statistical plan. It flows directly from the data needs outlined in Table 1, and includes budget and partnership information based on consultations and input from key sector stakeholders.

Table 2: JRLO Sector Statistical Activities

WBS	Activities	Responsibility		Time frame & Costs (in thousands Frw)					Total NSDS3 (in thousands Frw)	Total NSDS3 (in USD)
		Main	Partner	2019/20	2020/21	2021/22	2022/23	2023/24		
Pillar I: Produce statistics to support evidence-based decision-making				**58,500**	**305,700**	**36,000**	**56,800**	**46,600**	**503,600**	**548,584**
Strategic Objective 02: Enrich and expand data supply across the NSS				**58,500**	**305,700**	**36,000**	**56,800**	**46,600**	**503,600**	**548,584**
2.1	Monitor different national programs that are key or sensitive to unity and reconciliation promotion	NURC	MINALOC, Prime Minister Office	-	-	-	32,000	-	32,000	34,858
2.2	Monitoring on how institutions compliancy unity and reconciliation principles	NURC	MINALOC, Prime Minister Office	18,500	14,700	21,000	12,300	25,000	91,500	99,673
2.3	Access to and awareness of laws	RLRC	JRLOS Institutions & CSOs	-	25,000	-	-	-	25,000	27,233
2.4	Conduct a research on the Rwanda Reconciliation Barometer	NURC	-	-	168,000	-	-	-	168,000	183,007
2.5	Conduct a research on the status of unity and reconciliation among the youth more specifically in schooling youth	NURC	-	-	80,000	-	-	-	80,000	87,146
2.8	Monitor and foster unity and reconciliation in the	NURC	CNLG, RNP, General	15,000	18,000	15,000	12,500	21,600	82,100	89,434

WBS	Activities	Responsibility		Time frame & Costs (in thousands Frw)					Total NSDS3 (in thousands Frw)	Total NSDS3 (in USD)
		Main	Partner	2019/20	2020/21	2021/22	2022/23	2023/24		
	commemoration of Genocide against the Tutsi		Prosecution and Districts							
2.9	Survey on citizen's participation in legislative process	RLRC	JRLOS Institutions & CSOs	25,000	-	-	-	-	25,000	27,233
Pillar II: Facilitate a data revolution to deepen statistical impact				**2,500**	**2,500**	**2,500**	**2,500**	**2,500**	**12,500**	**13,617**
Strategic Objective 04: Harmonise best practices in data governance across the NSS				**2,500**	**2,500**	**2,500**	**2,500**	**2,500**	**12,500**	**13,617**
4.2	Strengthen the IT based data generation and analysis	NISR	Judiciary	2,500	2,500	2,500	2,500	2,500	12,500	13,617
Pillar III: Build statistical capability across the NSS to increase data uptake and use				**2,000**	**2,000**	**2,000**	**2,000**	**2,000**	**10,000**	**10,893**
Strategic Objective 08: Enhance capacity for data management and statistical analysis				**2,000**	**2,000**	**2,000**	**2,000**	**2,000**	**10,000**	**10,893**
8.1	Capacity Building in application of court statistics to improve monitoring and evaluation of Judiciary Performance	NISR	Judiciary	2,000	2,000	2,000	2,000	2,000	10,000	10,893
	Grand Total: Justice, Reconciliation, Law and Order Statistics			**63,000**	**310,200**	**40,500**	**61,300**	**51,100**	**526,100**	**573,094**

A3.10 Private Sector Development and Youth Employment Sector Statistical Plan

1. Sector Background

Drawing on the three pillars of the National Strategy for Transformation (NST-1), and the aspirations articulated in Rwanda Vision 2020 and Vision 2050, the PSDYE Sector Strategic Plan (PSSP) will facilitate progress toward 'economic transformation from an agrarian to a high-productivity knowledge-based economy'. Current limitations in data availability, particularly on labour productivity, firm resilience and R&D expenditure, pose critical obstacles to effective planning and value chain optimisation, highlighting the relationship between statistical development and Rwanda's ambitious plans for national development and economic growth.

The PSSP identifies access to data and technology as a key component of effective private sector development. In particular, the PSSP outlines a number of initiatives that expand the use of technology in PSDYE programs, which complement broader NSDS3 objectives to build data literacy, both for government and the wider public. In particular, initiatives to promote skills-building in science and technology, develop e-commerce systems for 'digitally-enabled exports' and efforts to 'lower the cost of accessing information through ICT' strongly align with the implementation plan for the Data Revolution Policy (DRP). While current data management systems in the sector remain limited, a strong focus on capacity building to support sector activities and operations offers an opportunity to move toward more effective model for sector statistical practice. The following strengths, weaknesses, opportunities and threats (SWOT) will shape progress in these areas throughout implementation of the PSSP and NSDS3:

Strengths	**Weaknesses**
1. Strongly supported by NISR data products and existing frameworks for NISR-sector cooperation. 2. Baselines available for all indicators captured in the NST and SSP. 3. Despite limitations in data production, key sector MDAs regularly leverage available data to produce and publish analysis.	1. Informal patterns of data sharing coupled with limited data production in some institutions perpetuate a mismatch between data supply and demand. 2. Uneven statistical capacity across institutions results in uneven patterns of data production and use. 3. Underdeveloped MIS' across institutions hinder data management and dissemination. 4. Reliance on a request-based system for data access creates inefficiency and reduces technical staff time for analysis.
Opportunities	**Threats**
1. Projects in e-commerce and data literacy open new opportunities for NISR collaboration through the DRP and Training Centre. 2. Emerging institutional systems and data platforms create opportunities to improve sector coordination.	1. Lack of alignment between PSSP and SDG data requirements threatens coherent data production priorities. 2. The absence of an integrated MIS system reinforces institutional fragmentation and data silos.

2. Sector Data Requirements

This sector plan defines statistical needs and projects for the PSDYE sector based on policy indicator frameworks outlined in Table 1 (below), including the NST-1 (7 indicators), PSSP (11 indicators), the SDGs (18 indicators), AU Agenda 2063 (23 indicators) and EAC Vision 2050 (4 indicators). Calculating overlapping data requirements across frameworks, these 63 indicators translate to 56 unique data points drawn from a diffuse network of producers, encompassing 11 institutions. The sector is strongly supported by NISR survey products (11 indicators, 20%), but 22 indicators currently lack baselines (39%), illustrating a need to expand data production respond to policy-driven data demand over the next 5 years.

Table 1: PSDYE Sector Indicators

No	Indicator	Agenda					Data source	Frequency	Responsible institution
		SDG	AU2063	EAC2050	NST1	SSP			
1	Proportion of tariff lines applied to imports from least developed countries and developing countries with zero-tariff	1	0	0	0	0	Annual Report	Annually/6 months	RRA
2	Proportion of traded wildlife that was poached or illicitly trafficked	1	0	0	0	0	Annual Report	Annually/6 months	RDB
3	Developing countries and least developed countries share of global exports	1	0	0	0	0	Annual Report	Annually/6 months	BNR
4	Proportion of time spent on unpaid domestic and care work, by sex, age and location	1	0	0	0	0	LFS	Annually	NISR
5	Proportion of informal employment in non-agriculture employment, by sex	1	0	0	0	0	LFS	Annually	NISR
6	Average hourly earnings of female and male employees, by occupation, age and persons with disabilities	1	0	0	0	0	LFS	Annually/5 years	NISR
7	Unemployment rate, by sex, age and persons with disabilities	1	1	1	0	0	LFS	Annually/5 years	NISR
8	Proportion of youth (aged 15-24 years) not in education, employment or training	1	0	0	0	0	LFS	Annually	NISR
9	Proportion and number of children aged 5-17 years engaged in child labour, by sex and age	1	1	0	0	0	LFS		NISR
10	Manufacturing value added as a proportion of GDP and per capita	1	1	0	0	0	LFS	Annually	NISR
11	Manufacturing employment as a proportion of total employment	1	0	0	0	0	LFS	Annually	NISR
12	Frequency rates of fatal and non-fatal occupational injuries, by sex and migrant status	1	0	0	0	0	MIFOTRA Reports		MIFOTRA
13	Tourism direct GDP as a proportion of total GDP and in growth rate	1	1	0	0	0	RDB Reports	Annually/6 months	RDB
14	Proportion of small-scale industries in total industry value added	1	0	0	0	0	Unspecified	Annually	Unspecified
15	Proportion of small-scale industries with a loan or line of credit	1	0	0	0	0	Unspecified	Annually	Unspecified
16	Proportion of medium and high-tech industry value added in total value added	1	0	0	0	0	Unspecified	3 YEARS	Unspecified
17	Labour share of GDP, comprising wages and social protection transfers	1	0	0	0	0	Unspecified	3 YEARS	Unspecified
18	Proportion of countries adopting relevant national legislation and adequately resourcing the prevention or control of invasive alien species	1	0	0	0	0	Unspecified	Annually	Unspecified
19	Number of PPP and civil society partnership projects	0	1	0	0	0	Admin	Annual	Unspecified
20	% share of total output received from extractive sector industries owned by locals	0	1	0	0	0	Admin	Annual	Unspecified
21	% of food imported	0	1	0	0	0	Admin	Annual	Unspecified
22	% contribution of the creative arts to GDP in real terms increased	0	1	0	0	0	Admin	Annual	Unspecified
23	Rate of increase of intra-African trade volume per annum	0	1	0	0	0	Admin	Annual	Unspecified
24	% increase of intra-Africa trade in agriculture commodities	0	1	0	0	0	Admin	Annual	Unspecified

25	% of informal sector ventures graduating into Formal Enterprises	0	1	0	0	0	Admin	Annual	Unspecified
26	Underemployment rate by age, sex	0	1	0	0	0	LFS	Annually/6 months	NISR
27	Proportion of employed people living below the minimum wage	0	1	0	0	0	LFS	Annually/6 months	NISR
28	% share of total output received from non-extractive sector industries owned by locals	0	1	0	0	0	N.ACCOUNT	Annually	NISR
29	% increase of intra-Africa trade in service	0	1	0	0	0	Admin	Annually	MINECOFIN/ RDB
30	Number of commodities exchanges established	0	1	0	0	0			
31	% increase of the coastal tourism financing the development of the programmes of the communities	0	1	0	0	0	Admin	Annually	RDB
32	1. % of tariff lines liberalised within African states 2. Number of Non-tariff barriers (NTBs) reported and eliminated	0	1	0	0	0	Adm		MINEACOM
33	Proportion of business start-ups by youth by formal/informal and by industry	0	1	0	0	0	IBES	Annually	NISR
34	Proportion of Youth and Children engaged in talent-based development programmes, leisure and recreation	0	1	0	0	0	Admin	Annually	MINIYOUTH
35	Finished and semi-finished products as a proportion of total exports	0	1	0	0	0	Adm	Annually	BNR
36	Export diversification index (by product; by market, by destination (intra and intercontinental)	0	1	0	0	0	Adm	Annually	BNR
37	Resources raised through innovative financing mechanisms as a % of national budget	0	1	0	0	0	Admin	Annually	RDB
38	Manufactured Export (as % of total Export)	0	0	1	0	1	Admin	Annually	MINICOM
39	FDI net inflows (% of GDP)	0	0	1	0	1	Admin	Annually	BNR
40	Food production (million metric tonnes)	0	0	1	0	0	Admin	Annually	NAEB
41	Number of new decent and productive jobs created	0	0	0	1	0	LFS	Annually	NISR
42	Annual export growth	0	0	0	1	0	N. Accounts	Annually	NISR
43	Value of exports	0	0	0	1	0	N. Accounts	Annually	NISR
44	Exports of goods and Services as a percentage of GDP.	0	0	0	1	0	N. Accounts	Annually	NISR
45	Industry as share of GDP	0	0	0	1	0	N. Accounts	Annually	NISR
46	Value of tourism revenues	0	0	0	1	0	annual report	Annually	RDB
47	Value of MICE revenues	0	0	0	1	0	annual report	Annually	RDB
48	Annual exports growth	0	0	0	0	1		Annually	PSDYE Sector
49	Services share of total exports	0	0	0	0	1		Annually	PSDYE Sector
50	Private Investment as share of GDP*	0	0	0	0	1	N. Accounts	Annually	NISR
51	Credit to SMEs as share of GDP	0	0	0	0	1	N. Accounts	Annually	NISR
52	Number of active firms, older than two years with four or more employees, dis-aggregated by gender of owner	0	0	0	0	1		Annually	PSDYE Sector
53	Total factor Productivity (TFP)	0	0	0	0	1		Annually	PSDYE Sector
54	R&D expenditure as share of GDP	0	0	0	0	1	N. Accounts	Annually	NISR
55	Off-farm jobs created annually, disaggregated by gender	0	0	0	0	1		Annually	PSDYE Sector
56	Labour productivity in off-farm sectors	0	0	0	0	1		Annually	PSDYE Sector

3. PSDYE Sector: Five-year Statistical Plan

The following table provides a summary of all the key activities for the PSDYE sector statistical plan. It flows directly from the data needs outlined in Table 1, and includes budget and partnership information based on consultations and input from key sector stakeholders.

Table 2: PSDYE Sector Statistical Activities

WBS	Activities	Responsibility		Time frame & Costs (in thousands Frw)					Total NSDS3 (in thousands Frw)	Total NSDS3 (in USD)
		Main	Partner	2019/20	2020/21	2021/22	2022/23	2023/24		
Pillar I: Produce statistics to support evidence-based decision-making				**385,000**	**310,000**	**242,000**	**253,000**	**359,000**	**1,549,000**	**1,687,364**
Strategic Objective 02: Enrich and expand data supply across the NSS				**385,000**	**310,000**	**242,000**	**253,000**	**359,000**	**1,549,000**	**1,687,364**
2.1	Youth perception studies toward employability and quality per High Learning Institutions	MINIYOUTH	MINEDUC, WDA, RDB, HEC, NEP	40,000	-	42,000	-	44,000	126,000	137,255
2.2	Assessment of alcohol and drug consumption behaviour among youth.	MINIYOUTH	NRC, RNP, MINALOC, Districts	45,000	-	-	-	45,000	90,000	98,039
2.3	Domestic tourism survey	NISR	RDB	-	60,000	-	-	70,000	130,000	141,612
2.4	Industrial Research and Development Support	NIRDA	MINICOM	200,000	200,000	200,000	200,000	200,000	1,000,000	1,089,325
2.5	Rwanda tourism integrated data warehousing system	RDB	DGIE, RRA, NISR, BNR	50,000	-	-	-	-	50,000	54,466
2.6	Rwanda Youth Development Index	MINIYOUTH	-	-	50,000	-	-	-	50,000	54,466
2.7	Youth MSMEs attrition assessment and analytics	MINIYOUTH	-	50,000	-	-	53,000	-	103,000	112,200
Pillar II: Facilitate a data revolution to deepen statistical impact				**1,264,000**	**2,009,182**	**2,201,500**	**7,520**	**27,411**	**5,509,613**	**6,001,757**
Strategic Objective 04: Harmonise best practices in data governance across the NSS				**1,264,000**	**2,009,182**	**2,201,500**	**7,520**	**27,411**	**5,509,613**	**6,001,757**
4.1	Integrated Management Information System project	RDB	N/A	814,000	1,759,182	2,000,000	-	-	4,573,182	4,981,680
4.3	Rwanda Economic Intelligence Data Centre	RDB	MINECOFIN	450,000	250,000	201,500	-	-	901,500	982,026
	Grand Total: Private Sector Development & Youth Employment Statistics			**1,649,000**	**2,319,182**	**2,443,500**	**260,520**	**386,411**	**7,058,613**	**7,689,121**

A3.11 Social Protection Sector Statistical Plan

1. Sector Background

Drawing on the three pillars of the National Strategy for Transformation (NST-1), and the aspirations articulated in Rwanda Vision 2020 and Vision 2050, the Social Protection Sector Strategic Plan (SP-SSP) aims to 'ensure that all Rwandan citizens have a dignified standard of living, are protected from social exclusion, neglect and abuse and are supported to access employment and other livelihood opportunities'. The ambitious objective to achieve 'universal social protection for all citizens' captured in the SP-SSP implies a strong need for a consistent flow of high-quality granular data to effectively identify and target interventions in areas of greatest need. With this in mind, ongoing efforts to improve program coverage, responsiveness, and cross-sectoral harmonisation motivate investments in statistical development for the social protection sector.

Plans to expand program management information systems (MIS) and consolidate them into an integrated Social Protection MIS (iSP-MIS) will require investments in technical capacity and appropriate infrastructure to develop and maintain formal standards for data management. In addition, plans to adapt program design and targeting using a data-driven approach include a partnership with NISR to refine *Ubudehe* methodologies. New data flows and analytical techniques are required to develop a 'multidimensional household welfare assessment mechanism' that addresses linkages between social vulnerability and issues related to environment, food security, and WATSAN. Collectively, these planned interventions illustrate accelerating demands on statistical capability in the social protection sector. The following strengths, weaknesses, opportunities and threats (SWOT) will shape progress in these areas throughout implementation of the SP-SSP and NSDS3:

Strengths	**Weaknesses**
1. SSP includes strong recognition on the role of evidence in improving sector performance, and a mandate to improve data use. 2. Plans to leverage ICT-based tools and the iSP-MIS to move toward integrated data management at central and district levels. 3. Existing MIS systems at the program-level reinforce the need for more granular data, while supporting the development of a more comprehensive iSP-MIS.	1. Current data management systems remain underdeveloped, increasing pressure on the design of an integrated MIS 2. Limitations of current staff capacity to respond to increasing complexity of planned analytical tasks. 3. Existing survey products may not capture a sufficient volume of information on the poorest and most marginalised groups. 4. Insufficient publication of data products weakens effective feedback loops.
Opportunities	**Threats**
1. Plans for multi-dimensional analysis motivate cross-sectoral collaboration and data flows. 2. Process of integrating program data into a single system (iSP-MIS) allows for a data-driven approach to sector coordination. 3. Development of the national data portal under the DRP increases access to a wider range of covariate data for use in multidimensional analysis of vulnerability for program targeting.	1. Dependence on data integration from other sectors to achieve goals requires effective data flows that may hinge on informal channels. 2. Fragmented data systems across MDAs and programs may delay full functionality of the iSP-MIS or compromise a holistic approach to data governance.

2. Sector Data Requirements

This sector plan defines statistical needs and projects for the social protection sector based on policy indicator frameworks outlined in Table 1 (below), including the NST-1 (1 indicator), SP-SSP (25 indicators), the SDGs (5 indicators) and AU Agenda 2063 (3 indicators). Calculating overlapping data requirements across frameworks, these 34 indicators translate to 30 unique data points derived from a diffuse network of producers, encompassing 7 institutions. The sector is supported directly by NISR survey products (7 indicators, 23%) and 5 indicators currently lack baselines (17%), illustrating a need to expand data production over the next 5 years.

Table 1: Social Protection Sector Indicators

No	Indicator	Agenda					Data source	Frequency	Responsible institution
		SDG	AU2063	EAC2050	NST1	SSP			
1	Proportion of population below the international poverty line, by sex, age, employment status and geographical location (urban/rural)	1	0	0	0	0	EICV	3 years	NISR
2	Proportion of population living below the national poverty line, by sex and age	1	0	0	0	1	EICV	3 years	NISR
3	Proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions	1	0	0	0	0	EICV	3 years	NISR
4	Proportion of population covered by social protection floors/systems, by sex, distinguishing children, unemployed persons, older persons, persons with disabilities, pregnant women, newborns, work-injury victims and the poor and the vulnerable	1	1	0	0	1	Annual report	Annual	MINALOC
5	Growth rates of household expenditure or income per capita among the bottom 40 per cent of the population and the total population	1	0	0	0	0	EICV	3 Years	NISR
6	Proportion of formal sector workers covered by the national social protection programme	0	1	0	0	0	EICV/ADMIN	3 years/annual	NISR/MINALOC
7	Proportion of eligible informal sector workers and rural labour covered by the national social protection programme	0	1	0	0	0	EICV/ADMIN	3 years/annual	NISR/MINALOC
8	Percentage of the population living below extreme poverty line	0	0	0	1	1	EICV	3 Years	NISR
9	% of social protection beneficiary households demonstrating a significant improvement in socio-economic status	0	0	0	0	1	Min Pkg household profiling mechanism	annually	MINALOC
10	Number of extremely poor child-headed HHs accessing social protection	0	0	0	0	1	JSR reports/EICV	annually	MINALOC
11	% of PwDs covered by social protection	0	0	0	0	1	JSR reports/EICV	annually	MINALOC
12	Number workers enrolled in voluntary long-term savings scheme	0	0	0	0	1	RSSB annual reports	annually	MINALOC
13	Number of extremely poor mothers and infants in first the 1,000 days benefitting from nutrition-sensitive Child Support Grant	0	0	0	0	1	LODA annual report	annually	MINALOC
14	Number of households in crisis provided with other short-term social assistance (temporary financial assistance, shelter, health fees, etc)	0	0	0	0	1	MINALOC, LODA, RDRC, FARG reports	annually	MINALOC
15	% of VUP cPW expenditure contributing to Disaster Risk Reduction	0	0	0	0	1	LODA annual reports	annually	MINALOC
16	Number of PwDs with access to rehabilitation support services	0	0	0	0	1	Report from Annual Orthopaedic and Rehab Centres	annually	MINALOC

No	Indicator	Agenda					Data source	Frequency	Responsible institution
		SDG	AU2063	EAC2050	NST1	SSP			
17	Number of vulnerable children/youth benefitting from NRS rehabilitation and reintegration services	0	0	0	0	1	NRS annual reports	annually	MINALOC
18	% of children in orphanages integrated into families	0	0	0	0	1	NCC annual reports	annually	
19	%. of eligible social protection beneficiary households receiving asset transfers under MPG framework	0	0	0	0	1	iSP-MIS Household Profiling MINAGRI/RAB reports	annually	LODA, MINAGRI, CSOs, private sector
20	Number of community-based projects implemented under Ubudehe programme	0	0	0	0	1	LODA MEIS/reports	annually	LODA, Local gov
21	% of extremely poor households who are members of a community savings group/VSLA	0	0	0	0	1	SP sector household profiling system	annually	MINALOC
22	Number of extremely poor and vulnerable individuals receiving formal skills training and apprenticeships	0	0	0	0	1	LODA, FARG, RDRC, NCPD reports	annually	MINALOC
23	Number of studies/evaluations conducted through SPSWG and disseminated	0	0	0	0	1	JSR reports	annually	MINALOC
24	% of Sectors and Cells with dedicated Social Protection staff (SEDOs and SPOs)	0	0	0	0	1	JSR reports	annually	MINALOC
25	% of social protection beneficiaries satisfied with quality of services	0	0	0	0	1	RGB Rwanda Citizens Report Card	annually	MINALOC
26	% of households in Ubudehe category 1 with a performance contract	0	0	0	0	1		annually	MINALOC
27	% of core social protection programme payments delivered on-time	0	0	0	0	1	iSP-MIS	annually	MINALOC
28	Number of formal partnerships between districts and CSOs on social protection	0	0	0	0	1	District reports	annually	MINALOC
29	% of formal complaints (in MEIS and CMS) resolved within the approved time period	0	0	0	0	1	LODA MEIS	annually	MINALOC
30	Number of poor and vulnerable households supported through HGS (e.g. Umuganda and Kuremera, Urugerero)	0	0	0	0	1	District reports	annually	MINALOC

3. Social Protection Sector: Five-year Statistical Plan

The following table provides a summary of all the key activities for the social protection sector statistical plan. It flows directly from the data needs outlined in Table 1, and includes budget and partnership information based on consultations and input from key sector stakeholders.

Table 2: Social Protection Sector Statistical Activities

WBS	Activities	Responsibility		Time frame & Costs (in thousands Frw)					Total NSDS3 (in thousands Frw)	Total NSDS3 (in USD)
		Main	Partner	2019/20	2020/21	2021/22	2022/23	2023/24		
Pillar III: Build statistical capability across the NSS to increase data uptake and use				**25,000**	**25,000**	**25,000**	**25,000**	**25,000**	**125,000**	**138,390**
Strategic Objective 04: Harmonise best practices in data governance across the NSS				**25,000**	**25,000**	**25,000**	**25,000**	**25,000**	**125,000**	**138,390**
4.1	iSP-MIS	MINALOC	DFID, UNICEF	25,000	25,000	25,000	25,000	25,000	125,000	138,390
	Grand Total: Social Protection Statistics			**25,000**	**25,000**	**25,000**	**25,000**	**25,000**	**125,000**	**138,390**

A3.12 Sport & Culture Sector Statistical Plan

1. Sector Background

Drawing on the three pillars of the National Strategy for Transformation (NST-1), and the aspirations articulated in Rwanda Vision 2020 and 2050, the Sport and Culture Sector Strategic Plan (SC-SSP) introduces 'an overarching sector-wide planning framework that mainstreams the sector into the national economy…to develop different sports disciplines and cultural values enshrined in Rwandan society'. As the newest sector for NST-1, Sport and Culture faces unique challenges in developing statistical capacity to support monitoring and evaluation, and ensure alignment with policy frameworks at the regional, continental and international level.

The sport and culture sector is in the very earliest stages of statistical development. Administrative data production has begun, but consists largely of qualitative assessments, and sector statistical needs are not currently addressed in NISR survey products. However, the SC-SSP identifies a number of ongoing initiatives that motivate investments in statistical development during NSDS3 implementation. Plans to build capacity for administration and management include further development of sector M&E frameworks and a new MIS. Sector program to strengthen policies around intellectual property and improve access to information through digitisation and facilitate community participation through ICT interventions strongly align with NSDS3 initiatives for the data revolution. In light of these activities, and increasing demand for sport and culture data products, this statistical plan holds significant potential to increase the visibility of sector statistical needs. The following strengths, weaknesses, opportunities and threats (SWOT) will shape progress in these areas throughout implementation of the SC-SSP and NSDS3:

Strengths	**Weaknesses**
1. Priorities in the SC-SSP to build up administrative and management capacity — including robust M&E systems. 2. Early plans to develop an MIS and bring in a full-time statistician. 3. Some technical support in GIS/Stata.	1. Currently depend on qualitative assessments over quantitative. 2. Minimal integration with NISR surveys and nascent administrative systems. 3. No formal systems for data collection and management. 4. Weak coordination mechanisms with districts, complementary NST-1 sectors and external partners.
Opportunities	**Threats**
1. A new sector with opportunities to develop statistical capacity early. 2. Launch of the NISR Training Centre will support staff development and build relationships with NISR. 3. Projects in ICT-based citizen engagement and information digitisation create opportunities to engage with the DRP.	1. Current data needs require collaboration and data sharing across sectors, with no formal mechanisms for data access. 2. Lack of full-time technical support in data production threatens capacity to fulfil emerging data requirements.

2. Sector Data Requirements

This sector plan defines statistical needs and projects for the sport and culture sector based on policy indicator frameworks outlined in Table 1 (below), including the SC-SSP (38 indicators), AU Agenda 2063 (5 indicators) and EAC Vision 2050 (1 indicator). These 44 indicators are derived from a diffuse network of producers, encompassing 12 different institutions. 2 indicators lack baselines (5%), and the sector is not currently supported directly by NISR survey products, illustrating a need to both improve and expand data supply over the next 5 years.

Table 1: Sport and Culture Sector Indicators

No	Indicator	Agenda					Data source	Frequency	Responsible institution
		SDG	AU2063	EAC2050	NST1	SSP			
1	Proportion of citizens appreciate the creative arts	**0**	1	0	0	0	special survey	Unspecified	Unspecified
2	Proportion of local content used in print and electronic productions and media	**0**	1	0	0	0	Admin	Unspecified	Unspecified
3	Number of MDAs established in a country for the promotion of creative art businesses	**0**	1	0	0	0	special survey	Unspecified	Unspecified
4	Existence / Establishment of fora to encourage inter-generational dialogue and cultural practices	**0**	1	0	0	0	Admin	Unspecified	Unspecified
5	Proportion of cultural national treasures that are identified, are retrieved, protected, archived and valued	**0**	1	0	0	0	Admin	Unspecified	Unspecified
6	Number of museums	0	0	1	0	0	Admin	Annually	MINISPOC
7	Participation opportunities in sports provided based on real needs	0	0	0	0	1	Admin	Quarterly	MINISPOC, NSC
8	Provide sport activities to cater for all demographic groups in the Country	0	0	0	0	1	Admin	Quarterly	MINISPOC
9	Schools provide formalised school sports and physical education	0	0	0	0	1	Admin	Quarterly	MINEDUC, MINISPOC
10	Sports used to achieve wider public policy outcomes (health, mobilisation for different Government programs, unity and reconciliation)	0	0	0	0	1	Admin	Annual	MINISPOC, NSC
11	Sports Sector providing relevant training courses to support sports in the Country	0	0	0	0	1	Admin	Annual	MINISPOC, NCBS
12	Parents actively engaged in supporting children participation in sports both in school and outside school	0	0	0	0	1	special survey	Annual	MINEDUC, DISTRICTS MINISPOC
13	Programs and activities supporting sports in early childhood learning framework in school and outside-school hours are developed	0	0	0	0	1	Admin	Annual	MINEDUC
14	Fewer Sports Associations and community/school clubs require emergency financial assistance	0	0	0	0	1	Admin	Annual	MINISPOC
15	Greater use of new technologies and communication in enhancing sports and recreation experience e.g. use of social media platforms: Twitter, Facebook, SMS, WhatsApp, etc.	0	0	0	0	1	special Study	Annual	MINISPOC, NSC
16	National Sports Centre a key part of the national high-performance system developing and producing an increase in the number of talented athletes selected for District and national teams	0	0	0	0	1	Info system		NSC, MINISPOC
17	Talent identification and development pathways for sportsmen, sportswomen and coaches/trainers are integral in national sports development plans	0	0	0	0	1	Info system		NSC, MINISPCO
18	Selected education Institutions identified as centres of sports excellence and integral in providing sports support services, facilities and education	0	0	0	0	1	Admin	Annual	MINEDUC, MINISPOC
19	Cutting edge sports support services available to talented sportsmen, sportswomen and coaches	0	0	0	0	1	Admin	Annual	MINISPOC, NSC
20	Structured talent identification programs in schools identifying athletes, coaches and officials	0	0	0	0	1	Admin	Annual	MINEDUC, MINISPOC
21	National teams working in close partnership with Districts with facilities fulfilling required standards	0	0	0	0	1	Admin	Annual	NSC, MINISPOC

No	Indicator	Agenda					Data source	Frequency	Responsible institution
		SDG	AU2063	EAC2050	NST1	SSP			
22	Rwanda active in hosting major regional, continental and international sports events	0	0	0	0	1	Event/ Tournament reports		MINISPOC
23	National Sports Council is established and functional/operational	0	0	0	0	1	Admin	Annual	MINISPOC
24	Long term strategic sports facilities and resources plan in place underpinning the objectives of Vision 2050	0	0	0	0	1	Admin	Annually	MINISPOC
25	Sports facilities are better planned to deal with environmental challenges – e.g. design of stadia designed to suit conditions of Rwanda terrain	0	0	0	0	1	Admin	Annually	MINISPOC
26	Fully functional National Creative arts industries database and regular data is collected and supports planning	0	0	0	0	1	Information system	Annual	MINISPOC, RALC
27	Community Arts Centres developed/approved and implemented	0	0	0	0	1	Admin	Annual	MINISPOC, RALC
28	Promulgation and functional Kinyarwanda Language across the Country	0	0	0	0	1	RALC reports	Annual	MINISPOC, RALC
29	Number of Literary books produced and published in Kinyarwanda official language	0	0	0	0	1	RALC reports	Annual	MINISPOC, RALC
30	Regular reports and publications of findings with mapping reports for each District/Province	0	0	0	0	1	Museums reports	Annual	NATIONALMUSEUMS, MINISPOC, RALSA
31	National Creative Industries Skills academy established	0	0	0	0	1	Annual reports	Annual	MINISPOC, NATIONAL MUSEUMS
32	National Craft policy development and coordination	0	0	0	0	1	Museums reports	Annual	MINISPOC
33	Sustainable graduates training programs in the Arts and Craft Centre	0	0	0	0	1	Admin	Annual	MINISPOC
34	Implementation of Events and Technical Services Policy	0	0	0	0	1	Admin	Annual	MUSEUMS, MINISPOC
35	Signed Bilateral and Trilateral Agreements with identified partners, strengthened and expanded continental and global partnerships	0	0	0	0	1	Partnership Report		MINISPOC, MINAFFETE
36	Functional flow and approved Investment in Culture	0	0	0	0	1	Admin	Annual	MINISPOC, MUSEUMS
37	Approved and implemented heritage human resources development strategy	0	0	0	0	1	Admin	Annual	NATIONAL MUSEUMS
38	Heritage tourism strategy developed, disseminated and implemented	0	0	0	0	1	Admin	Annual	N MUSEUMS, MINISPOC
39	Participation of Rwandan communities in the National Heritage Day	0	0	0	0	1	Admin	Annual	N. MUSEUMS, MINISPOC
40	National flags installed Institutions, schools, exhibitions hosted, and publications produced	0	0	0	0	1	Admin	Annual	NATIONAL MUSEUMS MINISPOC, MINAFFETE
41	Archives records proceeded internally, arranged and registered	0	0	0	0	1	Admin	Annual	RALSA, MINISPOC
42	New library structures and upgrading of existing ones	0	0	0	0	1	Admin	Annual	RALSA, MINISPOC MININFRA
43	Preserving all about the Genocide against the Tutsi in all Districts of Rwanda	0	0	0	0	1	Admin	annual	CNLG, MINISPOC
44	Avail information to the Rwandan community and rest of the world on genocide against the Tutsi	0	0	0	0	1	Admin	Annual	CNLG, MINISPOC

3. Sport and Culture Sector: Five-year Statistical Plan

The following table provides a summary of all the key activities for the sport and culture sector statistical plan. It flows directly from the data needs articulated in Table 1, and includes budget and partnership information based on consultations and input from key sector stakeholders.

Table 2: Sport and Culture Sector Statistical Activities

WBS	Activities	Responsibility		Time frame & Costs (in thousands Frw)					Total NSDS3 (in thousands Frw)	Total NSDS3 (in USD)
		Main	Partner	2019/20	2020/21	2021/22	2022/23	2023/24		
Pillar I: Produce statistics to support evidence-based decision-making				**30,000**	**30,000**	**30,000**	**25,000**	**25,000**	**140,000**	**152,505**
Strategic Objective 02: Enrich and expand data supply across the NSS				**30,000**	**30,000**	**30,000**	**25,000**	**25,000**	**140,000**	**152,505**
2.1	Identify new heritage Site at National level	INMR	NISR, MINISPOC DISTRICTS AND RALC	20,000	20,000	20,000	15,000	15,000	90,000	98,039
2.2	Impact assessment of all events organised by INMR	INMR	NISR AND MINISPOC, MICE	10,000	10,000	10,000	10,000	10,000	50,000	54,466
Pillar III: Build statistical capability across the NSS to increase data uptake and use				**30,000**	**-**	**25,000**	**-**	**-**	**55,000**	**59,913**
Strategic Objective 08: Enhance capacity for data management and statistical analysis				**30,000**	**-**	**25,000**	**-**	**-**	**55,000**	**59,913**
8.1	Museums statistical training	INMR	NISR AND MINISPOC	30,000	-	25,000	-	-	55,000	59,913
Pillar IV: Strengthen operational support to ensure sustainable statistical development				**1,000**	**-**	**-**	**-**	**-**	**1,000**	**1,089**
Strategic Objective 10: Build and sustain a workforce to support statistical development across the NSS				**1,000**	**-**	**-**	**-**	**-**	**1,000**	**1,089**
10.2	Recruitment of Statistician	INMR	NISR AND MINISPOC	1,000	-	-	-	-	1,000	1,089
	Grand Total: Sport and Culture Statistics			**61,000**	**30,000**	**55,000**	**25,000**	**25,000**	**196,000**	**213,508**

A3.13 Transport Sector Statistical Plan

1. Sector Background

Drawing on the three pillars of the National Strategy for Transformation (NST-1), Vision 2020 and Vision 2050, the Transport Sector Strategic Plan (TSSP) aims to 'stimulate production and development by linking production to demand, employment creation and income generation'. Given the strong linkages between economic growth, poverty reduction and transportation infrastructure and services, TSSP targets lean heavily on effective intervention designs informed by rigorous evidence. In Rwandan context, characteristics of the population distribution (e.g. high density, low urban) demand accurate, granular sector data to optimise transportation infrastructure and systems.

In order to deliver on commitments to 'develop reliable, sustainable and resilient infrastructure', 'provide safe, affordable public transport' and address the problem of 'deaths and injuries from road traffic accidents', the TSSP outlines an ambitious agenda to enhance and leverage data for planning and evaluation, including a new Transport Management Information System (TMIS), an Electronic Data Interchange (EDI), and plans to develop publicly available, real-time information systems for the public transportation network. With these initiatives in mind, it is vital to both sustain and expand sector statistical capability. The following strengths, weaknesses, opportunities and threats (SWOT) will shape progress in these areas throughout implementation of the TSSP and NSDS3:

Strengths	**Weaknesses**
1. Recent reorganisation of the sector, and significant data capacity in RURA create an enabling environment for statistical development. 2. Existing systems and commitments to Routine Data Quality Assurance (RDQA) provide a strong foundation for data management under the TSSP. 3. Results-based management objectives in the TSSP provide incentives for effective statistical practice. 4. The Transport Sector Working Group (TSWG) specifies a national focal point for data.	1. Limited statistical capacity in key agencies, including RTDA, MININFRA, and RCAA may undermine implementation of key frameworks, including the RDQA, and compromise data quality. 2. Underdeveloped plans to improve data collection processes could threaten the timeliness and viability of data to be used in planned analytical projects (e.g. MIS) 3. Nascent sector organisational structure and network leave roles and responsibilities in the data value chain underdefined.
Opportunities	**Threats**
1. Plans for real-time information systems for public transport creates demand for data science capacity. 2. Plans to develop the Road Asset Management System requires a consistent flow of georeferenced road data, motivating investments in staff capacity for data collection and analysis. 3. Existing sources of high-frequency data, including speed meters and CCTV cameras, provide rich data sources for sector investment in data science and analytics under the DRP.	1. Nascent organisational structures and existing guidance in data management may slow progress on key statistical activities. 2. Pressures to build data management systems and processes may crowd out analytical capacity. 3. Improving intervention targeting requires access to data and information from outside the sector that may not be publicly available.

2. Sector Data Requirements

This sector plan defines statistical needs and projects for the sport and culture sector based on policy indicator frameworks outlined in Table 1 (below), including the NST-1 (3 indicators), TSSP (35 indicators), the SDGs (2 indicators), AU Agenda 2063 (5 indicators) and EAC Vision 2050 (5 indicators). Calculating overlapping data requirements across frameworks, these 50 indicators translate to 47 unique data points derived from 3 different institutions. The sector draws minimally on NISR survey products (2 indicators, 4%), and 8 indicators currently lack baselines (17%) illustrating a need to both improve and expand data sources over the next 5 years.

Table 1: Transport Sector Indicators

No	Indicator	Agenda					Data source	Frequency	Responsible institution
		SDG	AU2063	EAC2050	NST1	SSP			
1	Passenger and freight volumes, by mode of transport	1	0	0	0	0	Records of MININFRA	Annually	MININFRA
2	Proportion of population that has convenient access to public transport	1	0	0	0	0	PUBLIC TRANSPORT POLICY AND STRATEGY	Annually	MININFRA
3	Proportion of the rural population who live within 2 km of an all-season road	0	0	0	0	1	EICV	Triennially	NISR
4	Number of passengers carried per year by National Carrier.	0	0	0	1	1	RTDA Reports	Annually	MININFRA
5	Length of unpaved national roads upgraded to paved	0	0	0	1	0	RTDA Reports	Annually	MININFRA
6	Number of Km of feeder roads rehabilitated	0	0	0	1	1	RTDA Reports	Annually	MININFRA
7	Quantity of Regional Railway Network (Km)	0	0	1	0	1	Admin	Annually	MININFRA
8	Paved Road Networks (Km)	0	0	1	0	0	Admin	Annually	MININFRA
9	Marine-Port Services Network	0	0	1	0	0	Admin	Annually	MININFRA
10	Civil Aviation and Air Transport (number of airports)	0	0	1	0	0	Admin	Annually	RCAA
11	Pipeline length (km)	0	0	1	0	0	Admin	Annually	MININFRA
12	% of intra- Africa tourism is doubled	0	1	0	0	0	Specific Survey		MININFRA
13	% contribution of shipping/port operation services to GDP	0	1	0	0	0	N ACCOUNT	Annually	NISR
14	% of annual tonnage of cargo carried by locally owned shipping lines	0	1	0	0	0	Admin	Annually	MININFRA
15	% of average duration of ship call time reduced	0	1	0	0	0	Admin	Annually	MININFRA
16	% of average clearing time of goods reduced	0	1	0	0	0	Admin	Annually	MININFRA
17	% of National paved roads in Good condition	0	0	0	0	1	RTDA reports	Annually	MININFRA
18	% of National unpaved roads in Good condition	0	0	0	0	1	RTDA reports	Annually	MININFRA
19	% of District road Class 1 in Good condition	0	0	0	0	1	RTDA reports	Annually	MININFRA
20	Number of Km upgraded/constructed	0	0	0	0	1	RTDA reports	Annually	MININFRA
21	Number of Km of paved national roads rehabilitated	0	0	0	0	1	RTDA reports	Annually	MININFRA
22	Number of Km of paved national roads maintained	0	0	0	0	1	RTDA reports	Annually	MININFRA
23	Number of unpaved national road maintained	0	0	0	0	1	RTDA reports	Annually	MININFRA
24	Number of operational weighbridges	0	0	0	0	1	RTDA reports	Annually	MININFRA
25	Number of Km of District roads class I maintained	0	0	0	0	1	Periodic maintenance reports	Annually	MININFRA
26	Number of Km of Urban road constructed	0	0	0	0	1	RTDA reports	Annually	MININFRA
27	Proportion of people with disabilities with convenient access to public transport	0	0	0	0	1	Progress reports	Annually	MININFRA

28	Number of Km of Scheduled Bus Routes added	0	0	0	0	1	Progress reports	Annually	MININFRA
29	Number of Km of DBL Introduced	0	0	0	0	1	Progress reports	Annually	MININFRA
30	Number of intersections upgraded	0	0	0	0	1	Progress reports	Annually	MININFRA
31	Percentage of Public Transport users accessing real time in CoK.	0	0	0	0	1	Specific Survey	Annually	MININFRA
32	Percentage implementation of cashless payment in public transport	0	0	0	0	1	Specific Survey	Annually	MININFRA
33	Percentage of public transport vehicles with internet connectivity	0	0	0	0	1	RTDA reports	Annually	MININFRA
34	Border posts crossing time in hours	0	0	0	0	1	RTDA reports	Annually	MININFRA
35	Passenger number transported by road	0	0	0	0	1	Specific Survey	Annually	MININFRA
36	Passenger number transported by Inland Waterways	0	0	0	0	1	Specific Survey	Annually	MININFRA
37	Freight volumes (Metric Tons) transported by road	0	0	0	0	1	Specific Survey	Annually	MININFRA
38	Freight volumes (Metric Tons) by Inland Waterways	0	0	0	0	1	RTDA reports	Annually	MININFRA
39	Number of ports developed	0	0	0	0	1	RTDA reports	Annually	MININFRA
40	Number of OSBP constructed	0	0	0	0	1	Progress reports	Annually	MININFRA
41	Reduction in number of road accident and incidents per 10,000 motor vehicles	0	0	0	0	1	Progress reports	Annually	MININFRA
42	% reduction of water accidents on Lake Kivu	0	0	0	0	1	Progress reports	Annually	MININFRA
43	Passenger handling capacity of airports	0	0	0	0	1	Progress reports	Annually	MININFRA
44	Air freight capacity (metric tons)	0	0	0	0	1	Progress reports	Annually	MININFRA
45	% Implementation of the ICAO 8 critical elements	0	0	0	0	1	Progress reports	Annually	MININFRA
46	Number of aircrafts	0	0	0	0	1	RwandAir reports	Annually	MININFRA
47	Number of destinations	0	0	0	0	1	RwandAir reports	Annually	MININFRA

A3.14 Urbanisation and Rural Settlement Sector Statistical Plan

1. Sector Background

Drawing on the three pillars of the National Strategy for Transformation (NST-1), and the aspirations articulated in Rwanda Vision 2020 and Vision 2050, the Urbanisation and Rural Settlement Sector Strategic Plan (USSP) adopts a crosscutting approach to 'promote good development that enhances national and local economic growth and ensures quality of life for everyone'. The USSP identifies 'institutionalisation of data collection' as 'an essential step' for the sector, motivating investments in statistical capacity during implementation.

In light of its crosscutting orientation, the URS sector faces unique challenges with regard to statistical development. First, it remains heavily dependent on data flows from other sectors to monitor and evaluate sector programming, placing significant pressure on mechanisms for coordination and dissemination. Second, the definition of boundaries between rural and urban spaces remains unclear — at times varying from dataset to dataset, increasing complexity of data integration. Investments in systems and data architecture during the previous SSP, including a national geodatabase, a building permit management information system (BP-MIS), and a district development index (DDI) provide a strong foundation for improvement during USSP implementation. Nevertheless, current shortfalls in data availability and statistical capacity still represent a significant obstacle to effective M&E practice in the URS sector. The following strengths, weaknesses, opportunities and threats (SWOT) will shape progress in these areas throughout implementation of the USSP and NSDS3:

Strengths	**Weaknesses**
1. Strong mandate to 'institutionalise' sector data production during USSP implementation. 2. Lead institutions hold some significant statistical capacity, particularly in key areas such as GIS. 3. Plans to build new systems to support data integration. 4. Production of annual sector plans, which includes data analysis, provides a preliminary use case.	1. Lack of sector data definitions in key areas, including rural/urban boundaries, compromise data integration and interoperability. 2. No formal mechanisms to publish or access tabular data for custom analysis.
Opportunities	**Threats**
1. Development of new systems, including a national geodatabase and the BP-MIS, will improve data management and offers opportunities for DRP engagement. 2. Plans to expand analytical products, including the DDI, calls for capacity building in statistics and data science.	1. Reliance on local data collection where data literacy is comparatively low threatens data quality. 2. Cross-sectoral orientation creates risks of fragmentation and data silos, requiring improvements in coordination.

2. Sector Data Requirements

This sector plan defines statistical needs and projects for the URS sector based on policy indicator frameworks outlined in Table 1 (below), including the NST-1 (2 indicators), USSP (32 indicators), the SDGs (1 indicators) and AU Agenda 2063 (2 indicators). Calculating overlapping data requirements across frameworks, these 37 indicators translate to 36 unique data points derived from 2 institutions. The sector draws on NISR survey products (5 indicators, 16%), and 2 indicators currently lack baselines, illustrating a strong positioning to respond to demand for URS data over the next 5 years.

Table 1: URS Sector Indicators

No	Indicator	Agenda					Data source	Frequency	Responsible institution
		SDG	AU2063	EAC2050	NST1	SSP			
1	Proportion of urban population living in slums, informal settlements or inadequate housing	1	1	0	0	1	EICV	3 years	NISR
2	Number of cities with more than 2 million population which has a report for rapid transit system								
3	a)% of homeless population; b) Average number of persons per room; c) % of households living in standard housing units	0	1	0	0	0	EICV	3 years	NISR
4	Population living in urban areas	0	0	0	1	0	EICV	3 years	NISR
5	Percentage of households living in planned settlements	0	0	0	1	0	EICV	3 years	NISR
6	Number of Districts using digital information systems in construction permitting and management	0	0	0	0	1	Admin	Annually	MININFRA
7	Number of Districts that conduct Urban Planning and Human Settlement Coordination Meetings at least every 2 months	0	0	0	0	1	Admin	Annually	MININFRA
8	Number of urban infrastructure projects implemented to make SC's attractive for investment	0	0	0	0	1	Admin	Annually	MININFRA
9	SC's branding strategies elaborated and implemented	0	0	0	0	1	Admin	Annually	MININFRA
10	Percent of rural households settled in integrated, planned, green rural settlements	0	0	0	0	1	Admin	Annually	MININFRA
11	Percent of rural settlements with safe year-round access within 45 minutes to a) primary schools, b) tarmac roads, c) markets, d) hospitals, e) financial institutions	0	0	0	0	1			MININFRA
12	Percent of households within 100 m of an improved water source by region	0	0	0	0	1	Admin	Annually	MININFRA
13	Km of urban infrastructure services provided in new residential zones	0	0	0	0	1	Admin	Annually	MININFRA
14	Percent of urban households with access to basic urban services (according to UPC servicing requirements)	0	0	0	0	1	Admin	Annually	MININFRA
15	Percent of urban households with improved sanitation facilities	0	0	0	0	1	Admin	Annually	MININFRA
16	Percent of urban households with access to public transport w/in 500 m and waiting time no more than 15 min	0	0	0	0	1			
17	Percent of urban households accessing electricity	0	0	0	0	1	EICV	3 years	NISR
18	Percent of urban households with access to health centre within 30 min	0	0	0	0	1	Admin	Annually	MININFRA
19	Percent of urban households with access to primary school within 30 min	0	0	0	0	1	Admin	Annually	MININFRA
20	Average share of the built-up area of cities that is open and green space for public use for all	0	0	0	0	1	Admin	Annually	MININFRA
21	Number of local government institutions capacitated	0	0	0	0	1	Admin	Annually	MININFRA
22	Number of affordable housing projects (and resulting no. of housing units) facilitated by government support schemes (infrastructure/ finance)	0	0	0	0	1	Admin	Annually	MININFRA
23	Number of informal settlement upgrading projects financially supported (and area in ha / no. of households whose habitat conditions have improved)	0	0	0	0	1	Admin	Annually	MININFRA

24	Number of rural settlements upgraded	0	0	0	0	1	Admin	Annually	MININFRA
25	Number of Rwandan establishments in the construction industry which are quality-certified with international recognition	0	0	0	0	1	Admin	Annually	MININFRA
26	Percent of registered professionals (architecture, urban planning, civil engineering professions) with proven capacity to develop cost-efficient, location-based and green buildings	0	0	0	0	1	Admin	Annually	MININFRA
27	Number of registered professionals in urban and rural settlement planning services and construction industry	0	0	0	0	1	Admin	Annually	MININFRA
28	Number of new government projects constructed	0	0	0	0	1	Admin	Annually	MININFRA
29	Percent of immovable government assets efficiently and regularly maintained at cost/m2 between TBD and TBD	0	0	0	0	1	Admin	Annually	MININFRA
30	Percent of category 3 / 4 new buildings and real estates that comply with minimum green building requirements	0	0	0	0	1	Admin	Annually	MININFRA
31	Percent of buildings of Cat. 3/4 that have received building permit, are inspected before and during construction and before occupancy	0	0	0	0	1	Admin	Annually	MININFRA
32	Percent of development projects permitted and constructed in line with urban planning documents	0	0	0	0	1	Admin	Annually	MININFRA
33	Number of Districts monitored in urban planning and building audits	0	0	0	0	1	Admin	Annually	MININFRA
34	Number of public information and awareness initiatives related to urban and rural settlement policies and development	0	0	0	0	1	Admin	Annually	MININFRA
35	All public and multi-dwelling buildings comply with universal accessibility and safety requirements	0	0	0	0	1	Admin	Annually	MININFRA
36	Percent of directly concerned land owners who have participated in the elaboration of Land Subdivision Plans (urban or rural)	0	0	0	0	1	Admin	Annually	MININFRA

3. URS Sector: Five-year Statistical Plan

The following table provides a summary of all the key activities for the URS sector statistical plan. It flows directly from the data needs outlined in Table 1, and includes budget and partnership information based on consultations and input from key sector stakeholders.

Table 2: URS Sector Statistical Activities

WBS	Activities	Responsibility		Time frame & Costs (in thousands Frw)					Total NSDS3 (in thousands Frw)	Total NSDS3 (in USD)
		Main	Partner	2019/20	2020/21	2021/22	2022/23	2023/24		
Pillar I: Produce statistics to support evidence-based decision-making				**550,000**	**3,800,000**	**1,950,000**	**600,000**	**100,000**	**7,000,000**	**7,625,272**
Strategic Objective 02: Enrich and expand data supply across the NSS				**550,000**	**3,800,000**	**1,950,000**	**600,000**	**100,000**	**7,000,000**	**7,625,272**
2.1	Available and gap of basic infrastructure in planned site settlement	RHA	MINALOC, REG, RTDA, WASAC	-	-	100,000	100,000	100,000	300,000	326,797
2.2	Income strata of population living in urban area (town/city-dwellers)	RHA	Private Sector, NISR	50,000	450,000	-	-	-	500,000	544,662
2.3	Inventory and assess socio-economic impact of HHs living in IDPs model	RHA	MINALOC, MINECOFIN, Reserve force, UN Habitat and District	-	-	200,000	300,000	-	500,000	544,662
2.4	Inventory of families (HHs) affected by of disasters / No of HHs relocated and their housing conditions	RHA	Districts	50,000	550,000	400,000	-	-	1,000,000	1,089,325
2.5	Inventory of HHs living in informal settlement and number of informal settlements sites	RHA	Districts/MINALOC, World Bank,	-	200,000	300,000	-	-	500,000	544,662

WBS	Activities	Responsibility		Time frame & Costs (in thousands Frw)					Total NSDS3 (in thousands Frw)	Total NSDS3 (in USD)
		Main	Partner	2019/20	2020/21	2021/22	2022/23	2023/24		
2.6	Inventory of HHs still living in scattered settlement and high-risk zone	RHA	MINALOC, MIDIMAR	100,000	300,000	100,000	-	-	500,000	544,662
2.7	Inventory of residential housing typologies and their cost effectiveness	RHA	Private Sector, NISR	50,000	750,000	-	-	-	800,000	871,460
2.8	Inventory on construction permits requested, those delivered, refused and the types of related houses to be constructed country wide	RHA	Districts, Private Sector, IER, RIA	-	100,000	200,000	200,000	-	500,000	544,662
2.9	Projected number of HHs to be resettled from rural to cities in 15 years.	RHA	Private Sector, NISR	50,000	250,000	-	-	-	300,000	326,797
2.1	Projected number of Houses required to accommodate the peoples to be resettled from rural to cities in next 15 years./current housing gaps	RHA	Private Sector, NISR	50,000	250,000	-	-	-	300,000	326,797
2.11	Projected number of social houses to be constructed in next 7 years /Gaps	RHA	Private Sector, NISR	50,000	50,000	-	-	-	100,000	108,932
2.12	Survey on the jobs generated by projects implemented under RHA mandate.	RHA	Districts/MINALOC, UN Habitat	50,000	400,000	200,000	-	-	650,000	708,061
2.13	Survey on compliance, knowledge and understanding of construction laws and regulations in place.	RHA	Districts, RBS, Private Sector, IER	50,000	200,000	200,000	-	-	450,000	490,196
2.14	Survey on Population living in Urban areas.	RHA	Districts/MINALOC, World Bank, UN Habitat	50,000	300,000	250,000	-	-	600,000	653,595
	Grand Total: Urbanisation and Rural Settlement Statistics			**550,000**	**3,800,000**	**1,950,000**	**600,000**	**100,000**	**7,000,000**	**7,625,272**

A3.15 WATSAN Sector Statistical Plan

1. Sector Background

Drawing on the three pillars of the National Strategy for Transformation (NST-1), Vision 2020 and Vision 2050, the WATSAN Sector Strategic Plan (WSSP) aims to 'ensure high standards of living for all Rwandans' by 'moving towards a modern Rwandan household'. Notably, the volume of data required for the WATSAN sector is lower relative to other NST-1 sectors. However, the burden on WATSAN statistical capacity is non-trivial. As one of the sectors with 100% coverage/elimination targets for 'access to clean water and sanitation', pressures to not only expand, but to enrich and disaggregate data supply are high. Such targets require consistent, highly granular flows of data, robust analytical methods, and adaptive programming mechanisms to ensure success.

Facilitating these developments in the WATSAN sector will require significant investments in statistical products and systems, as well as in the technical capability of staff at all stages in the data value chain, from data collection and publication, through uptake and impact. Delivering on these requirements is complicated by a nascent institutional structure and the crosscutting character of WATSAN activities, which are closely linked to policy areas in health, agriculture, environmental protection and the private sector. Ongoing efforts to improve information systems and coordination, including a new WATSAN MIS (WMIS), the WATSAN District-wide Approach and SMART Technologies Plan, provide a path toward a holistic approach to statistical development. The following strengths, weaknesses, opportunities and threats (SWOT) will shape progress in these areas throughout implementation of the WSSP and NSDS3:

Strengths	**Weaknesses**
1. Clear articulation of ambitious targets in the WSSP and vital linkages to developments in M&E create a mandate for sector statistical capacity. 2. Clear articulation of WATSAN leadership mandate, with a solid framework for an inclusive, coordinated approach through the SWAp. 3. Established frameworks for data collection at local, district and national levels. 4. Development of the WMIS and associated improvements in IT infrastructure.	1. Limited capability in statistical data production and analysis creates a risk of premature load-bearing on existing systems. 2. Weaknesses of accountability in data production — particularly at lower levels of administration — pose challenges for data quality. 3. Underdeveloped monitoring mechanisms disrupt dissemination channels and limit impact. 4. Absence of a 'unified data management strategy compromises effective data integration.
Opportunities	**Threats**
1. Recent restructuring of sector institutions and management creates opportunities to clarify and strengthen statistical roles and responsibilities. 2. 100% coverage/elimination targets introduce strong demand for more complex, data-driven methods for sector evaluation and planning.	1. Underdeveloped linkages across WATSAN MDAs and other sectors threaten data access and reinforce information silos (coordination). 2. 'Last mile' beneficiaries are the hardest to identify (and reach) due to limitations of existing data.

3. Linkages across sectors creates opportunities to strengthen coordination. 4. Dedicated SWAp website provides a platform to facilitate data and knowledge sharing. 5. Development of the WMIS provides an essential foundation for data integration and management.	3. Under the new institutional reorg (SWAp), some subsectors still lack clear monitoring mechanisms, and capacity varies significantly across stakeholders, which could reinforce data gaps. 4. Mismatch between demand for data and financing for data production.

2. Sector Data Requirements

This sector plan defines statistical needs and projects for the WATSAN sector based on policy indicator frameworks outlined in Table 1 (below), including the NST-1 (2 indicators), WSSP (40 indicators), the SDGs (4 indicators), AU Agenda 2063 (4 indicators) and EAC Vision 2050 (2 indicators). Calculating overlapping data requirements across frameworks, these 52 indicators translate to 51 unique data points derived from 4 institutions. The sector draws on NISR survey products (17 indicators, 33%), and 4 indicators currently lack baselines (,%) illustrating a strong positioning to respond to demand for WATSAN data over the next 5 years.

Table 1: WATSAN Sector Indicators

No	Indicator	Agenda					Data source	Frequency	Responsible institution
		SDG	AU2063	EAC2050	NST1	SSP			
1	Proportion of population using safely managed drinking water services	1	0	0	0	0	EICV	3 years	NISR
2	Proportion of population using safely managed sanitation services, including a hand-washing facility with soap and water	1	0	0	0	0	EICV	3 years	NISR
3	Proportion of waste-water safely treated	1	0	0	0	0	Admin		WASAC/ MININFRA
4	Proportion of urban solid waste regularly collected and with adequate final discharge out of total urban solid waste generated, by cities	1	0	0	0	1	EICV	3 years	NISR
5	% of population with access to safe drinking water	0	1	0	0	0	EICV	3 years	NISR
6	% of population with access to improved sanitation facilities b) % of population who use improved sanitation facilities	0	1	0	0	0	EICV	3 years	NISR
7	% of budget allocated to water and sanitation programme	0	1	0	0	0	Admin	Annually	MINECOFIN
8	% of waste water recycled for agriculture and industrial use	0	1	0	0	0	Admin	Annually	MININFRA
9	Access to safe water (%)	0	0	1	0	0	EICV	3 years	NISR
10	Access to improved sanitation (%)	0	0	1	0	0	EICV	3 years	NISR
11	Percentage of Households using an improved water source	0	0	0	1	0	EICV	3 years	NISR
12	Percentage of Households with access to basic sanitation facilities	0	0	0	1	0	EICV	3 years	NISR
13	% of households with improved water source in dwellings /yard by region	0	0	0	0	1	EICV	3 years	NISR
14	% of population using an improved water source in Rwanda	0	0	0	0	1	EICV	3 years	NISR
15	% of households with clean drinking water available when needed in rural areas	0	0	0	0	1	EICV	3 years	NISR
16	% of rural households using an improved water source within 500m	0	0	0	0	1	EICV	3 years	NISR
17	% of population using an improved water source within 30 minutes round-trip by region	0	0	0	0	1	EICV	3 years	NISR

No	Indicator	Agenda					Data source	Frequency	Responsible institution
		SDG	AU2063	EAC2050	NST1	SSP			
18	% of population using an improved water source by region	0	0	0	0	1	EICV	3 years	NISR
19	% of households with clean drinking water available when needed in urban areas	0	0	0	0	1	EICV	3 years	NISR
20	% of urban households using an improved water source within 200m	0	0	0	0	1	EICV	3 years	NISR
21	% of health centres with improved Water Supply facilities	0	0	0	0	1	Admin	Annually	MININFRA
22	% of schools with improved WS facilities	0	0	0	0	1	Admin	Annually	MININFRA
23	% of rural improved water sources functional at the time of spot check	0	0	0	0	1	Admin	Annually	MININFRA
24	% of public rural water supply systems managed by a contracted private operator	0	0	0	0	1	Admin	Annually	MININFRA
25	% of fully functional water supply system in urban areas	0	0	0	0	1	Admin	Annually	MININFRA
26	% of population using an improved water source which is of free contamination at the point of delivery, by region	0	0	0	0	1	Admin	Annually	MININFRA
27	% cost recovery (revenue / O&M costs) for rural piped water schemes	0	0	0	0	1	Admin	Annually	MININFRA
28	(%) non-revenue water (WASAC)	0	0	0	0	1	Admin	Annually	MININFRA
29	Total urban water production capacity (000'm^3 per day)	0	0	0	0	1	Admin	Annually	MININFRA
30	% of population with basic on-site sanitation facilities which safely contain waste in situ, by region	0	0	0	0	1	Admin	Annually	MININFRA
31	% of population using basic improved sanitation facilities, by region	0	0	0	0	1	Admin	Annually	MININFRA
32	% of households with on-site improved sanitation facilities or septic tank have access to safe sludge disposal services, by region	0	0	0	0	1	Admin	Annually	MININFRA
33	% of households with access to collective sewerage services	0	0	0	0	1	Admin	Annually	MININFRA
34	% of industries with wastewater treatment systems	0	0	0	0	1	Admin	Annually	MININFRA
35	% of schools with access to sanitation facilities which safely contain waste	0	0	0	0	1	Admin	Annually	MININFRA
36	% of schools with improved Sanitation facilities	0	0	0	0	1	Admin	Annually	MININFRA
37	% of Health centres with sanitation facilities which safely contain waste	0	0	0	0	1	Admin	Annually	MININFRA
38	% of health centres with improved Sanitation facilities	0	0	0	0	1	Admin	Annually	MININFRA
39	% of public offices with sanitation facilities which safely contain waste	0	0	0	0	1	Admin	Annually	MININFRA
40	% of public offices with improved sanitation facilities	0	0	0	0	1	Admin	Annually	MININFRA
41	% of public places (markets, car parks, petroleum stations, high ways) with sanitation facilities which safely contain waste	0	0	0	0	1	Admin	Annually	MININFRA
42	% of public places (markets, car parks, bus bays, petroleum stations, high ways) with improved sanitation facilities	0	0	0	0	1	Admin	Annually	MININFRA
43	% of urban population in areas covered by master plans with storm water considerations	0	0	0	0	1	Admin	Annually	MININFRA
44	% of households sorting waste	0	0	0	0	1	Admin	Annually	MININFRA
45	% of households contracted with service providers collecting and transporting waste in urban areas	0	0	0	0	1	Admin	Annually	MININFRA
46	% of Districts with appropriate solid waste disposal facilities/ modern Landfills	0	0	0	0	1	Admin	Annually	MININFRA
47	Number of districts with functional District WASH Boards	0	0	0	0	1	Admin	Annually	MININFRA
48	Percentage (%) of districts with at least 1 qualified WSS engineer	0	0	0	0	1	Admin	Annually	MININFRA
49	% women represented in key positions of water user committees	0	0	0	0	1	Admin	Annually	MININFRA
50	% female occupying key positions in Water and Sanitation Sector institutions	0	0	0	0	1	Admin	Annually	MININFRA
51	Parity female to male headed households using basic improved sanitation facilities	0	0	0	0	1	Admin	Annually	MININFRA

3. WATSAN Sector: Five-Year Statistical Plan

The following table provides a summary of all the key activities for the WATSAN sector statistical plan. It flows directly from the data needs outlined in Table 1, and includes budget and partnership information based on consultations and input from key sector stakeholders.

Table 2: WATSAN Sector Statistical Activities

WBS	Activities	Responsibility		Time frame & Costs (in thousands Frw)					Total NSDS3 (in thousands Frw)	Total NSDS3 (in USD)
		Main	Partner	2019/20	2020/21	2021/22	2022/23	2023/24		
Pillar II: Facilitate a data revolution to deepen statistical impact				**27,662**	**3,602**	**3,602**	**3,602**	**3,602**	**42,070**	**45,827**
Strategic Objective 04: Harmonise best practices in data governance across the NSS				**27,662**	**3,602**	**3,602**	**3,602**	**3,602**	**42,070**	**45,827**
4.1	Hosting cost of HMIS servers hosted at NDC, SSL, etc.	RBC	-	3,602	3,602	3,602	3,602	3,602	18,009	19,618
4.3	Vulnerability and Risk Analysis & Mapping/ Disaster Risk Management for health sector	RBC	-	21,332	-	-	-	-	21,332	23,237
Pillar III:				**2,729**	**-**	**-**	**-**	**-**	**2,729**	**2,972**
Strategic Objective 08: Enhance capacity for data management and statistical analysis				**2,729**	**-**	**-**	**-**	**-**	**2,729**	**2,972**
8.2	R-HMIS users on central level staff using queries for data analysis	RBC	-	2,729	-	-	-	-	2,729	2,972
	Grand Total: Water and Sanitation Statistics			27,662	3,602	3,602	3,602	3,602	42,070	45,828

Annex 4: NSDS3 Design Team

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