POLICY BRIEF

Findings from the AU-IPED-KIX Africa 19 Hub EMIS Strengthening Mission in South Sudan from 16th-18th March 2026

From Fragmented Data to Decision-Ready EMIS

Strengthening South Sudan's Education Data System for Planning, Equity, and Accountability

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I. OPENING

As the youngest country in Africa, South Sudan is taking deliberate steps to strengthen its education data systems - recognizing that better data is essential for better education outcomes. South Sudan's education data system currently operates through at least six parallel information streams: The School Attendance Monitoring System (SAMS), the Annual Education Census (AEC), the TVET Management Information System (TVET-MIS), The School Inspection Management System, The Core Data Management System, called, Country Office Tool for Managing Every Transaction (COMET), the Education in-Emergency Data Management System (EiEDMS), partner-supported dashboards, and manual school registers. A structured evidence review conducted under the 2026 EMIS strengthening mission formally identified 17 data system and coordination gaps operating across these streams, involving 14 institutional actors producing education data with uneven coordination. None of these gaps is insurmountable. Together, they represent a solvable system challenge - if South Sudan acts with coordination, commitment, and realism.

This policy brief emerges from the Education Management Information System (EMIS) Strengthening Workshop hosted by the Ministry of General Education and Instruction (MoGEI) of the Republic of South Sudan with technical support from the African Union's Pan-African Institute for Education and Development (AU-IPED) through the Global e-Schools and Communities Initiative (GESCI), under the Global Partnership for Education Knowledge and Innovation Exchange (GPE KIX Africa 19 Hub), a joint endeavour with Canada's International Development Research Centre (IDRC).

Held in Juba from 16th–18th March 2026, the engagement brought together South Sudan's education data actors across EMIS, Planning, ICT, Statistics, Policy, and related technical units, alongside the AU-IPED and GESCI technical team. The mission combined technical consultations, EMIS systems assessment discussions, priority-setting sessions, and field visits to selected public schools in Juba. It was guided by the AU EMIS Norms and Standards as the reference framework for assessing South Sudan's EMIS.

> *"For South Sudan, EMIS is not only about collecting education data. It is about building the evidence base needed to plan better, allocate resources fairly, and strengthen the education system."*
>
> **— Mabor Tur, KIX Africa 19 Hub Focal Point and Deputy Director of E-learning, ICT and Innovation, Ministry of General Education and Instruction, South Sudan.**

II. INTRODUCTION

Education data is the foundation of effective planning, financing, accountability, and reform. For South Sudan, a strong EMIS is especially important as the country continues to rebuild national systems, expand access to education, improve equity, quality, support teachers, and guide partner investments toward national priorities.

In South Sudan's post-conflict and system-rebuilding context, education data systems have had to operate under significant constraints, including limited infrastructure, financing gaps, population movement, and uneven institutional capacity. As a result, EMIS data has at times been incomplete or inconsistent, constraining evidence-based planning at national and subnational levels. The policy issue is therefore not simply whether data exists: the deeper challenge is that education data remains fragmented across parallel systems and institutional actors, data quality assurance is not yet fully institutionalised, school-level data systems remain manual and uneven.

The case for a phased, Ministry-led EMIS strengthening agenda is clear: South Sudan must move from fragmented data practices toward a coordinated, trusted, and decision-ready education data system. This brief is situated within Africa's wider education transformation agenda. The Continental Education Strategy for Africa 2026–2035 (CESA 2026–2035) emphasises stronger education data systems, improved monitoring, EMIS 2.0 or digitized EMIS, and better use of evidence for equity, learning, and system transformation. Strengthening South Sudan's EMIS is therefore both a national imperative and a contribution to continental and global commitments under CESA 2026–2035, Agenda 2063, and Sustainable Development Goal 4.

III. BACKGROUND

South Sudan's EMIS has developed through annual school census exercises, partner-supported digital tools, and incremental investments in national data infrastructure. MoGEI maintains an EMIS unit responsible for coordinating data collection, analysis, and reporting. Digital tools - including tablets, GPS coordinates, dashboards, and enumerator tracking mechanisms, have been introduced with partner support and are more established within education census and national monitoring processes than at school level. Six parallel EMIS platforms (The School Attendance Monitoring System (SAMS), the Annual Education Census (AEC), the TVET Management Information System (TVET-MIS), The School Inspection Management System, The Core Data Management System, called, Country Office Tool for Managing Every Transaction (COMET), the Education in-Emergency Data Management System (EiEDMS)) operate alongside partner-supported dashboards and school-level manual records, reflecting a system that has grown in scope without yet achieving the integration, governance, or quality assurance needed to function as a unified national information system.

The 2026 EMIS strengthening mission, led by AU-IPED under the GPE KIX Africa 19 Hub, assessed South Sudan's system against the AU EMIS Norms and Standards - the continental benchmark spanning policy and governance, institutional capacity, statistical processes, data

quality, reporting, dissemination, and data use. The assessment was structured around four interrelated pillars: data assessment, policy translation, capacity strengthening, and inter-institutional coordination. It found that South Sudan's EMIS challenges are not only technical, they are closely linked to governance, financing, school-level implementation, partner coordination, and the gap between policy intent and practice. A structured review of mission evidence produced 17 formally logged gaps, 13 system-level insights, and a data readiness assessment spanning 16 analytical areas - the evidentiary foundation for this brief.

IV. WHY SOUTH SUDAN'S EMIS NEEDS STRENGTHENING

1. Education data remains fragmented across systems and partners

The structured evidence review found education data distributed across six parallel EMIS platforms (SAMS, AEC, TVET-MIS, SIIMS, EIEDMS, WFP-COMET), multiple partner-supported dashboards, and manual records - with 14 institutional actors producing education data with uneven coordination. Different actors produce different figures for learners, schools, teachers, and programme beneficiaries. With only AEC being the authoritative reference point. The current fragmentation of education data systems creates gaps that limit MoGEI's capacity to maintain a comprehensive, nationwide perspective on education data. Annual school census datasets for 2021–2025, school master lists, teacher datasets, and partner-generated data remain pending integration into a unified data system.

2. School-level data practices are largely manual and uneven

Schools are the primary source of education data, yet the system's weakest data link. Field validation conducted during the mission found that school-level data collection relies heavily on physical registers, manual reporting, and administrative transmission channels. Schools visited in Juba face infrastructure constraints including limited access to computers, electricity, internet connectivity, standardised data collection tools, and staff with data collection skills. Dropout and retention data - among the most policy-critical indicators, are not systematically captured at school level. The mission evidence indicated that without reliable data at the school level, national statistics will remain structurally incomplete.

3. Data quality assurance is not yet sufficiently institutionalised

Some verification mechanisms exist - supervisory checks, cleaning processes, phone-based validation, and field monitoring tools. However, the structured review found data quality assurance to be uneven and under-resourced. Critically, donor support has historically focused on data collection rather than on validation, reconciliation, and quality assurance. Without standardised protocols, documented cleaning procedures, feedback loops, and routine audits, trust in official education statistics remains fragile - and with it, the credibility of planning and budgeting decisions built on those statistics.

4. Governance, financing, and capacity gaps limit sustainability

South Sudan's EMIS requires stronger governance arrangements for data ownership, sharing, protection, accountability, and partner alignment. Irregular funding has directly caused skipped data collection cycles, creating data continuity gaps that undermine trend analysis. EMIS

activities remain heavily dependent on external financing, leaving the system vulnerable to partner project timelines. Capacity gaps are specific and documented: data science, programming, networking, system administration, desktop publishing, and data communication skills are insufficient across national and subnational levels. These gaps affect the system's ability not only to collect data, but to manage, analyse, communicate, and use it.

> **17 data, system, and coordination gaps formally identified**
>
> *Structured Evidence Review, South Sudan EMIS Strengthening Mission, March 2026*

V. THE SOLUTION: A PHASED NATIONAL POLICY DIRECTION

South Sudan needs a phased, nationally owned EMIS strengthening agenda that builds from existing foundations while systematically addressing the system conditions required for reliable education data. The policy direction is clear: move from fragmented data collection towards a coordinated, trusted, and decision-ready EMIS that supports planning, budgeting, equity monitoring, partner alignment, and reporting under national, continental, and global commitments.

Five linked priorities should guide this national policy direction:

- **Map and integrate education data systems** by identifying existing datasets, platforms, data owners, gaps, overlaps, and opportunities for harmonization.
- **Strengthen school-level data practices** through standardized registers, reporting templates, dropout tracking tools, basic data training, and support for schools operating in low-resource contexts.
- **Institutionalize data quality assurance** through clear validation protocols, documented cleaning processes, routine audits, feedback loops, and defined responsibilities from school to national level.
- **Reinforce Ministry-led partner coordination** so that partner-supported data activities, tools, financing, and datasets align with MoGEI priorities and contribute to one national EMIS agenda.
- **Promote data use for planning, budgeting, and accountability** by ensuring that EMIS outputs inform resource allocation, teacher deployment, equity monitoring, policy dialogue, and reporting under national, continental, and global commitments.

Three arguments underpin this direction:

> **Argument 1: Fragmentation across** (SAMS, AEC, TVET-MIS, SIIMS, EIEDMS, WFP-COMET), **and 14 uncoordinated data actors is the primary barrier to reliable education planning**

Evidence: The structured review identified six parallel EMIS platforms, partner dashboards, and manual records producing inconsistent figures for the same indicators. With 14 institutional actors generating education data without common identifiers, governance protocols, or a master dataset, data inconsistencies across various independent systems limit MoGEI's capacity to maintain a singular, consolidated view of essential education metrics, including enrolment totals, teacher distribution, and school operational status. International evidence consistently shows that unified EMIS frameworks produce more trusted statistics, attract better-aligned partner support, and enable more equitable resource distribution than fragmented systems.

Argument 2: Institutionalised data quality assurance - not more data collection, is what transforms EMIS into a trusted planning instrument

Evidence: The mission found that donor support has generally focused on data collection rather than validation, reconciliation, and quality assurance. Existing verification processes - supervisory checks, phone-based validation, and cleaning routines, are under-resourced and inconsistently applied. Data collected without a unified systematic quality assurance is not decision-ready data. Systems with formal quality assurance frameworks produce statistics that are used more consistently in budget decisions and sector planning, and meet the reporting standards required under CESA 2026–2035 and SDG 4. South Sudan already collects substantial amounts of education data: the immediate priority is making that data trustworthy, not expanding collection further.

Argument 3: South Sudan has the foundations to build on: a phased approach is both feasible and more sustainable than system replacement

Evidence: South Sudan already has annual school census processes, six active EMIS platforms, partner-supported digital tools (tablets, GPS coordinates, dashboards, and enumerator tracking mechanisms), and demonstrated MoGEI commitment to EMIS strengthening. A phased approach that begins with data landscape mapping, school-level tools, and partner coordination - rather than wholesale system replacement, is achievable within current resources and operationally realistic. Low-cost, context-appropriate tools have been demonstrated as effective in comparable fragile and conflict-affected settings across the continent. Starting with existing foundations avoids the common failure mode of ambitious EMIS investments that outpace institutional readiness and are abandoned when external financing ends.

VI. POLICY RECOMMENDATIONS

The following five recommendations respond directly to the identified problems and are aligned with the AU EMIS Norms and Standards, CESA 2026–2035, Agenda 2063, and SDG 4. Each is specific, actionable, and time-bound. Failure to implement these recommendations will leave South Sudan's education data system fragmented, under-trusted, and unable to support the evidence-based planning and accountability that the country's education reform agenda requires.

Recommendation 1: Conduct a comprehensive EMIS data landscape analysis

What: MoGEI, with support from AU-IPED and partners, should undertake a detailed mapping of all existing education datasets, platforms, tools, reporting processes, and data owners across (SAMS, AEC, TVET-MIS, SIIMS, EIEDMS, WFP-COMET), partner systems, and administrative records.

Why: South Sudan cannot move toward reliable EMIS integration without first knowing what data exists, who owns it, how reliable it is, and which datasets are authoritative. With annual school census data for 2021–2025, school master lists, teacher datasets, and population denominators still pending integration, this analysis is the essential first step.

How: The analysis should map datasets by owner, years covered, variables, disaggregation levels, quality concerns, integration potential, and gaps. It should cover school census data, school master lists, teacher data, school feeding data, refugee/IDP/returnee data, population estimates, learning assessment data, and partner datasets.

When: Immediate priority - within 3–6 months.

Recommendation 2: Establish a Ministry-led EMIS partner coordination framework

What: MoGEI should establish a practical partner coordination framework and tracking tool covering all 14 institutional actors currently producing education data.

Why: When partner-supported data initiatives operate through separate systems without a national framework, they contribute to fragmentation and duplication. Partner support is essential, but it must reinforce, not replace, the national EMIS.

How: The framework should define partner reporting expectations, data-sharing requirements, approval processes for school-level engagement, financing transparency, and alignment with MoGEI priorities. A partner tracking tool should document who is doing what, where, with which datasets, and with what resources.

When: Immediate priority - first coordination meeting within three months.

Recommendation 3: Institutionalise data quality assurance from school to national level

What: MoGEI should develop and operationalise a standardised data quality assurance protocol.

Why: Reliable education planning depends on trusted data. The mission found that donor support has focused on collection rather than validation. A formal protocol shifts the system from data gathering to data trustworthiness.

How: The protocol should define school-level verification checks, county and state validation steps, national cleaning and reconciliation processes, approval workflows, routine audits, correction procedures, and feedback loops to schools and subnational offices.

When: Short-term priority - within 6–12 months.

Recommendation 4: Strengthen school-level data systems and EMIS capacity

What: MoGEI and partners should strengthen the tools, infrastructure, and human capacity needed to produce reliable school-level data, and conduct a Ministry-wide EMIS capacity gap assessment.

Why: School-level data is the foundation of the national system. Infrastructure constraints - computers, electricity, internet connectivity, and the absence of standardised tools limit data reliability at source. Documented capacity gaps in data science, programming, networking, system administration, desktop publishing, and data communication affect every tier of the system.

How: School-level actions: standardised registers, reporting templates, a dropout-reasons tracking tool, basic data training, and infrastructure readiness assessment. At national and subnational levels: a capacity gap assessment across EMIS, ICT, planning, statistics, and policy units, followed by a structured capacity-building plan.

When: Short- to medium-term - beginning with the capacity gap assessment and low-cost school tools.

Recommendation 5: Develop practical EMIS governance and sustainable financing mechanisms

What: South Sudan should develop a standardized EMIS governance framework supported by practical implementation tools and a sustainable financing strategy.

Why: Policies alone will not strengthen EMIS. Irregular funding has directly caused skipped data collection cycles, creating continuity gaps. Without a sustainable domestic financing base, EMIS remains vulnerable to partner project cycles. Governance without financing and tools remains aspirational.

How: Governance tools: data ownership guidelines, data-sharing protocols, data protection procedures, partner reporting requirements, and clear roles for MoGEI units. Financing: identify core EMIS functions requiring predictable domestic financing, partner-supported areas, and mechanisms for tracking contributions.

When: Medium-term - aligned with the finalised costed EMIS action plan.

Risk Mitigation

Effective implementation will require attention to key operational, institutional, and financing risks. The table below sets out key risks and proposed mitigation measures.

Risk	Potential Effect	Mitigation Measure
Official datasets not yet available	Limits quantitative trend analysis and indicator calculation.	Begin with the EMIS data landscape analysis and validate datasets progressively with MoGEI and partners.
Continued partner fragmentation	(SAMS, AEC, TVET-MIS, SIIMS, EIEDMS, WFP-COMET), and partner dashboards may continue producing inconsistent figures.	Establish a Ministry-led partner coordination framework and tracking tool. Established integrated data-systems.
Weak school-level infrastructure and capacity	Schools may be unable to collect or transmit reliable data.	Start with low-cost registers, reporting templates, dropout tracking tools, and basic data training.
Insufficient financing for core EMIS functions	Data collection, validation, training, and system maintenance remain irregular.	Develop a sustainable EMIS financing strategy aligned with the finalised costed action plan.
Policy-to-practice gap	Governance reforms may remain on paper without implementation tools.	Pair policy reforms with practical tools, clear roles, accountability mechanisms, and timelines.

Call to Action

For the Ministry of General Education and Instruction

MoGEI should lead the transition from fragmented education data practices toward a nationally owned EMIS strengthening agenda. Immediate actions include:

- Validate available datasets and confirm data owners across (SAMS, AEC, TVET-MIS, SIIMS, EIEDMS, WFP-COMET), and partner systems.
- Convene the first EMIS partner coordination meeting within three months.
- Develop EMIS policy and strategy.
- Develop and pilot a school-level dropout-reasons tracking tool.

- Develop and pilot a Payam-level (secondary-level) school closure-reasons tracking tool.
- Initiate the comprehensive EMIS data landscape analysis.
- Confirm MoGEI focal persons for each dimension of the EMIS strengthening agenda.

For AU-IPED and the GPE KIX Africa 19 Hub

AU-IPED and the GPE KIX Africa 19 Hub should continue providing technical support aligned with the AU EMIS Norms and Standards, CESA 2026–2035, Agenda 2063, and SDG 4. Priority support areas:

- Data landscape analysis and system integration planning.
- Partner coordination framework and tracking tool development.
- Capacity gap assessment and structured capacity-building support.
- Policy-to-practice translation and governance tools.
- MoGEI–NBS collaboration and population denominator alignment.

For Development Partners

Development partners should align EMIS investments behind MoGEI priorities and contribute to a single national data strengthening agenda. Partners should:

- Report all datasets and activities to MoGEI's partner tracking tool.
- Reorient support from data collection toward quality assurance and integration.
- Support school-level data systems in their implementation areas.
- Contribute transparently to the EMIS financing strategy.

VII. CONCLUSION

South Sudan has the foundations for a stronger EMIS with six active EMIS platforms, digital tools, annual school census processes, and demonstrated MoGEI and partner commitment are real assets. The structured evidence review confirms, however, that these foundations are constrained by the identified data, system, and coordination gaps that must be addressed systematically and in the right sequence.

A phased approach is both essential and achievable. Mapping the data landscape, coordinating the institutional actors around a single national framework, institutionalising data quality assurance, strengthening school-level systems, and developing sustainable governance and financing mechanisms - these are not abstract reforms. They are the specific, practical steps that will move South Sudan from data fragmentation to decision-ready evidence.

The stakes of inaction are real: without trusted education data, resource allocation remains guesswork, equity gaps go undetected, partner investments cannot be properly aligned, and continuity gaps in annual census data will widen. A stronger EMIS will not only serve South Sudan's national planning agenda - it will contribute to Africa's continental commitment, under

CESA 2026–2035 and Agenda 2063, to build education systems where every learner is counted, every school is resourced, and every decision is grounded in evidence.

> *South Sudan does not only need more education data. It needs a trusted, coordinated, and nationally owned EMIS that can turn data into decisions.*