

Data Systems, Data Gaps, and SEEA Requirements

Day 3: Building the Information Foundation

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Wednesday, January 21, 2026

Day 3 Agenda

Morning (09:30 – 13:00)

- **Session 1: Data Requirements for NCA**
 - Types of Data (Statistical, Admin, Geo)
 - Spatial & Temporal Needs
 - Quality Standards
- **Session 2: Data Gap Analysis Methodology**
 - Data Inventories
 - Identifying Gaps vs. SEEA
 - Tiered Data Strategies

Afternoon (14:00 – 16:00)

- **Session 3: Practical Exercise**
 - Group work by Account
 - Preparing Rwanda Data Gap Matrix

Day 3 Output

Draft Data Gap Analysis Matrix (Institution-wise).

Session 1: The Three Pillars of NCA Data

Accounts are built by fusing three types of data:

1. Statistical Data

- Surveys & Censuses.
- **Source:** NISR (EICV, SAS).
- **Value:** Socio-economic context.

2. Administrative Data

- Routine records.
- **Source:** Ministries (Permits, Budget execution).
- **Value:** Flows of use (water, timber).

3. Geospatial Data

- Earth Observation (EO).
- **Source:** RSA, RLMUA.
- **Value:** Extent & Condition maps.

Dimensions: Spatial vs. Temporal

Temporal Resolution

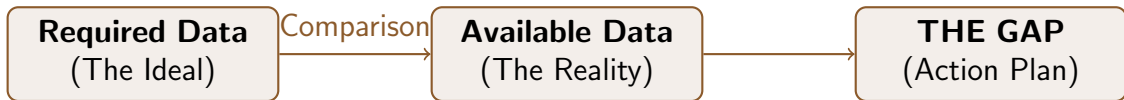
- **Ideal:** Annual Accounts.
- **Reality:**
 - Land cover maps: Every 5-10 years?
 - Water flow: Daily/Monthly.
 - Mining: Quarterly.
- *Action:* Interpolation is often needed.

Spatial Resolution

- **National:** Aggregate numbers (e.g., Total GDP).
- **Catchment/District:** Critical for Water/Ecosystems.
- *Action:* Accounts must be compiled at the lowest common denominator (e.g., Province) to be useful.

Session 2: Diagnosing the Gaps

We cannot manage what we do not measure.



Types of Gaps:

- **Availability Gap:** Data does not exist.
- **Accessibility Gap:** Data exists but is not shared.
- **Quality Gap:** Data exists but is unreliable.

A Tiered Strategy for Rwanda

We don't need perfect data to start.

Tier 1 (Short Term): Global datasets (EarthMap, ARIES) + Rough estimates. *Good for advocacy.*

Tier 2 (Medium Term): National data, adjusted for SEEA. *Good for policy.*

Tier 3 (Long Term): Direct compilation, fully integrated surveys. *Good for monitoring.*

Strategy

Start with Tier 1/2 to show value, then invest in Tier 3.



Coffee Break

11:00 – 11:30

Building a Data Inventory

Who is the Custodian?

Domain	Key Institution	Dataset
Land	RLMUA (Land Authority)	Land Use Master Plan
Water	RWB (Water Board) WASAC	Hydrological bulletins Production stats
Forests	RFA (Forestry Auth.)	Forest Inventory
Minerals	RMB (Mines Board)	Export stats
Economics	NISR / MINECOFIN	GDP / Budget

NISR's role is to coordinate these flows.



Lunch Break

13:00 – 14:00

Session 3: Filling the Gap Matrix

Task: In your groups, analyze 3 key datasets for your sector.

The Matrix Columns:

- 1 Data Item (e.g., Timber Harvest Volume).
- 2 Existing Source (e.g., RFA Report 2024).
- 3 Frequency (e.g., Annual).
- 4 **SEEA Requirement** (e.g., Needs breakdown by species).
- 5 **Action Required** (e.g., Add question to next survey).

Example: Water Matrix

Item	Source	Quality	Gap/Action
Rainfall	Meteo	High	None. Ready for use.
Irrigation Use	RAB	Low	Gap. mostly estimated. <i>Need meters on large schemes.</i>
Groundwater	RWB	Medium	Partial. Only specific boreholes. <i>Need modelling.</i>

The Institutional Challenge: Data Sharing

Technical problems have technical solutions. Institutional problems are harder.

- **Silo Mentality:** "This is MY data."
- **Format Incompatibility:** PDF vs Excel.
- **Timing:** Budget data comes in June, Crop data in December.

Solution: Formal Data Sharing Agreements (MoUs) led by NISR.

Key Takeaways

- ① **Diverse Data:** NCA needs a mix of geospatial, admin, and survey data.
- ② **Pragmatism:** Use Tier 1 methods where data is missing; don't wait for perfection.
- ③ **Coordination:** The biggest gap is often *access*, not existence.
- ④ **Roadmap:** The identified gaps will form the basis of the National NCA Roadmap.

Tomorrow: Institutional Governance (RACI).



Murakoze Cyane!

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