

# Post mid-term review of Rwanda's third National Statistics Development Strategy

December 2023





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# Executive summary

National Statistics Development Strategy 3 (NSDS3) had some ambitious objectives, pushing Rwanda significantly in the direction of transformation and modernisation.

This review found that good progress towards most of the NSDS3 objectives has been made. However, many of these developments are still in their early stages and need further work before they can be considered comprehensively achieved or sustainable.

In drafting NSDS4, National Institute of Statistics Rwanda (NISR) and members of the national statistical system (NSS) will need to ensure they balance ambition with sustainability. NSDS4 should build on the gains made and ensure they are embedded and sustainable.

Under NSDS3, as well as the production the production and improvement of core statistics, other key objectives were effective coordination across the NSS (delivered via the building of NSDS3 sectoral strategies) and the leading of a 'data science revolution'. The additional responsibilities given to NISR around the monitoring of the governments 'Imihigo' programme<sup>1</sup> were also an important and challenging objective added during the period.



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<sup>1</sup> <https://rwandapedia.rw/hgs/imihigo/how-it-works>

## Examples of areas where good progress has been made

- Most users are satisfied with the core statistical products, and the 2022 census was implemented successfully and with good use of innovation, despite the interruptions of the COVID-19 pandemic and the economic shock that followed.
- The creation of the data science campus and the launch of the training centre have brought increased reputation for NISR, and NISR has become a destination of choice for international events and study tours from other African national statistics institutes.
- The foundations of a strong data science team have been laid, and there are some useful examples of their work delivering efficiencies for NISR production teams (for example, data linkage between the census and the PES, new work on CPI automation and to support the enterprise survey and linkage to the business register).
- There are some good examples of cross-NSS working on harmonisation in some key areas and of the development of admin data systems.

But many of these developments are still in their early stages and need further work before they can be considered comprehensively achieved or sustainable.

In drafting NSDS4, NISR and members of the NSS will need to ensure they balance ambition with sustainability. NSDS4 should build on the gains made and ensure they are embedded and sustainable. NSDS4 is an opportunity to make sure that Rwanda is comprehensively on the path to transformation and modernisation in official statistics and embeds its position as a leader in the region. This should include implementing the African Roadmap for Transformation and Modernisation.



# Recommendations list

- 01** The NSS should conduct periodic self-assessments on progress being made in the implementation of the NSDS, with an overview presented to the NSDS Steering Committee.
- 02** The NSDS4 should contain similar pillars and ambitions as NSDS3, taking forwards elements which were not complete or that remain relevant to NSDS4.
- 03** The design of NSDS4 should refer to the African Roadmap for Transformation and Modernisation, including the Draft Maturity Assessment Model provided at Annex 4.
- 04** NSDS4 should have simpler, more engaging vision and mission statements.
- 05** NISR should continue to identify opportunities to use the technological developments seen in the 2022 census in their forward survey programme, and should share lessons around the region.
- 06** Consideration should be given to the production of user-friendly census products to increase use, especially at the local level.

- 07 NISR and relevant NSS members will need to prepare carefully for the launch of EICV7 results, developing a comprehensive approach to communications, working with partners where relevant.
  - 08 NSDS4 should be written in the spirit of supporting sustainable inclusive development in Rwanda.
  - 09 NSDS4 should include an objective that will effectively support the three outstanding areas to attain SDDS accreditation.
  - 10 NSDS4 to contain specific moves to more comprehensively coordinate across all MDAs who are part of the NSS.
  - 11 NSDS4 should include specific goals around development of legal and policy frameworks.
  - 12 NISR should develop a mechanism for the development, delivery and monitoring of the work programme of the Data Science Campus.
  - 13 NISR should develop a specific training plan for data science.
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14 NISR should develop processes and policies covering a range of issues relevant for data sharing. And take forward at least one project using these policies.

15 NISR should identify the remaining IT and other infrastructure needs for Data Science Campus and data science work across NISR and put these in place as a priority in the first half of the NSDS4 period.


16 NSDS4 needs to set out proportionate mechanisms for coordination across the National Statistical System to bring greater collaboration and coherence to data science work.

17 NSDS4 should contain a clear strategy for Rwanda's Role in the Africa Regional Hub, weighing up the costs and benefits of their role in this space.

18 That NISR allocate resources and commit to a timeline to upgrading the website in NSDS4.

19 Citizens' needs should have more focus in NSDS4.

20 NSDS4 should consider data requirements at lower local geographical levels.



21 The NSS led by NISR should design a training module for Data Managers and Health Centre official dealing with data at the sector level.

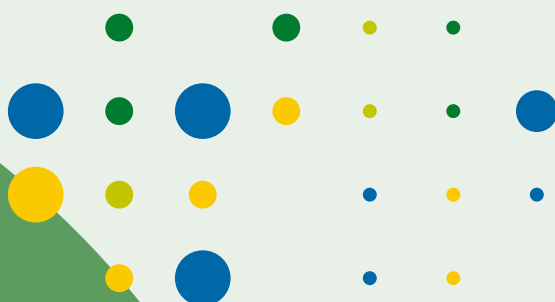
22 A comprehensive strategy for the training centre will be needed for NSDS4, to make the most of the resources.

23 NISR should run a staff satisfaction survey.

24 NISR/NSS to consider incentives like higher salaries, benefits, career opportunities, and work-life balance to reduce high staff turnover.

25 As a contribution towards the national drive towards digitisation, the review team would encourage NISR to do more in areas of their lead.

26 The format of the steering committee should be improved.



# Introduction

## Background to national statistics in Rwanda

The National Institute of Statistics of Rwanda (NISR) was created in October 2005, prior to which the functions now in NISR were executed by a Department of Statistics in the Ministry of Finance and Economic Planning.

NISR is the central statistical organisation within the Rwandan National Statistical Service (NSS). It provides the major statistical infrastructure for official statistics within the country and is responsible for producing a wide range of key national statistics whilst providing leadership, policy direction and forward planning. Rwanda: Law No.45/2013 of 16/06/2013 Relating to the Organisation of Statistical Activities in Rwanda gives NISR the responsibility for co-ordinating statistical activities carried out by those Ministries, Departments and Agencies (MDAs) which are also contributors to the overall NSS.

NISR successfully completed its first NSDS 2009 to 2014 which focussed on core data production at NISR. The end of programme evaluation of NSDS1 concluded that amongst the strengths were:

- effective collaboration between NISR and development partners
- a strong planning and organisation and management structure
- expertise in survey planning
- basic ICT, statistical infrastructure and adequate physical environment
- established and practised professional independence and ethical code in the leadership of NISR with political support from the highest level for statistical development



However, among the challenges facing NISR the evaluation in 2014 referred to:

- inadequate co-ordination of programmes across the NSS as well as within each of the ministries, departments and agencies of the Rwandan government (MDAs) and districts
- an absence of sector/district strategies which would have been beneficial in the delivery of NSDS1
- a need for better and deeper analysis of data from surveys and censuses
- an inadequate staff complement in NISR
- a need for improved financing security

NSDS2 ran from 2014 to 2019 and aimed to build on NSDS1, improve NSS coordination and undertake some admin data pilots. In 2017, a team from the UK Office for National Statistics<sup>2</sup> conducted a mid-term review of NSDS2 and concluded that:

- the achievements of NSDS1 had been successfully built upon
- there had been substantial progress in delivering surveys, in improving macro-economic statistics, and in meeting the needs of key users particularly in respect of the Economic Development and Poverty Reduction Strategy and SDG monitoring requirements
- NISR had placed a strong focus on quality and there had been some good developments in this field
- the management processes for NSDS2 provided an excellent example of best practice for other countries
- there have been some strong case studies in cooperation with other parts of the NSS making a great start in some important and challenging areas for example, CRVS and education data
- but there have been some challenges - not all administrative data (herein admin data) ambitions have been realised, and in other fields (such as agriculture) ownership from MDAs is not at the level required to ensure that the increased quality of data will lead to effective use
- we recommend some actions aimed at a wider user base with greater participation and cooperation in decision making, and support proposals designed to strengthen the NSS

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<sup>2</sup> MID-TERM EVALUATION OF NSDS2 ( RWANDA ), MARCH 2017 was carried out by Robert Bumpstead, Mark Gautrey, Nicholas Palmer, Mike Pepper and Emily Poskett from the UK Office for National Statistics (ONS)

## **NSDS 1: FI 2009/10 to 2013/14**

- Five priority areas.
- Emphasis on core data production at NISR.
- Development of survey visa system and user satisfaction survey.
- Top five SSA ranking in World Bank Statistical Capacity Indicator.
- Majority external finance.



## **NSDS 2: 2014/15 to 2018/19**

- Six strategic objectives.
- Emphasis on NSS coordination.
- Increased data frequency.
- Development of business statistics.
- Administrative data pilots.
- Sector plans for priority sectors.
- Majority domestic finance.



## **NSDS 1: FI 19/20 to 2023/24**

- 12 strategic objectives
- Emphasis on external engagement.
- Demand driven data production.
- SDDS status.
- Sector plans for all NST1 sectors.
- NSS outreach
- Imehigo
- Data revolution policy and training centre
- Strengthened legal and government framework

## The NSDS3 review period

The NSDS3 spans the period of July 2019 to June 2024.

During this time, COVID-19 impacted the world in numerous ways and the business of data collection, statistics production was affected globally. A brief overview of some of the key restrictions seen in Rwanda can be noted below:

- The virus was confirmed to have reached Rwanda in March 2020, with Rwanda's response to the virus receiving international praise for its effectiveness.
- The Rwandan Ministry of Health announced on 18 March 2020, via X (formerly Twitter), that all international commercial passenger flights would be suspended for 30 days, with effect from 20 March. On 21 March, officials announced a two-week lockdown. Both public and private employees were to work from home under strict measures. All borders were also to be closed, cargo and Rwandan nationals being exempt, with a mandatory 14-day quarantine.
- The government continued to extend the lockdown regularly, later bringing in the requirement for face coverings and an overnight curfew. Restrictions first began to ease around August 2020 when some restaurants were allowed to open, although most restrictions remained in place regarding international travel, mass gatherings and travel between districts.
- By early January 2021, many restrictions were eased but curfews remained. Rwanda resumed most transportation options (including airport operations and opening of air borders – land borders remain closed) and business operations (including daycares and schools). However, on January 18, when transmission of the virus began to worsen, stricter restrictions were implemented again and Rwanda entered a further period of lockdown. This period continued with easing and tightening of restrictions throughout in line with the severity of infection rates etc.
- By December 2021, the main remaining restriction was the curfew, prohibiting movements nationwide between 12.00am and 4.00am. All businesses had to close at 11.00pm.
- The last remaining major restrictions – the closed land borders and curfew – were lifted in March 2022. Throughout each phase of lockdown, restrictions flexed regarding public offices being open to staff, with some extended periods of time where staff were advised to work from home.

These restrictions are important to detail. They were necessary for public health security and were similar to those applied in other countries. However, important as they were, they affected the normal operations of all business and governments, including NISR and the NSS and therefore must be considered when making conclusions upon progress made during this period.

The NISR and NSS in general had three significant milestones impacted:

- preparation for the Census
- EICV6 had to be abandoned after months of field work
- the recruitment and establishment of the NISR Data Science Department was delayed

Additionally, the following were also issues:

- governance of the NSDS3 implementation was also affected by some members of the NSDS Steering Committee being drawn down out of Rwanda during the pandemic
- staff had to work from home systematically for the first time when the infrastructure for in almost all the NSS member organisations was not set up for this new work pattern

## Objectives of this review

The ONS has been asked to review progress in the implementation of NSDS3 in terms of how it meets demands for official statistics, capacity building with the NSS, adoption of new and emerging technologies and ICT infrastructure and assessment as to how official statistics are used to satisfy urgent needs of users. The review also aims to make recommendations which can be considered for NSDS4, looking at progress using a modernisation lens.

Key evaluation questions are listed here (see Annex 1 for full evaluation matrix):

1. to what extent has NISR enhanced and sustained core data production including in the areas identified in NSDS3, and what lessons can be learned for NSDS4 specifically:
  - 1.1. implement the RPHC5
  - 1.2. implement periodic surveys, including the RDHS, EICV6 and EICV7
  - 1.3. implement annual surveys including Seasonal Agriculture Survey (SAS), IBES, Establishment Census and Labour Force Survey (LFS)
  - 1.4. rebase GDP
  - 1.5. meet requirements for SDDS status
2. how well do official statistics satisfy the most urgent needs of the users at this time?
3. how effectively is NSS coordination working? What recommendations can be made for NSDS4?
4. how far has the data science campus progressed? What gaps are there in moving to a fully operationalised campus facilitating data access and innovation? What should NISR prioritise in the next NSDS?
5. how easy is it to access official statistics and their metadata?
6. to what extent has NSDS3 been implemented to build capacity? How effective have capacity building initiatives been?

## Methodology

Our approach has been to use existing ONS experience and knowledge to make the review efficient and effective, whilst adding fresh perspectives. The core review took place over a one-and-a-half-week period in September 2023.

A mixed approach method was adopted which involved:

- desk review
- interviews with NISR members of staff
- interviews with ONS members of staff who have provided technical assistance during the period under review
- meetings with development partners
- workshops with the NSS.
- meetings with NSS members of staff in the sidelines of the NSS workshops
- district workshops

Virtual interviews and district workshops were conducted prior to the core review week with all other meetings and workshops being conducted in person by the review team in Kigali.



Team members:

- Emily Poskett – Co-lead International Development Team ONS, Team Leader
- Natalie McQuade – Project Manager International Development Team, ONS – Project Coordinator
- Will Marks – Central Policy Secretariat, ONS – to provide fresh perspective, and bring lessons from the UK context
- Theo Joloza – ONS Strategic Adviser to NISR – to ensure work relevant for context
- Tim Harris – Engagement Lead at the ONS Data Science Campus – on the data science components of the report
- Other ONS staff interviewed for the review, and involved in discussions on particular issues included: Garnett Compton (census), Nick Palmer (labour force statistics and economic statistics more broadly), Byron Kalies (learning and development)

The team worked with Matthew Shearing – independent consultant who worked for UNECA on the Roadmap for the Transformation and Modernization of Official Statistics in Africa, but working with UNICEF at the time of the review on mainstreaming child rights into NSDS. This ensured the inclusion of both aspects into the NSDS review.

As part of the review, the team had requested the NSS conduct self-assessments before the mission. However, these were not received. This was, however, mitigated by NSS members providing the required information during the workshops. The recommendations and the conclusions in this report are therefore based upon the information given during the review week and the ONS's own institutional knowledge.

**Recommendation 1:** The whole NSS should conduct periodic self-assessments on progress being made in the implementation of commitments under the NSDS. These should be done at sector level with an overview presented to the NSDS Steering Committee.

# Findings

## Cross-cutting findings

NSDS3 had some high ambition objectives, and good progress towards most of them has been made. These objectives included: the setting up of the data science campus, adopting big data into official statistics as part of the data revolution, the purchase of mobile phones and software and other materials to support the first digitally administered RPHC, and coordination of all parts of the NSS under 15 sector statistical strategies.

The ultimate aim was an aspiration for NSDS3 to be the driver for enabling data to be easily available to users to support evidence-based decision making.

The review has indicated that to a large extent, users believe that the NSS has met the objectives of NSDS3. In terms of making data available for policy making, the NISR has been able to release statistical outputs on time with most being ready before the date announced in the release calendar. It is important to also point out that some users have reported some challenges. Some of the challenge can be attributed to the consequences of the COVID-19 pandemic while some are due to NSDS3 having been too optimistic in including a wide range of ambitions, and that whilst several of them have made good progress, they are not yet at the point of being embedded or sustainable. In drafting NSDS4, the NSS will need to ensure they balance ambition, with sustainability. NSDS4 should build on the gains made and ensure they are embedded and sustainable.

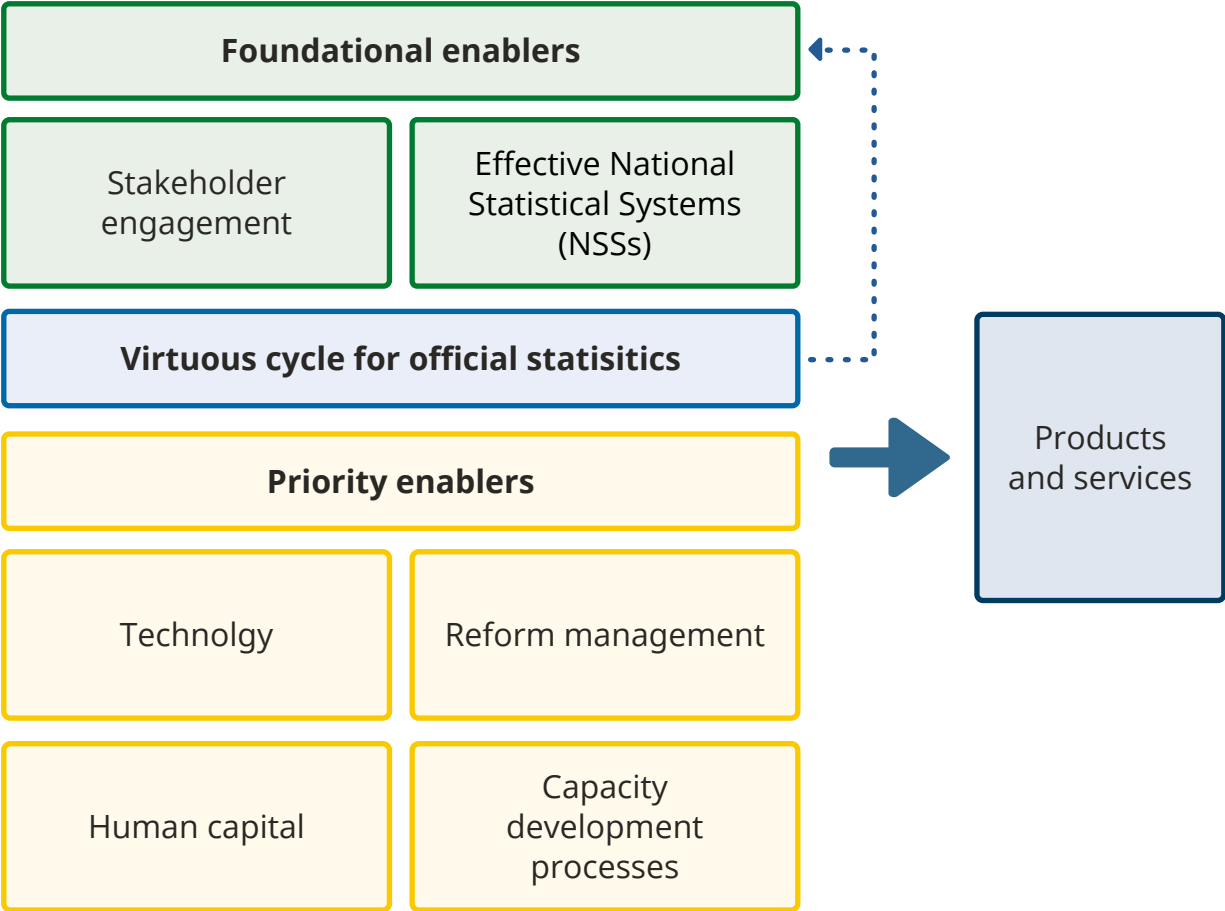
**Recommendation 2:** The NSDS4 should contain similar pillars and ambitions as NSDS3, taking forwards elements which were not complete or that remain relevant to NSDS4. Elements of the strategy that remain relevant should not be changed for the sake of it. NSDS4 should establish clearly NISRs role in NSS coordination and in data science capability, and ensure that these are understood by all stakeholders, the aim should be that by the end of NSDS4 these functions are well established, embedded and sustainable.

NSDS4 is also an opportunity to make sure that Rwanda is comprehensively on the path to transformation and modernisation, and embeds its position as a leader in the region. Rwanda is doing well in this regard, when benchmarked against the African Roadmap for Transformation and Modernisation, and rightly holds a position as a regional leader, but there are a few key areas where further progress needs to be made, and these should be included in the plans for NSDS4.

Figure 1 shows the key enablers necessary to maintain the virtuous cycle necessary in order for statistical systems to modernise and transform. The benchmarking for Rwanda, undertaken as part of this review, demonstrated how under NSDS3 (and previously) good progress has been made in many of the priority enablers, and Rwanda is seen as a leader in the continent, especially with regards to technology and capacity development. However, the benchmarking also noted the need to continue to make progress against the foundational enablers of external stakeholder engagement (the NSS looking outwards) and effective NSSs (how the NSS organises itself) in order to ensure this progress translates into sustainable results.

NISR can benefit from a broader understanding of their stakeholders whilst engagement with MDAs and development partners is largely comprehensive, there are significant gaps and often rely on personal relationships rather than formal systematic intern-institutional mechanisms. This engagement with these partners should also be matched with more systematic engagement with citizen users by all producers in the national statistical system, including users at district level.

Figure 1: Key elements of the African Roadmap for Transformation and Modernisation



**Recommendation 3:** The design of NSDS4 should refer to the African Roadmap for Transformation and Modernisation, including the Draft Maturity Assessment Model provided during the Review and at Annex 4. In particular, the process of developing NSDS4 should use the benchmarking to look at how to address the so-called ‘foundational enablers’ of external stakeholder engagement and effective NSSs. The NSDS4 drafting team should pay consideration to the aspects highlighted under these headings in the Draft Maturity Assessment Model (Annex 4), and review whether action needs to be taken to ensure Rwanda is achieving the benchmarks set at levels 1 and 2 for both aspects, and set out in NSDS4 any actions needed to achieve these.

**Recommendation 4:** NSDS4 should have simpler, more engaging vision and mission statements. These should be easy to understand, ambitious, and summarise well the aims of the strategy itself, in terms of its impact on society, rather than the institutions in the NSS. In addition, a summary or shorter version of NSDS4 should be published which everyday readers can easily engage with. This would draw out the key points from the main strategy document and set the scene on a page or two – this would be well designed graphically and include infographics to enhance easy understanding and impact with all users.

## Pillar 1: Produce data to support evidence-based decision-making

### SO.1: Sustain and enhance core data production at NISR

Core data production has mostly been completed as planned, despite the interruptions of the global COVID-19 pandemic. The review team found that users are largely satisfied with these outputs – with particular praise for the advance release calendar, and the way it is used, and the emerging outputs from the 2022 census (noting that, there appears to be un-met demand from users for the provision of added-value services, see SO7 for recommendations on this)

The 2022 census was implemented successfully with key results being available very quickly. The review team would like to commend NISR for the use of technological innovations in the census: including the use of smart phones (which was cost effective compared to tablets which are used in most countries), e-recruitment (introduced due to the pandemic and proved successful), hybrid training mechanisms (avoiding the need of mass gatherings in the pandemic, whilst reducing the quality concerns of completely virtual trainings), and effective remote supervision of field operations with the use of technology. However, there was some feedback (most notably from development partners and some MDAs) that the dissemination work associated with the census thematic reports could be improved in future. Rather than having to read several long thematic reports, in addition there should also be a concise summary of headline census findings easily accessible for users. As above, this could include charts and infographics to help understanding and impact.

**Recommendation 5:** NISR should continue to identify opportunities to use the technological developments seen in the 2022 census in their forward survey programme, and should share lessons (positive lessons for example, on the use of smart phones) as well as any challenges, with partners around the region.

**Recommendation 6:** consideration should be given to the production of user friendly census products to increase use, especially at the local level

The majority of the planned periodic and annual surveys did go ahead as planned despite the interruption of the COVID-19 pandemic, however the notable exception being the EICV6 survey.

Some innovations were also seen in these surveys, for example, telephone interviewing in the LFS.

## Planned surveys and implementation under NSDS3, including the impact of COVID-19

### RDHS (Demographic and Health Survey)

**Plan in NSDS3:** Planned for November 2019 to June 2020

**Implementation:** [The survey](#) was completed. Field work began in November 2019 and was suspended from April to June 2020 due to COVID-19 before NISR got special permission to resuming the fieldwork from June 4 2020 until completion on: 20 July 2020.

### EICV6 (Poverty survey)

**Plan in NSDS3:** Planned for October 2019-October 2020

**Implementation:** [The survey](#) was partially completed. The fieldwork started as planned in October 2019 but was stopped in March 2020 due to COVID-19 restrictions, at which point 40 per cent of the sample had been surveyed. The decision was taken not to continue with fieldwork, so no further data collection occurred. Some limited indicators were published from the data that was collected.

### EICV7

**Plan in NSDS3:** Planned for 23/24 (Oct – Oct)

**Implementation:** As of the time of this report, the planning is on track (the pilot is complete and interviewer training is underway).

### SAS (Seasonal Agriculture Survey)

**Plan in NSDS3:** [Annual](#) – with every [third year being 'upgraded'](#) (a bigger sample including household plots)

**Implementation:** The survey was delivered as planned, annually throughout the pandemic. It is not apparent that COVID-19 restrictions impacted the implementation of this survey or subsequent reporting.

### Integrated Business Enterprise Survey (IBES)

**Plan in NSDS3:** Annual

**Implementation:** The data collection for [the survey](#) was put on hold during the pandemic, so the latest publication from May 2023 is the 2019-2021 survey, using data collected from May to August 2022 with the year 2021 being the reference period.

### Establishment Census

**Plan in NSDS3:** 2020/ 2021 and 2023/ 2024

**Implementation:** [This census](#) has been able to continue as planned.

In the previous review, a recommendation was made about linking the NISR Establishment Census with the RDBs Business Register. This has not happened

but it is still the intention. There have been challenges as the two exercises have different coverage (Bus register is only formal business and establishment census includes informal too). The data science team are working with the economic stats team to improve identifiers and enable better matching following the 23/24 establishment census.

### Labour force survey (LFS)

Plan in NSDS3: Annual

**Implementation:** [This survey](#) was delivered as planned, with quarterly estimates provided since February 2019, however due to COVID-19 the survey moved to telephone interviewing for data collection in both May and November 2020, to comply with preventative measures set by the government. This worked reasonably well for a limited time but the response rate began to fall and there were concerns about the quality of responses, especially in urban areas, and so they returned to face to face interviewing as soon as was feasible, from the following data collection period in February 2021. In May 2020, an abridged questionnaire was used to measure the main indicators only, and therefore [the 2020 annual report](#) is limited to the abridged indicators.

Due to the stopping of the EICV6 survey, the gap between poverty statistics will be seven years. The review team found that users in general seem to understand the decisions made around the EICV survey in 2020 – but this gap presents a serious risk that the results of EICV7 will be highly anticipated and NISR needs to be prepared to answer challenging questions. The communications of this will need to be well planned. They need to make thorough preparations for this and the best approach will be to be as transparent as possible about the methodologies used, and how the data can and cannot be used.

**Recommendation 7:** NISR and relevant NSS members will need to prepare carefully for the launch of EICV7 results, developing a comprehensive and transparent approach to communications, working with partners (such as the World Bank) where relevant.

There have been a number of improvements in regular economic statistics, however the rebasing of National Accounts has not been achieved as planned and this means that there will be a significant period between the last rebasing (2017) and the subsequent one (2024), which presents some risks for NISR in terms of communicating any revisions to users, as the economy will have seen significant changes in this seven-year period.

At the mid-term review of NSDS2 (2017), it was concluded that Rwanda was “close to having fulfilled the requirements for accreditation in terms of the SDDS programme”<sup>3</sup>, and it is one of the stated aims of NSDS3.

This review has established that SDDS accreditation has still not been attained. However, it is noted that out of the 19 areas that needed to be developed to meet accreditation, 16 are compliant. with key progress including:

- the compilation of production indices
- the compilation of producer price indices on a monthly basis
- the compilation of quarterly BOP
- as well as the move to publishing labour force measures quarterly

Areas that remain non-compliant include debt statistics and Government Finance Statistics.

**Recommendation 8:** NSDS4 should include an objective that will effectively support the three outstanding areas to attain SDDS accreditation. This will not only increase the trustworthiness of Rwanda’s official statistics. It will also be in line with Rwanda’s transformation agenda allowing users especially financial market participants to have adequate information to assess the economic situation in Rwanda.

### SO.2: Enrich and expand data supply across the NSS / SO.3: Leverage NSS data products to lead Imihigo indicator selection and evaluation

Rwanda is data rich and NISRs strong leadership offers lots of potential to do more in admin data.

From the evidence presented, the team were unable to robustly evaluate what proportion and which of the planned activities had taken place.

The review team were made aware of a number of cross-NSS activities which have enriched and expanded data supply, most impressively in the areas of CRVS and education data expansion. Some other good cross ministry harmonisation initiatives were also noted (for example, in external trade statistics).

From the data collected during the workshop, it is clear that there is a divergence in the level to which MDAs report the availability of indicators in their sector, varying between 40 and 100 per cent.

The review team got the general sense that alongside the good examples identified above, progress in some other sectors has been more limited.

Reasons for missing indicators, cited by MDAs included:

- surveys which were missing or not completed due to COVID-19
- surveys which were missing due to budget or human capacity constraints in MDAs
- surveys which were planned by MDAs, but not given authorisation / visa by NISR – in some cases without a clear understanding by the ministry team on why this is
- quality issues with some of the data being collected
- a lack of coordination / harmonisation between data collection initiatives in their area

As noted under SO4 below, some of the ‘missing’ indicators could be easily addressed due to greater understanding in MDAs of the potential of existing data (for example, the census).

**Recommendation 9:** NSDS4 should be written in the spirit of supporting sustainable inclusive development in Rwanda. As such when drafting NISR and NSS should reflect on any gaps that still remain in the sector specific needs and Rwanda’s Sustainable Development Goals (SDGs) and consider incorporating children’s rights as advocated by UNICEF.

## **Pillar 2: Lead a national data revolution to deepen statistical impact**

### **SO.4: Harmonise best practices in data governance across the NSS**

Members of the national statistical system are clearly committed and engaged well in both the review of NSDS3 and the scoping for NSDS4. During our workshop sessions, the majority of MDAs asked questions, provided feedback and offered suggestions for the future. This engagement should be capitalised upon by NISR whilst MDAs are keen to be involved.

NISR has a good relationship with many of the key MDAs. MINECOFIN for example are aware of the role that NISR play, the statistics they produce, services they offer, and their own statistics. When asked about their awareness of NISR statistics, the census was often most mentioned. However, the MDA awareness was not comprehensive. Some smaller MDAs were not plugged into the right stakeholders within NISR or aware of the services, data collection or help.

For example, MINISPORTS were interested in collecting data on access to sports facilities in local areas. The representative from the Ministry was not aware they could speak with NISR about using an existing survey to explore this. Equally, NISR can be better at ensuring they stay in touch with all MDAs on a regular basis. This can help assess user needs and promote NISR’s work.

There is also a lack of understanding by some MDAs of the services available from NISR. MININFRA for example are interested in electricity use disaggregated by disability. NISR noted that this was already available but clearly there is more to do in making MININFRA aware of this, and the MDAs knowing who to talk to with their statistical and data needs.

To better understand the complex landscape across the NSS, NISR should map out and proactively work to address gaps in the system. This would allow NISR to systematically engage all sectors to understand their needs. More practically, perhaps each MDA (or each sector) could have a buddy within NISR who could meet periodically for a mutual sharing of user needs and latest updates. Similarly, the NSDS steering committee format could be reviewed so that periodically an MDA presents on their latest work, statistics and data needs on a rota basis.

Some sectors noted that as well as data sharing between MDAs, the next step was now to ensure that statistics were harmonised (both in terms of standards and definitions) across the NSS. MDAs gave some examples where they felt that differing definitions were causing issues for users. They also noted that data systems should also be integrated and data shared more easily across the NSS.

**Recommendation 10:** NSDS4 to contain specific moves to more comprehensively coordinate across all MDAs who are part of the NSS.

#### Recommendations for NISR

- Map out all MDAs and identify a relevant named individual, to lead coordination with each MDA ('a buddy') – to have regular conversations throughout the year to ensure that priorities and opportunities on both sides are understood and addressed, and closely reflect users needs.
- Establish sector level working groups in key sectors to join up relevant discussions and identify synergies and opportunities around particular topics.
- As part of improvements to the steering committee [see recommendation 24], ensure better attendance from MDAs and put a focus on a different sector strategy in each meeting.
- Child rights – specific workstream to mainstream data production and uptake of data children into NSDS4 will be an important part of enhancing the performance of the NSS and providing cross-cutting strategic gains. This is particularly important as a coordinated approach to child rights in the NSS is in its infancy it cuts across the above sectors and allows for consideration of better approaches for the Leaving No-one Behind Agenda in general.

## SO.5: Enable data openness, integration and interoperability through enhanced legal and policy frameworks

NSDS3 highlighted the need to address the ambiguities in the statistical laws to better enable join-up of administrative systems and expand opportunities for research and analysis and raise new policy issues for open data and transparency in Rwanda.

The review team is aware of efforts in this space, and a good level of understanding of the need to emphasis appropriate legal and policy environments to facilitate data sharing. The team are aware of specific progress in some areas:

- physical security procedures have improved in NISR offices and plans for the Big Data Lab have progressed (see SO6)
- law No 058/2021 of 13/10/2021 Relating to the protection of personal data and privacy – NISR inputted into this new legislation to ensure there were some clauses around statistical purposes (see SO6)
- NISR are actively exploring best practice for enhanced data stewardship at the institutional and NSS level
- min ICT is facilitating data governance agreement across the Government of Rwanda

But the review team was not fully sighted on whether all the aims of the NSDS3 have been comprehensively achieved.

### **Recommendation 11:** NSDS4 should include specific goals around development of legal and policy frameworks.

Specifically:

- NISR, as the national statistics office should have the responsibility to establish and lead a cross government effort on data sharing
- NISR should collaborate with a range of other partners in order to access the data required to effectively deliver their aims for a big data lab [links to recommendations 14 and 15]

## SO.6: Equip and operationalise a public Data Science Campus to facilitate data access and innovation

There are five objectives in NSDS3 related to NISR's role on data science and big data:

- the Data Science Campus
- human capital development
- policy and legal frameworks
- it systems and infrastructure
- advocacy

NISR has made progress in each of these areas – and the building blocks are in place, although they have not necessarily been tested in terms of delivery of outputs.

Progress is still being made in the final year of NSDS3, up to July 2024. But there will be areas where the expectations set out will not be completely met. For many of these there are good reasons why progress has been slower. In others the context has changed and evolved so that the original plans have been modified over the period of the strategy.

The remainder of this section looks at progress in each of the five objectives.

### **The Data Science Campus (DSC)**

The DSC is now in place. It took longer than expected to set it up and staff it primarily because of delays caused by wider government processes that needed to be followed and because of COVID-19 restrictions. For example, the director was not in post until mid-2021 and the recruitment of the wider DSC staff was not complete until the end of 2021.

Retention of staff was initially an issue, with some data scientists leaving for better paying roles elsewhere. But the DSC director has made good progress in developing an environment where staff feel valued and have a sense of good future career prospects within NISR and this has stabilised the DSC staff situation.

Initially the work of the DSC was focused on building the team, assessing and developing their skills and delivering a limited number of activities aimed at demonstrating the value of data science to the wider NISR.

More recently the team has started working on more substantive projects and those with wider potential impact. For example, using data science to improve the efficiency of linking responses between the census and the post-enumeration survey.

The DSC has also recently embarked on planning its first significant automation project in relation to the Consumer Price Index (CPI). Using data science to automate statistical processes was one of the key areas foreseen in NSDS3, and the CPI work is currently scheduled to take place within the period of that strategic plan.

**Recommendation 12:** NISR should develop a mechanism for the development, delivery and monitoring of the work programme of the DSC. This should include a clear statement of the criteria that will be used to decide how different proposals are prioritised based on the impact of each on areas such as the efficiency and effectiveness of NISR, the quality of statistical outputs and the demands of data users.

## Human capital development for data science

There has been good progress on skills development within DSC. In particular skills have been improved in: coding (including for the transition of processes from Stata to R/Python), collaborative working, data science tools (such as GitHub), and techniques (for example, web scraping). Support and training has come from mentoring processes (including, for example, from the ONS Data Science Campus, the ONS-funded data science ODI fellow, and the ONS International Data Science Accelerator scheme), on the job training and training courses from the Africa Regional Hub for Big Data and Data Science and other partners.

More widely in NISR (outside of DSC) there has been less of a focus on developing coding skills and the understanding of data science. This has led to some caution and nervousness to engage with the new data scientists from some staff working on existing statistical outputs.

There have been some discussions with the African Institute of Mathematical Sciences (AIMS) and the University of Rwanda about how they might make available courses and content for NISR and the wider National Statistics System (NSS). But these have not yet been implemented.

**Recommendation 13:** NISR should develop a specific training plan for data science. This should look at the skills required within the DSC – but there should also be an assessment of needs and a training delivery plan for NISR analysts outside of DSC.

## Policy and legal frameworks related to data science

A new data protection law was put in place during NSDS3. This specifically allows NISR to request data for statistical purposes from other organisations. This has great potential for exploring/ acquiring new data for data science projects. But the processes under the new law have not yet been tested to see how it works in practice.

**Recommendation 14:** NISR should develop processes and policies covering a range of issues such as data sharing, data linkage and privacy to guide work conducted under the new data protection law. And take forward at least one project using and/or linking data from an external ministry or agency.

## IT systems and infrastructure for data science

A key piece of infrastructure envisaged by NSDS3 was the Big Data Lab: a place where researchers could come and access data from NISR and other parts of the NSS in a controlled environment. The physical space for the Lab has been set up, including with some computers. Some census data is already available. And there are specific areas where authorised people can access restricted data. But overall there has been less progress than envisaged, in setting up the centre in terms of the amount of data that can be accessed and its use by researchers and the public.

The DSC and its staff require certain levels of IT and infrastructure to operate effectively, including suitable laptops, shared networks for collaborative working, data science tools, secure storage for data and computer processing capabilities. These are not yet all in place.

More widely, infrastructure and processes between NISR and the wider NSS also needs to be strengthened. For example, data is currently transferred physically using memory sticks rather than through a secure electronic route.

The work of the DSC will also interact with other parts of NISR's infrastructure – for example the organisation's website. DSC staff have been exploring how to improve data accessibility and visualisation through the use of dashboards. But great clarity is needed on the responsibilities and processes involved in agreeing or developing NISR's data dissemination between the communications team, statistical output areas and DSC.

**Recommendation 15:** NISR should identify the remaining IT and other infrastructure needs for DSC and data science work across NISR, and put these in place as a priority in the first half of the NSDS4 period.

## Advocacy for data science

Good progress on advocacy for data science has been made within NISR. The DSC and the potential of data science is becoming understood across the office. DSC is now being approached by other units in order to develop and transform their outputs. For example, the CPI team and DSC are discussing how to automate the CPI processes.

Outside of NISR, there is much data science work starting in other ministries and agencies in Rwanda. NISR is linked in with some of these activities and initiatives. But more connections could be made and there is also scope for NISR (or some cross-NSS group) to play a role in coordination and bringing greater collaboration and coherence to this work.

**Recommendation 16:** NSDS4 needs to set out proportionate mechanisms for coordination across the national statistical system to bring greater collaboration and coherence to the data science work emerging across MDAs.

### The Africa Regional Hub

One data science initiative that was not included in NSDS3 is NISR's leadership of the Africa Regional Hub. This seeks to promote and share data science work across African statistics offices and build capability across the continent. It takes a minor, but significant, amount of the time of one or two of the NISR data science team.

There are clear benefits for NISR in engaging in this work, including the ability to showcase its progress and get insights into data science work and expertise elsewhere. But there are also costs. NSDS4 will need to reflect on these benefits and drawbacks of engagement and be very clear about the level of NISR engagement and the reasons for it.

**Recommendation 17:** NSDS4 should contain a clear strategy for Rwanda's Role in the Africa Regional Hub, weighing up the costs and benefits of their role in this space.

## 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

NISR have energy and enthusiasm in this space, and all staff recognise the need to improve statistical outputs to better meet user needs. This includes building capacity within the NSS by providing briefing sessions to NSS members when new developments and releases come up as well as providing training to statisticians embedded in other government agencies. Overarching feedback from MDAs and users highlighted the need to tailor communications to the audience, specifically focusing more on shorter, key messages on publications with accompanying visualisations.

There are some good initiatives that target the citizen users, such as their well-known infographics competition and new to 2023, a hackathon, and NISR works well with development partners on these. Also, it is worth noting the 'Reading data with children' initiative. This initiative recognises the important role children play in Rwanda. Children and young people are agents of change as they can

be key in communicating data to parents or peers who are not data literate.

Whilst there are measurable benefits from these initiatives, there are still opportunities to do more. In particular, requests from users include:

- consider placing key points at the top of website releases
- better data visualisation
- more data in Excel / other downloadable formats
- time series easily available
- more disaggregated data
- dashboards / interactives which users can engage with

There was universal feedback from users, and from NISR staff, that the website needs upgrading. NISR staff want to start improving outputs, writing fewer PDFs and being more web-based with reports that are more easily searchable, but the current website doesn't facilitate this.

Staff also highlighted their plans to work more closely with the data science team on data visualisation, but again seem to be waiting for the new website upgrade. The data science team have previously done some work on dashboards which could become a feature on the new website.

During workshops conducted at district level, users expressed a desire for statistics to be available at lower geographical levels at least at district level, and that this should be in dashboard format on the website.

The majority of workshop participants working at the grassroots level (Sector, Cell and Village) stated that disaggregated data is available only at the district level and that makes it difficult for local level decision makers to use the data meaningfully.

The following areas were also highlighted as area where data gaps existed at the lower geographical levels:

- the size of arable land
- mobile phone penetration and internet accessibility at Sector, Cell, and Village levels
- agricultural activities at Sector, Cell, and Village levels
- status of public transport, roads
- status of economic activity so that those that are vulnerable can be easily identified and supported

**Recommendation 18:** That NISR allocate resources and commit to a timeline to upgrading the website in NSDS4. The upgraded website should be optimised for easy access via personal computers and mobile devices as a lot of people indicated that they access data using either tablets or mobile phones.

**Recommendation 19:** Citizens' needs should have more focus in NSDS4: including better engagement with citizens, making more data available at the local level where possible, ensuring reports available in clear non-technical speak (including shorter versions of releases with main points), and in Kinyarwanda where possible, and consideration given to alternative mechanisms to reach users, for example via text messages or participation in local level events.

**Recommendation 20:** NSDS4 should consider data requirements at lower local geographical levels. This can be possible through the utilisation of administrative data in official statistics. Data sharing between different members of the NSS will be key in achieving this as it will allow data linkage between administrative and survey data to create datasets that allow more granularity.

#### **SO.8: Enhance capacity for data production and statistical analysis**

In the workshops conducted in districts, there was recognition that there was ongoing change in the wider statistical landscape. Key district officials, directors of planning and monitoring and evaluations, and district statisticians but data management officers and health centre staff who operate at the sector level do not although they use data on a daily basis. The review found that those that are trained at the local levels do not have the capacity to train others adequately.

**Recommendation 21:** The NSS led by NISR should design a training module for data managers and health centre officials dealing with data at the sector level. This will help them understand the data thereby avoiding misinterpretation which can affect the quality of decisions made. The module would need to be dynamic so that it can be updated when there has been a significant methodological change or clarification of definitions.

### SO.9: Introduce new methods in data science and analytics

There are a variety of ways that new methods related to data science could enhance the processes and outputs of a national statistics office:

- replicating existing processes in a more effective way, for example through automation or adding quality control procedures.
- using new techniques to deliver improved outputs and analysis.
- exploring new and innovative data sources and data science methods.

NISR has made some progress in these areas – but much more remains to be done to operationalise this aspect of modernisation in the production of statistics.

NISR is undertaking its first significant automation project – seeking to automate the processing and production of Consumer Price Index (CPI) outputs by July 2024. Automation is an area which can deliver significant resource savings for NISR. A key future step in unlocking wider impact will be demonstrating the principles within this CPI work – and then seeking to replicate those for other statistical outputs.

New techniques have started to be used within NISR. In particular the post-enumeration survey that followed the census used data science to improve and speed up the matching of households between the survey and the census.

The DSC has also produced new and innovative analysis related to labour market and tourism by scraping data from the internet – for example on job vacancy levels and the costs and availability of overnight accommodation. Further work is needed to incorporate this type of information into routine statistical outputs.

Less progress has been made in using new data sources or using techniques such as machine learning or natural language processing (text analysis). There would be benefits in exploring areas such as these under the new NSDS4 strategy.

Recommendation 12 relates to the prioritisation of data science work, which is important here

## **Pillar 4: Strengthen the enabling environment for sustainable statistical development**

One of the clearest developments over the course of NSDS3 is the new NISR building, which opened in 2019, containing the NISR training centre, the Big Data Lab and offices for the data science campus and others. Whilst not all these elements are fully up and running (see SO6) this investment has improved working conditions and access to training for NISR staff, which will help with staff retention and increased profile of NISR within Rwanda and internationally.

The training centre has also helped reduce the costs and improve the environment for trainings, benefitting the whole NSS (including enumerator training for the different surveys and specialist trainings in data skills for example), and enabling NISR to host regional and global events, beginning with the UN big data conference in 2019, which coincided with the building's opening.

### **SO.10: Build and sustain the workforce to support sustainable statistical development**

The launch of the training centre has, as previously mentioned, opened up training opportunities for the NSS.

NISR have been regular hosting regional events and study visits from other African NSOs, as they are widely recognised as leaders in the region; NISR's role as the Africa Regional Hub (see SO6) also leads to many international events being hosted in Kigali. These open up some great opportunities for NISR staff. Although it is recognised that being the host of study visits frequently, can absorb a lot of time and energy.

There are some other initiatives including the NISR intern scheme, which help to raise awareness of official statistics as a career.

The Single Project Unit has also enabled NISR to retain some skills and leverage necessary expertise for specific projects.

However, the NSS still faces challenges with low staff numbers and high turnover, partly due to low government salaries. The African Roadmap for Transformation and Modernisation recommends that NSOs should consider how to improve their performance management systems and organisational culture to build careers and improve staff satisfaction. This includes anticipating staff mobility between organisations, enhancing collaboration with academia to strengthen the relevant labour market supply, and improving planning for leadership continuity at senior levels.

To best target its resources to reduce staff turnover, NISR and the NSS would benefit from a better understanding of staff satisfaction. This could be followed by an action plan to implement some of the other levers mentioned in the African Roadmap, such as improving performance management systems and organisational culture.

Statisticians and analytical staff are key in enhancing evidence-based policy making. The NSS needs to understand why its staff are leaving and what it can do to keep them. This includes looking at things like salaries, benefits, career opportunities and work-life balance.

It is also important for the NISR to invest in leadership training for its senior management team to ensure effective and efficient succession planning at the senior levels.

**Recommendation 22:** A comprehensive strategy for the training centre will be needed for NSDS4, to make the most of the resources. It is recommended that this strategy should include training on softer skills (a focus on a talent pipeline / leadership continuity and project management) and an increased focus on training and engaging the NSS. It should also build in the work of the data science team on data science capacity and international events.

**Recommendation 23:** NISR should run a staff satisfaction survey. This can help NISR's leadership to identify areas where they can feasibly make improvements, which can help to reduce staff turnover. A follow-up action plan should then be developed.

**Recommendation 24:** NISR to consider incentives like higher salaries, benefits, career opportunities and work-life balance to reduce high staff turnover (this links to recommendation 23 as the areas to target can be identified through the survey).

## **SO.11: Invest in operational infrastructure, assets and logistics to support sustainable statistical development**

The Government of Rwanda has placed information and communication technology (ICT) as a central tool for its transformation and is committed to digitising all its service delivery across all sectors under their Irembo programme<sup>4</sup>. Many NISR services are already partly digitising and NISR ICT team have pulled together a list of areas where NISR could use digital technology to greater effect.

### **Services that NISR are considering digitising under the Government of Rwanda Irembo programme**

#### **Statistical, Methods, Research and Publication (SMRP) Unit**

NSS standardisation

- to issue visa to conduct surveys
- to give authorisation to publish survey report

NSS coordination and advisory system

- to prepare the national program of the statistical system
- to advise the Government and State institutions regarding the development of the national statistical system and establishment of policies and strategies related to the promotion of the statistical system
- to coordinate and gather statistical information and methodologies of different sectoral departments in charge of statistical activities in the country

Statistical capacity building and awareness system

- to advise and train the personnel in charge of national statistical activities in the country
- to encourage the public to participate in statistical activities and learn how to use the census and surveys results

#### **All core mandate and technical support units**

To conduct national census and other national surveys

- this involves the following: recruitment and training of enumerators and supervisors, design and coding of the questionnaire, data collection and processing for every national census and survey

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4 IremboGov

## SMRP and ICT Units

SMRP and ICT units to disseminate the official statistical data whether the one publicised by the Institute or the data bearing its visa endorsement. This is not only about publication of statistics reports and anonymised datasets to online platforms but also involves conferences, meetings, distribution of reports material to decentralised entities and use of social media to disseminate.

**Recommendation 25:** As a contribution towards the national drive towards digitisation the review team would encourage NISR to do more in areas of their lead:

- building on the experiences in census 2022 – move towards greater use of e-recruitment and hybrid training for enumerators
- make greater use of digital technology in the production and dissemination of statistical outputs (creating more dynamic, online material)
- work towards trialling self-completion for some data collection exercises, notably the 2032 census
- consider providing some services via the Irembo platform

## SO.12: Mobilise resources and strategic partnerships to support sustainable statistical development

The review team’s exposure to external stakeholders was limited to some key development partners and AIMS.

The development partners (DPs) are supportive of NISR and the work that they are doing, especially with regards to the census and see NISR as a good partner. We heard that NISR are responsive to DP demands, that they can easily access data, and that they perceive the quality of statistical products as being good. DP feedback on statistical outputs was similar to those of other stakeholders, namely that there is inconsistency in communication and dissemination across the NSS and that reports are dense and could do more with data visualisation. They also flagged tensions between their sector specific demands and the limited resources available. But in general, they are satisfied that NISR involve and engage them well.

During the review of NSDS2, ONS (2017) concluded that: “the management processes for NSDS2 provided an excellent example of best practice for other countries”, this was based upon the fact that basket funding was being provided by most DPs, and the steering committee was inclusive (including civil society for example) and effective (in scrutinising budgets and in ensuring partners shift their programmes responsively to shifting priorities). However, the review team in 2017 highlighted concerns as to how the new Payment for Results (P4R) programme would fit into this landscape, and made several recommendations (see Annex 2, particularly recommendations 4, 11, 12) to enhance the steering committee’s role further.

Now in 2023, it appears that these recommendations to strengthen the steering committee have not been implemented. Further to this, some of the partners (DPs, and the MDAs that we spoke too) now feel that the steering committee's role has become less effective during the NSDS3 period. This may be in part due to the change in the nature of DP support as well as due to the pandemic changing working models, however the comments which should be reviewed by NISR include:

- that the meetings have little structure, and that whilst members find the updates useful and interesting, it is hard to put progress into context or to engage in meaningful discussion
- that there is no regular monitoring of the NSDS targets or other key performance indicators
- that the meetings would be more appropriately chaired by the Ministry of Finance
- that the participation of MDAs is lower than it should be, and that their virtual attendance gives them low visibility

Linking to recommendation 3, and building on the successes during NSDS3 and before, to optimise and sustain a virtuous cycle for official statistics, if the design of NSDS4 refers to the African Roadmap for Transformation and Modernisation, including the Maturity Assessment Model provided at Annex 4 – this will include broadening existing mechanisms to anticipate further development of external relationships relevant to Rwanda with respect to Government users, development partners, potential partners in data provision and production (for example, business, academia), managing labour market issues (for example, business, academia, professional societies), and external support for official statistics (for example, the media and professional societies).

## **Recommendation 26:** the format of the steering committee should be improved. Specifically, it should:

- include regular monitoring against the NSDS results framework and other key performance indicators (KPIs), as well as activity reporting
- make efforts to ensure inclusive and fruitful participation of MDAs in the meetings – reviewing format and their part in the agenda (see recommendation 9)

## ANNEX 1:

# Evaluation matrix

## Pillar 1: Produce data to support evidence-based decision-making

### Strategic objective

SO.1: Sustain and enhance core data production at NISR

### Key evaluation questions

1. To what extent has NISR enhanced and sustained core data production including in the areas identified in NSDS3, and what lessons can be learned for NSDS4 specifically:
  - 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

### Methodology

- Self assessments
- ONS experts to review progress in areas including RPHC and LFS, and identify progress and lessons learned
- Review SDDS requirements, via remote communication with IMF

### Strategic objective

SO.2: Enrich and expand data supply across the NSS

SO.3: Leverage NSS data products to lead Imihigo indicator selection and evaluation

### Key evaluation questions

2. How well do official statistics satisfy the most urgent needs of the users at this time?

### Methodology

- Discuss stakeholders expectations and how these have been met via CSO workshops week beginning 14th Aug and during fieldwork visit.

## **Pillar 2: Lead a national data revolution to deepen statistical impact**

### **Strategic objective**

SO.4: Harmonise best practices in data governance across the NSS

### **Key evaluation questions**

3. How effectively is NSS coordination working? What recommendations can be made for NSDS4

### **Methodology**

Meetings with NSS stakeholders during fieldwork visit

### **Strategic objective**

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

### **Key evaluation questions**

4. How far has the data science campus progressed?
  - What gaps are there in moving to a fully operationalised campus facilitating data access and innovation?
  - What should NISR prioritise in the next NSDS?

### **Methodology**

- Draw on material from the ONS's data science team targeted review / strategy work already ongoing, based on self-assessment and fieldwork from June visit.

## **Pillar 3: Build capability across the NSS to promote data uptake and use**

### **Strategic objective**

SO.7: Expand strategic communication and advocacy to increase data uptake and statistical literacy

### **Key evaluation questions**

5. How easy is it to access official statistics and their metadata?

### **Methodology**

- The ONS's own reflections, plus feedback from stakeholders collected.

## Strategic objective

SO.8: Enhance capacity for data production and statistical analysis

SO.9: Introduce new methods in data science and analytics

## Key evaluation questions

6. To what extent has NSDS3 been implemented to build capacity? How effective have capacity building initiatives been?

## Methodology

- Feedback from staff collected during review week.

## Pillar 4: Strengthen the enabling environment for sustainable statistical development

### Strategic objective

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



## ANNEX 2:

# Recommendations from previous review (ONS 2017) and updates

## Recommendations from mid-term review of NSDS2

### Recommendation 1

NISR and partners to consider whether a modest investment or reallocation of existing budgets to the recommended improvements could be introduced before the conclusion of NSDS2 in order to achieve the conditions for SDDS status.

**Status as of September 2023:** 16 out of 19 areas have been achieved.

- However some outstanding things remain not compliant (debt statistics and GFS).

### Recommendation 2

NISR, MINALOC and other partners should implement the specific recommendations on ways to improve quality of CRVS further.

**Status as of September 2023:** Many advances have been made.

The National Centralised and Integrated CRVS system (NCI-CRVS) is now integrated, with the mother system being managed by the National Identification Agency (NIDA), and with the health management system, vital statistics, and the Rwanda population register, all drawing from this. The plan is to link the system to the education management system too and give each child a unique identifier. The vital statistics report from the most recent year used this new system

### Recommendation 3

Output from the second Establishment Census taking place in 2017 should feed into the Business Register. Consideration be given in the design of NSDS3 for further improvements to a Business Register including its transfer from the Rwanda Development Board to NISR.

**Status as of September 2023:** Not achieved.

- It has proved challenging to bring together these data sources which have different coverage and objectives, and this aim has also suffered from staff turnover and ICT limitations. But it is still the intention of NISR / RDB, and they are also considering bringing together further with RRA data on businesses.
- One issue is the lack of identifiers, and the data science team are working with the economic stats team to identify a way to resolve this, which could facilitate better matching following the 23/24 establishment census.

## Recommendation 4

Data on website hits that was shared with the review team should be shared with the steering committee, and reported regularly going forwards so that they can assess whether progress is being made in reaching a wider pool of stakeholders over time.

**Status as of September 2023:** Not progressed.

- There are three recommendations relating to the steering committee (4, 11 and 12) which have not been progressed – and this review addresses the role of the steering committee further (see SO12), including the use of KPIs such as this.

## Recommendation 5

NISR to review user needs for clear executive summaries and narrative to accompany published data and different language versions of the website and publications.

**Status as of September 2023:** Mixed progress.

- A few Kinyarwanda leaflets were produced alongside some major outputs, but this was not actioned significantly.
- Some selected outputs provide brief summaries of the key findings in Kinyarwanda and/or French, such as the monthly CPI report and the [key trends report for the fifth population and housing census](#). However, some major outputs such as RDHS, EICV, LFS and more do not appear to have any publications available in alternative languages.
- There are plans to move from PDF reports to web based reports, which will include producing improved executive summaries for each output once / if implemented.
- The use of infographics and other data visualisation techniques can be seen occasionally throughout some outputs such as the key trends report for the 5th population and housing census but further opportunities to display data in this way should be addressed to better meet user needs.

## Recommendation 6

NISR should put further emphasis on the development of a cadre of statisticians across the national statistical system, on establishing sector statistics forums and on training MDAs on the NQAF, metadata and standards manuals.

**Status as of September 2023:** Not progressed

## Recommendation 5

For NSDS3, NISR to develop a proper strategy for utilisation of the training centre, in consultation with other parts of the GSS, that builds upon, and does not detract from the need to build basic statistical skills.

**Status as of September 2023:** The whole of NISR has massively benefitted from the training centre.

- The review team understood that a comprehensive strategy as articulated here is still outstanding

## Recommendation 6

The steering committee should to ensure sufficient funding is allocated for validation and maintenance of Education Administrative Data Information System

**Status as of September 2023:** This has been surpassed with the developments of a new data management system in education (SDMS), which is operational and being used for statistical publications since 2023.

## Recommendation 7

NISR and MIFOTRA should undertake additional analysis to understand better the relationships between the various labour data sources and to look at the feasibility of producing meaningful statistics from the administrative data sources.

**Status as of September 2023:** This work is underway but now being led by the RDB.

- They are working on a system to try to bring together sources of data including LFS and other admin sources to make more analysis. NISR and MIFOTRA worked with them on the conception of the project but are now focussed on supplying good data to them.

## Recommendation 8

NISR and the steering committee should consider the suggestions provided for expanding external engagement and dialogue with users and producers.

**Status as of September 2023:** Some progress may have been made in this.

- This remains an area of focus for this review – and further recommendations have been made.

## Recommendation 9

The steering committee should continue to play a thorough role in scrutinising the value for money of specific activities, and should request further clarity on how the increase in budget for the training centre will be managed.

**Status as of September 2023:** See recommendation 4.

## Recommendation 10

The steering committee should regularly monitor the balance of Government of Rwanda / Development Partner funding ratio for NSDS2. A formal update on this should be provided at the next steering committee meeting and in NSDS annual reports. This should include a report on the World Bank credit expected / disbursed flows of funds, and the proportion of the budget that these make up.

**Status as of September 2023:** See recommendation 4.

## Recommendations from mid term review of NSDS II

NSDS3 should give early priority to implementation of the Organisational Strategy for NSS

**Status as of September 2023:** Has been implemented and it led to the recruitment of the new data science team.

- Now, some new recruitment is underway due to web based assessment of capacity and a recognition of a lack of capacity in some background areas.

## ANNEX 3:

# List of stakeholders met

## ONS

- Garnett Compton, census expert
- Rose Drummond, previous strategic adviser to NISR (2018-2021)
- Nick Palmer, labour market specialist
- Byron Kalies, training and development expert

## NISR

- SLT:
  - Yusuf Marangwa, Director General
  - Ivan Murenzi, Deputy Director General
- NSDS team met regularly during the mission:
  - Jean Claude Nyirimanzi, Director Statistical Methods, Research and Publications
  - David Museruka, SPIU Coordinator
  - Therese Uwimana, Director Data Revolution and Big Data
  - Emmanuel Mupende, Monitoring and Evaluation
  - Tharcisse Nzasingizimana, Trade statistics
  - Jack Duncan, ODI Fellow, Data Scientist, NISR
- Other key NISR staff with whom 121 discussions were held:
  - Michel Ndakize, Director Demographic and Social Statistics
  - James Byiringiro, Head of Survey Operations
  - Jimmy Mukasa, Director of ICT unit, and team
  - Florent Bigirimana, Agriculture Statistics
  - Venant Habarugira, Director of Census
  - Claude Mwizeriwa, Director Economic Statistics
  - Jean Luc Kabera, Methodology and Dissemination
  - Claudette Kayitesi, Training Centre Manager

## Other ministries

- Rwanda Development Board, Innocent Muyumbu
- PLUS: 50+ stakeholders from across the NSS during a two-day workshop

## Development partners

- The UK's Foreign, Commonwealth and Development Office (FCDO), David Rinnert, Berni Smith), Caitlin Spence (Education), Anastasiya Kretova (Climate and Environment), Zephy Muhirwa (governance), Eric Uwitonze Mahoro (governance), Clement Uwiringiyimana (communications) and Benon Talemwa
- PARIS21 – Lauren Harrison and Phillipe Gafishi (remotely)
- IMF – Joaquin Lennon Sabatini (remotely)
- UNICEF – Pascal Karemera and Charlotte Taylor
- UNFPA – Florian Harindimana
- UN Women – Doreen Umurerwa Mutimura
- UN Resident Coordinator's Office – Leah Schmid and Sibylle Kamikazi
- World Bank – Juan Carlos Parra Osorio

## Others:

- AIMS – Dr Isambi Sillon Mbalawata, Research and Scientific Development Manager, and Joseph Ndiritu, Associate Director, Programs Delivery & Reporting

## ANNEX 4:

# Draft Maturity Assessment Model for the African Roadmap

UNICEF and PARIS21 are developing a draft maturity assessment model for implementing the African Roadmap for Transformation and Modernisation, in line with a toolkit on mainstreaming Child Rights into NSDS process to be released in December 2023. A first iteration is provided below. The long-term intention is to develop the model and learn from testing by NSS stakeholders in Africa.

Important notes for users:

- The maturity indicators apply to all of the NSS, except where the NSO is explicitly mentioned. This is an important distinction as consideration of the NSS as a holistic system is the bedrock of Transformation and Modernisation, especially in decentralised systems.
- The indicators can be used as checklists. But they are intentionally indicative and not overly descriptive or prescriptive. They should support assessments of gaps, inspire thinking and facilitate dialogue between national stakeholders on what targets and actions are most relevant for a specific country.
- The model can also be adapted to domain/sector level planning where specific products and services are integrated with domain-level considerations around the enablers. The Review of Rwanda's NSDS3 provided a workshop to support the interpretation of the model in respect of Child Rights data. It is recommended that NISR continue to work with UNICEF Rwanda on this basis to ensure that Child Rights are effectively mainstreamed.
- The enabler regarding Capacity Development Processes is considered more of a checklist for good practice for countries and development partners, regardless of the level of maturity of the country concerned.

## High-level description of the Enablers

### External stakeholder engagement (the NSS looking outwards)

- User engagement – NSSs move from a regular formal system towards a multi-stakeholder, highly dynamic, and responsive system of informal and formal relationships.
- Statistical advocacy and external leadership – NSS need to be increasingly proactive with a wider variety of external stakeholders to generate investment in official statistics, prove their value to national prosperity, improve data quality, maintain independence.
- Mobilisation of sustainable finances – via action in the above areas and integrating official statistics into national financial planning and policy monitoring.

## Effective NSSs (how the NSS organises itself)

Legal frameworks and institutional arrangements for gradually more:

- independent statistical production
- close connectivity to users
- better management of the political economy for official statistics
- cooperation and consistency in standards across official statistics producers.

## Technology

- Increasingly sustainable physical and IT infrastructure
- Enhancements to efficiency of statistical business processes

## Reform management

- Improved organisational cultures
- Improved management processes
- Change Management
- Development of Project and Programme management functions

## Human capital

- Adapting to and influencing labour markets
- Increasingly effective performance and career management
- Valuing non-technical skills and behaviours, inc. external and internal leadership skills
- Achieving the right balance in traditional and digital skills and where to source them

## Capacity development processes

- Increasingly managed and delivered locally
- Bringing in expertise from beyond official statistics
- Balancing strategic with technical skills
- Longer term commitments in financial and other assistance
- Enhanced cooperation and coordination between development partners

# Draft Maturity Assessment Model

## NSS external engagement

### Level 1 – Fundamentals are in place and maintained

1. All official statistics map onto known national policy priorities, particularly the National Development Plan (NDP).
2. Technical aspects of key Government policy indicators are actively influenced by NSO/NSS bodies.
3. Head of NSO regularly meets with ministers and acts on meeting their needs; at least one cabinet minister is a champion for official statistics.
4. Head of NSO and senior management team spend a significant portion of time on user relationships communicate about the value of their existing and potential products to potential domestic funders.
5. NSO has a specialised function for supporting engagement with users (not just a communication function).
6. NSDS is in place and aligned to realistic resource commitments.
7. NSDS is used regularly by stakeholders (producers and users) to realign strategic planning.
8. Donor funds are integrated with domestic resources through a common expenditure framework for the NSS.

### Level 2 - Beginning to establish and reap the benefits of a virtuous cycle

1. Systematic user-producer mechanisms influence decision-making on official statistics, including at a sub sub-national level.
2. Official statistics respond to demands beyond the NDP at local and national levels.
3. NSO actively influences international developments, statistical standards and policies.
4. There is a clear understanding of role of official statistics across Government, Parliament, media, and other sectors (national consensus) with multiple champions for official statistics in Government and Parliament.
5. Government has a public commitment to high quality and independent official statistics.
6. NSO actively inputs into the development of wider Government strategies, such as digital transformation.
7. Policymakers routinely make use of official statistics, use advice/analysis from official statisticians in policy decisions, and get their support on general statistical literacy skills.
8. Public trust in and awareness of official statistics is high.

9. National or international communities of statistical or other data professionals (such as statistical societies) provide scientific feedback on the NSS, support independence through constructive support and criticism, advocate for official statistics, and help deal with strategy and technical challenges.
10. Allocation of fiscal resources by Government is adequate for the statistical work plan over at least five years.
11. NSDS and official statistics are integrated in national Results-Based Management systems and Integrated National Financing Frameworks.

### **Level 3 – Becoming a highly advanced statistical system**

1. Systematic and multilateral engagement includes academia media, and technology sector.
2. Scientific means of collecting a wider range of user feedback influence decisions about official statistics.
3. Official statistics are delivered in partnership with external organisations with well-defined but agile roles
4. Extensive domestic user engagement takes place at domain levels.
5. Funding for statistics across NSS bodies is ring-fenced and protected, including for innovation.
6. Long term statistical literacy programmes advance beyond Government into schools and other areas.
7. NSO clearly articulates its position and value in language relevant to the modern data ecosystem, for example, as a data steward, a clear position on use of digital data and data science
8. NSS focuses on generating knowledge to support user needs, rather than just providing statistics
9. NSO and NSS producers are thought leaders and influencers at international, regional, and sub-regional levels

## Effective National Statistical Systems

### Level 1 – Fundamentals are in place and maintained

1. Basic legal and political mandate is in place for:
  - data collection
  - independence of production and of the Chief Statistician
  - protection of confidentiality
  - defining the NSS
  - establishing NSO as coordinating body for the NSS
2. Mechanisms allocate and manage roles across NSS bodies, staff see themselves as a professional community.
3. Mechanisms allow data quality and standards to be managed in a consistent way across NSS, for example via a NQAF.
4. Domestic or international resources for official statistics are coordinated and mobilised jointly across Government.
5. NSS bodies (central and local Government.) have regular means of communication on issues of common interest.
6. NSO has a specialised function for supporting coordination across the NSS in decentralised systems.
7. Planning for operational or financial autonomy of the NSO incorporates due considerations of risk mitigation for overall NSS coordination.

### Level 2 – NSS is well-established and benefitting from coordination

1. Strong legal mandate for:
  - coordination among NSS data producers
  - coordination between producers and users
  - financial independence for the NSO
  - sharing data/micro data across Government
  - NSO to safely point out misuse and/or misinterpretation of official statistics
2. No evidence or low risk of political interference.
3. Common statistical standards, statistical quality and approaches to respondent burden across the NSS are monitored and supported, led by the NSO.
4. NSO has a formal role in national consultations on data related Government policies, for example, on data protection.
5. Statistical release calendar and dissemination policy for all official statistics, with process for monitoring/updating.
6. A code of practice for official statistics/statisticians is in place.
7. Asymmetries in statistical capacity of NSS bodies at national and sub-national level are assessed and a plan is in place to develop well-balanced capacities.

### Level 3 – Becoming a highly advanced NSS

1. Shared culture/mindset among the NSS and other data custodians facilitates extensive sharing of data, metadata and micro-data.
2. National consensus on an advanced role for the NSS as a national data steward.
3. Regular independent quality monitoring and follow up improve NSS products and processes.
4. Clear distinction between official statistics, other Government data, and non-Government data (with guidance available to users at point of dissemination).
5. NSO or other independent body regularly comments publicly on statistical misuse/ misinterpretation.
6. The code of practice drives improvements in data quality, by being regularly socialised across the NSS, maintaining relevance to the modern data ecosystem, being embedded in performance management systems, and being well-known and used by Government, Parliament and the media.

## Digital and other technology

### Level 1 – Foundations for efficiency and sustainability

1. NSO has consistent power and internet supply during working hours.
2. NSS IT capacity is sufficient for secure data storage and processing.
3. NSS IT hardware and software are generally reliable sustainable, and provide demand-driven solutions.
4. Buildings used in statistical processes across the NSS do not inhibit efficiency of statistical processes or infrastructure.
5. Computer-assisted data collection is being used routinely.
6. All NSO statistical releases are available on the internet with continuous access for users.
7. Potential investments in survey reconfiguration have been identified.
8. Some key administrative data sources have been identified for piloting their use as official statistics, leading to plans to address fundamental data quality issues and the development of future strategy.
9. Identification of how digital data or technology can be used tactically at low cost to demonstrate how the NSS can play a unique and added value role in supporting policy needs or to provide for sustainable efficiencies in statistical production systems (as compared to other potential investments).

### Level 2 – Significantly enhanced performance through modern technology

1. Survey/enquiry respondents are offered multi-mode response options (for example, web, phone or mail).
2. There has been a transition to multi-mode methods and an integrated survey platform.

3. NSO has a central data warehouse for key time-series datasets and micro-data based on common sets of standards, classifications and metadata.
4. NSO technology strategy is well-aligned with national and sub-national Government plans for technological developments affecting data (for example, e-Government or digital connectivity) and Open Government.
5. Administrative data sources are used for a wide range of official statistics based on digital technology solutions.
6. Data from a variety of sources are commonly integrated to produce statistical outputs.
7. A strategy/roadmap exists for the use and development of geospatial data.
8. A wide range of non-traditional digital data sources have been investigated, high-potential sources experimented with, and there is a plan for using them in combination with traditional sources while maintaining quality and integrity.
9. Benefits of technological innovation are optimised via collaboration with external research bodies or data providers, including via the provision or exchange of confidential micro-data, for example, via microdata labs.
10. All official statistics are disseminated through a dedicated web portal.

### **Level 3 – A tech-savvy NSS a national and international leader in the use of technology and digital data**

1. All production systems are digitised, integrated, and automated, and include a data warehouse for all data storage, processing and dissemination.
2. Data dissemination is regularly integrated with added-value technological systems such as GIS and other emerging technologies.
3. Data science capabilities are expanded to measure new phenomena faster and more reliably, such as the digital economy, natural capital accounting high-frequency indicators etc.
4. NSS continuously explores frontier technologies and statistical innovation through dedicated projects.
5. Specialised functions are in place that respond with agility to emerging features of the modern data landscape, including support for digital dissemination, data science and digital innovation, data governance and security.

## Reform Management

### Level 1 – Fundamentals are in place and maintained

1. Staff and/or a function is available to project and programme manage NSDS delivery, with a key objective being the development of sustainable internal NSO capability in this area.
2. NSDS articulates the business case for investment in official statistics based on the NSO having sound approaches to reform management, including:
  - a reform management strategy covering programme, change, and risk management
  - KPIs for the NSDS and with a monitoring strategy
3. NSDS is an accessible document that is used regularly in line with statistical advocacy processes among national and international stakeholders.
4. NSS staff are aware of the change management strategy for the NSDS and a process is in place to allow them to shape it.

### Level 2 – Modernised management systems

1. Programme and project managers are working in the NSO and managing NSDS delivery with close oversight by the NSO senior management board.
2. Financial commitments are in place to fully support all objectives of the NSDS with regular financial reporting and outcome monitoring processes for funding providers.
3. NSO has developed an inventory of organisational processes to support business processes, according to the GAMS0, and integrates ethical considerations relevant to the modern data landscape.
4. A function in the NSO supports business process re-engineering which including providing blueprints for processes to be reformed envisaged in the NSDS.
5. NSO and NSS staff have a high level of awareness and buy-in to the NSDS and change management strategy and processes are in place for them to support its development and delivery.
6. A key function of the NSO senior management board and NSS coordination bodies is the management of NSDS delivery, including a monitoring, evaluation and learning (mel) process, and implementing the change management strategy.

## Human capital

### Level 1 – Sustainable fundamental skills for quality statistics

1. Recruitment and staffing plan in place and funded for the NSO for at least the next five years.
2. Connections with national educational institutions provide well-qualified professional statisticians, with approximately 40 per cent of NSO staff holding graduate degrees in statistics or related subjects.
3. NSO has an effective training programme in place to develop its staff in line with the NSDS, with commitments to provision of training in place at domestic, sub-regional, regional or international levels.
4. Government staff producing and/or disseminating official statistics in non-NSO bodies are trained or qualified in statistics.
5. Top tier of NSO senior management is well-skilled in leadership, business intelligence, and advocacy and regularly re-train in this area.
6. NSO staff have skills in using and communicating about digital technology, they are well-skilled at senior management level and an increasing amount of NSO staff have at least basic knowledge of the application of digital technology and data in official statistics – for example, data science and the costs and benefits digitalisation.
7. A core cadre of staff in the NSO have sufficient skills to support reform management.
8. A performance management system is implemented consistently across NSO business units.

### Level 2 – Developing a sustainable strategy well-adapted to the modern data ecosystem

1. A code of conduct is in place for NSS staff and they are trained in its implementation.
2. NSO skills balance includes more ICT experts, including to support internal IT users and develop tailored ICT solutions for the institutional environment.
3. Experts in geospatial technology are available centrally or in domain areas within the NSO.
4. Most staff have a working understanding of the use of digital data sources and there are sufficient skills available to support data integration across many domains.
5. Cooperation with scientific and technology community is established on training in digital skills and provision of statistical processes and products.
6. At least the top two tiers of senior managers are well-trained in statistical and organisational leadership, including change management, drawing on experiences from inside and outside the world of official statistics.
7. HR planning involves continuous scoping and training of new training or recruitment needs, and understands that staff need a broad set of non-technical skills.

8. NSO performance management system also rewards the application of non-technical skills that support transformation, such as innovation, staff management, seeking continuous personal and corporate improvement, communication skills, and coaching staff through change.
9. A learning strategy covers staff across the NSS and applies the latest knowledge about sustainable and efficient learning.

### Level 3 – A modernised and agile stock of human capital to draw upon

1. HR plans ensure the NSS has flexible access to geospatial data experts, data scientists, data engineers, and data analysts as needed to meet user needs and explicitly considers the most efficient sources of skills across in-house and externally provided services.
2. Attractive career paths are designed and marketed for official statisticians. These contribute to the NSO/NSS retaining at least 90 per cent of its technical staff in each year while supporting career-long mobility between NSO units, other NSS bodies and external organisations.
3. Performance management systems in the NSO and NSS bodies have similar and compatible structures in terms of statistical standards and career development.
4. There is a demonstrable/highly visible commitment of staff to continuous improvement across the NSO and NSS.
5. NSS staff are business-savvy and outward-looking as a default and can easily work with and in a variety of institutional environments.

### Capacity development processes

1. Peer-to-peer and mutual learning must be enhanced; groups of countries with similar learning needs should participate in learning activities together — the results of assessments using the maturity assessment model could provide a basis for the planning of such learning activities.
2. Strategies are needed to ensure that learning activities are gradually more locally embedded and enhance the statistical literacy of potential domestic users of official statistics. NSSs should become more independent in conducting learning activities within the system and with other national partners, or in direct partnership with other countries. At the same time, learning plans should allow for opportunities outside of the NSS for statistical advocacy and help to develop statistical literacy.
3. Expertise and experience from the world beyond official statistics should be leveraged; such activities should be aimed at transferring knowledge relevant to the skills and perspectives required in emerging data ecosystems. This should also be used as an opportunity, wherever relevant, to improve outward facing cultures in NSSs.

4. Sustainability should be embedded as a guiding principle in all learning activities; learning activities should be used for and linked explicitly to the provision of benefits to national users and the sustaining of virtuous cycles for official statistics.
5. Action is required to further strengthen the coordination and impact of the capacity development assistance provided by members of the African statistical system and partners in relation to:
  - monitoring, coordinating and communicating the planning and delivery of technical and strategic action, in particular ensuring planning and reporting is well-coordinated including with wider development assistance (i.e., not specifically earmarked for official statistics)
  - ensuring that technical and strategic guidance and information about sources of assistance for transformation and modernization are more accessible and more frequently used
  - building a stronger African voice and presence in global developments in official statistics, including engagement with junior and younger staff in Africa, and greater inclusion of African expertise and partners from beyond the world of official statistics.
  - establishing longer-term commitments and a continuous provision of resources to individual countries or groups of countries
  - improving learning processes: a review of current good practices, challenges, and opportunities in relation to the road map would provide a starting point.

## ANNEX 5:

# Acronym list

### AIMS

The African Institute of Mathematical Sciences

### COVID-19

Coronavirus disease 19

### CPI

Consumer Price Index

### CRVS

Civil Registration and Vital Statistics

### DHS / RDHS

(Rwanda) Demographic and Health Survey

### EICV

Integrated Household Living Conditions Survey (French acronym)

### FCDO

Foreign, Commonwealth and Development Office (UK government)

### GDP

Gross Domestic Product

### IBES

Integrated Business Enterprise Survey

### LFS

Labour Force Survey

### MDAs

Ministries, Departments and Agencies (of the government of Rwanda)

### MININFRA

Ministry of Infrastructure (Rwandan government)

### MINISPORTS

Ministry of Sports (Rwandan government)

### NISR

National Institute of Statistics Rwanda

**NSDS**

National Strategy for the Development of Statistics

**NSO**

National Statistical Office (generic term)

**NSS**

National Statistical System

**ODI**

The Overseas Development Institute (UK)

**ONS**

Office for National Statistics (UK government)

**Paris21**

The Partnership in Statistics for Development in the 21st Century

**PES**

Post Enumeration Survey

**PHC / RPHC**

(Rwandan) Population and Housing Census

**SAS**

Seasonal Agriculture Survey

**SDDS**

Special Data Dissemination Standards

**UK**

(the) United Kingdom (of Great Britain and Northern Ireland)

**UNDP**

United Nations Development Programme

**UNECA**

United Nations Economic Commission for Africa

**UNFPA**

United Nations Population Fund

**UNICEF**

United Nations Children's Fund

**WB**

World Bank



