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CROSS-COUNTRY POLITICAL ECONOMY ANALYSIS

THE STATUS OF FOUNDATIONAL LEARNING DATA IN CAMEROON, KENYA, AND MALAWI

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About the Unlocking Data Initiative

The Unlocking Data Initiative is a community of practice that connects African scholars, NGOs, national statistics offices and policymakers for the purpose of improving access to and use of education data. The **Unlocking Data: Scaling Uses and Users of Education Data** project is a collaborative work led by Zizi Afrique Foundation and supported by eBase Africa, EdTech Hub, Education Sub-Saharan Africa (ESSA) and the University of Malawi's Centre for Education Research and Training (CERT). The latter project, which is being implemented in Cameroon, Kenya and Malawi, aims to scale up uses and users of data to address the knowledge gap of how to adaptively scale up the effective use of existing education data by policymakers and researchers in Africa.

To find out more about us, go to https://unlockingdata.africa/. Our evidence library can be found at https://docs.unlockingdata.africa/lib/

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Abbreviations and acronyms

ADB	Asian Development Bank
ADEA	Association for the Development of Education in Africa
AKF	Aga Khan Foundation
APHRC	African Population and Health Research Centre
CBC	Competency-based curriculum
CERT	Centre for Education Research and Training
CEMASTEA	Centre for Mathematics, Science and Technology Education in Africa
CSO	Civil society organisation
EYC	Elimu Yetu Coalition
FBO	Faith-based organisations
FAWE	Forum for African Women Educationalists
ICT	Information communication technology
KICD	Kenya Institute of Curriculum Development
KIPRA	Kenya Institute for Public Policy Research and Analysis
KISE	Kenya Institute of Special Education
KNATCOM	Kenya National Commission for UNESCO
KNEC	Kenya National Examination Council
KNBS	Kenya National Bureau of Statistics
MC	Mastercard Foundation
MoE	Ministry of Education
MoGCDWS	Ministry of Gender, Community Development and Social Welfare
NACONEK	National Council for Nomadic Education in Kenya
NCPD	National Council for Population Development
NEMIS	National Education Management Information System
NGO	Non-governmental organisation

PC	Population Council
PALN	People's Action for Learning Network
PASEC	Programme for the Analysis of Education Systems
PEA	Political economy analysis
SDG	Sustainable Development Goal
TSC	Teachers Service Commission
TVETA	Technical and Vocational Education and Training Authority
UDI	Unlocking Data Initiative
UNICEF	United Nations International Children's Emergency Fund
UNHCR	United Nations High Commissioner for Refugees
WERK	Women Educational Researchers of Kenya
ZAF	Zizi Afrique Foundation

Executive summary

This report examines challenges regarding foundational learning, data generation status, and evidence flow and usage in education policy formulation in Cameroon, Malawi, and Kenya. Foundational learning — encompassing literacy, numeracy, and core competencies — is critical for achieving equitable and inclusive education. However, disparities in data availability, capacity for analysis, and alignment with policymaking hinder progress in these countries. This report uses a political economy analysis (PEA) framework to explore the structural, political, and institutional factors shaping data use and its implications for foundational learning. It provides actionable insights to address gaps and improve equity in these three countries.

The report employs a mixed-methods approach, combining desk reviews of existing literature and policies, stakeholder consultations, and analysis of education data systems. It applies the PEA framework to identify systemic challenges and opportunities, focusing on three dimensions: power dynamics, institutional arrangements, and contextual factors influencing the collection, sharing, and use of data in foundational learning. This approach ensures a comprehensive understanding of the factors affecting education systems across diverse regional contexts in the three countries.

The key findings from this analysis are summarised below:

1. **Data Gaps and disparities:** Significant gaps remain in data disaggregated by gender, location, and other critical variables. For instance, in Malawi, education data often lacks granularity at the district level, leading to limited visibility of marginalised communities (↑Kadzamira et al., 2025), while Cameroon shows imbalances, with better documentation in the Central and Far North regions compared to others (↑Pambe et al., 2025).

2. **Skewed focus in foundational learning:** Foundational learning efforts frequently prioritise literacy while neglecting numeracy and critical thinking. In Kenya, national assessments like the Early Grade Reading Assessment (EGRA) have focused extensively on reading, with fewer programmes dedicated to numeracy, limiting holistic skills development (↑Gachoki & Arisa, 2025).

3. **Capacity constraints:** Limited technical and analytical capacity within government agencies hamper the effective use of data for policymaking. In Cameroon, challenges in harmonising education data collection across ministries exacerbate inefficiencies and reduce the utility of existing information (↑Pambe et al., 2025).

4. **Regional imbalances:** Geographical inequities in evidence generation and education service delivery persist. As highlighted above, in Cameroon, urban

schools benefit from more robust data systems and resources than rural areas (↑Pambe et al., 2025).

5. **Policy and practice disconnect:** Weak links between data systems and education policy result in the underutilisation of evidence for decision-making. For example, in Kenya, while the National Education Management Information System (NEMIS) collects vast amounts of data, challenges in access and application reduce its impact on policy implementation (↑Gachoki & Arisa, 2025).

Conclusion and recommendations

- **Investments to strengthen data systems:** Invest in comprehensive, disaggregated, and real-time data collection mechanisms to support targeted interventions. In all countries, improving NEMIS functionality and accessibility could help ensure that data informs policy and resource allocation more effectively.
- **Enhance capacity:** Build technical expertise within government agencies to analyse and use data for informed decision-making. Malawi could benefit from capacity-building programmes for education officers at district levels to improve the use of data in resource planning.
- **Promote equity:** Close regional and demographic data gaps to ensure inclusive and context-sensitive education policies. For instance, Cameroon should prioritise data collection in less-documented regions such as the East, ensuring equitable representation in national planning.
- **Foster partnerships:** Engage academia, civil society, and private sector actors to improve data generation and use. Malawi's collaborations with UNICEF to improve data quality provide a model for leveraging partnerships to enhance evidence-based interventions.
- **Prioritise holistic learning:** Expand the focus of foundational learning programs to include numeracy and critical thinking alongside literacy. Kenya's Tusome programme could integrate targeted numeracy components to balance its heavy focus on literacy outcomes.

1. Introduction

Foundational learning is the cornerstone of educational success, unlocking the potential of millions of young learners and, ultimately, shaping the trajectory of national development. In sub-Saharan Africa, addressing foundational learning challenges is critical to achieving the United Nations' Sustainable Development Goal 4 (SDG 4) (↑UN DESA, no date), which emphasises inclusive and equitable quality education. While there are different definitions of foundational learning across national policies, international organisations, and research participants involved in the studies presented in this report, the Unlocking Data Initiative focuses on learning and data regarding school-going children aged between 3 and 10 years as an entry point for foundational learning.

In the context of foundational learning, data serves as both a diagnostic and strategic tool to enhance outcomes, ensure equity, and optimise resource allocation. In this report, we define data systems as "frameworks including repositories, processes, and methodologies used to collect, store, process, and analyse data" (↑Gachoki & Arisa, 2025). Data is essential for driving improvements in foundational learning, and this report presents findings on how stakeholders interact with data to identify support mandates and priorities in the education sector.

Cameroon, Malawi, and Kenya, the countries tackled in this report, present diverse contexts that reveal shared challenges and unique opportunities in using education data effectively. By applying a political economy analysis (PEA) framework, this report contextualises the dynamics surrounding evidence and data use in educational policymaking and identifies pathways to improve data accessibility, knowledge generation, and evidence-based decision-making. The report is for policymakers, non-governmental organisations (NGOs), and scholars and citizens interested in and active within the space to increase the generation and use of data to improve foundational learning.

The objectives of this report are to:

- Analyse the state of foundational learning data systems in the three countries.
- Assess the political and institutional factors influencing evidence uptake and data usage.
- Provide recommendations for enhancing evidence-based policy formulation across countries.

1.1. Scope and structure of the report

This report is anchored on the emerging findings from the focus countries' mapping of data users, usages, and gaps in foundational education mapping exercises. It presents a snapshot of the state of foundational education data and provides a high-level comparative analysis of priorities, gaps, areas of progress, and challenges. This analysis examines the shared issues and the distinct features and experiences of the countries. For detailed information on each country, please refer to the country reports available in the Unlocking Data Evidence Library.

There are seven sections in this report. Section 1 situates the Cross-Country Report in the overall research structure of the Unlocking Data Initiative as a synthesis of the three country-specific reports. Section 2 presents the methodology. Section 3 provides a deeper dive into the main analytical framework adopted for the analysis. Section 4 and Section 5 consider the application of this framework to unpack the findings from the focus countries and identify successful strategies and best practices from each country's context. Next, Section 6 provides recommendations for enhancing and unlocking data in foundational learning. Section 7 concludes the report with reflections on the findings.

2. Methodology

The cross-country analysis is a synthesis of findings from situational analysis reports on the status of foundational learning data for each of the three countries collaborating in the Unlocking Data Initiative. The latter is a multi-country effort involving Kenya, Malawi, and Cameroon to enhance the accessibility, utilisation, and impact of education data in sub-Saharan Africa. The situational analysis reports used mixed-methods approaches, including:

1. **Desk reviews**: Comprehensive reviews of national and international reports on foundational learning.
2. **Stakeholder consultations**: In-depth interviews and focus group discussions with policymakers, civil society organisations (CSOs), and data generators.
3. **Evidence mapping**: Systematic mapping of data systems, policies, and stakeholders to understand evidence flow and uptake.

Primary data sources include situational analysis reports on foundational learning data in Cameroon (↑Pambe et al., 2025), Kenya (↑Gachoki & Arisa, 2025), and Malawi (↑Kadzamira et al., 2025). Please refer to the individual reports for more information on the methodologies each report uses to map contexts, stakeholders, challenges, and opportunities for foundational learning data usage and uptake in each of these countries. [1]

[1] Full bibliographic details are given in the References section. However, the in-text citations link directly to the Unlocking Data Evidence Library, where these reports are accessible.

3. Framework: A political economy analysis for cross-country comparisons of foundational learning data

Political economy analysis (PEA) is a methodological framework used to examine the interplay of political, economic, and social factors that influence policy decisions and implementation. Originating in international development contexts, PEA goes beyond technical analysis by focusing on power dynamics, interests, incentives, and structural factors that drive or hinder progress when it comes to evidence uptake in policymaking. It identifies the formal and informal 'rules of the game', stakeholder interests, and systemic opportunities or constraints, offering a holistic perspective on the complex realities shaping policy environments.

3.1. Why a political economy analysis?

PEA is valuable for understanding the context-specific barriers and enablers of evidence uptake, particularly in policy decisions. It helps reveal why certain challenges persist and identifies actionable entry points for reform. In the context of foundational learning in the focal countries, PEA can highlight the dynamics influencing evidence-based decisions, such as resource allocation, conflicting stakeholder interests, and governance structures. This deeper understanding enables policymakers, researchers, and practitioners to tailor strategies that foster effective evidence use in decision-making processes.

3.2. Components of a PEA framework

1. **Issue identification:** Focuses on the specific problem or policy challenge. For this report, the focus is the uptake of evidence in the form of data in response to foundational learning challenges. This includes understanding what drives or hinders evidence integration.
2. **Structural factors:** Examine the overarching country-level policy structures and historical legacies shaping the demand for evidence. The factors include existing systems, such as education governance, which influence evidence-driven decisions.
3. **Rules of the game:** Include formal legal frameworks, norms, incentives, and power relationships that dictate how actors interact within the evidence ecosystem. For example, trusted networks often dominate evidence selection during crises.

4. **Stakeholder interests and power:** A PEA analyses the roles, motives, and power dynamics of different actors, including ministries, NGOs, and private entities. This helps understand who influences policy and whose interests are prioritised.
5. **Opportunities:** Identify actionable pathways for strengthening evidence use, such as leveraging partnerships or enhancing institutional capacities for data collection, analysis, and data usage in decision-making.

This structured approach ensures that evidence generation and dissemination strategies align with the nuanced realities of policy environments.

The rest of this document will present cross-country data from the foundational learning situational analysis reports of Kenya, Cameroon, and Malawi using a PEA framework. Through this analysis, actionable recommendations for enhancing data generation, accessibility, and uptake in policy circles will be distilled and presented.

4. Comparative analysis of challenges

This section looks at the common and unique challenges in foundational learning data usage and uptake identified in the three countries of focus.

4.1. Common challenges

The challenges identified across Kenya, Cameroon, and Malawi are summarised below.

1. **Data accessibility**: Due to infrastructural and regulatory barriers, public access to foundational learning data remains limited across all three countries. In **Kenya**, while universities have centralised data repositories, these repositories are not interoperable. Inconsistent reporting indicators and frameworks, as well as limited data collection, storage, processing and analysing capacity, hinder comprehensive record-keeping and access to data. Additionally, 46% of the data systems on foundational learning in Kenya are national repositories (owned by the central government), out of which only 20% of this data is open access. In contrast, data systems owned by international organisations and CSOs are predominantly open-access (↑Gachoki & Arisa, 2025). **Malawi** faces significant hurdles from outdated data storage systems, further complicating accessibility. **Cameroon** encounters issues with fragmented data platforms that hinder smooth access for policymakers and CSOs.
2. **Knowledge generation and distribution:** All countries exhibit notable gaps in gender-disaggregated and regionally representative data, limiting their ability to address inequities effectively.
3. **Resource constraints**: Inadequate funding and lack of trained personnel hamper the effective use of data. In **Kenya**, while the competency-based curriculum (CBC) demands extensive data inputs, insufficient funding prevents its full implementation. In the **three countries**, over-reliance on donor funding creates vulnerabilities in data system sustainability. Similarly, limited financial resources restrict training opportunities for data handlers in **Cameroon**.
4. **Policy gaps**: National policies need to reflect the need to integrate data-driven approaches across different stakeholders comprehensively. In **Kenya**, the CBC framework, despite its potential, struggles with implementation mechanisms that need strengthening and alignment across different actors. **Malawi** lacks cohesive policies to align national goals with data initiatives. **Cameroon** and **Kenya** exhibit a focus on literacy without addressing broader foundational competencies like numeracy.

4.2. Unique contextual challenges

There is a narrow focus on literacy in Cameroon which neglects other key areas, reflecting systemic weaknesses in data generation and analysis. Limited stakeholder engagement further exacerbates the challenge, as key actors lack access to or awareness of comprehensive educational data.

In Kenya, progressive frameworks like the CBC exist, which exemplify a structured approach to integrating data into education reforms, but their success is limited by the available IT infrastructure and insufficient teacher training and retooling. The CBC emphasises competency-based learning over traditional rote memorisation, making data on individual student performance critical for its success. However, the government has not used the data collected through the CBC to address learning poverty, especially in foundational literacy and numeracy. Through the Constitution of Kenya 2010, education was devolved, with early childhood education being placed under county governments while primary education from Grade 1 was placed under the national government. This arrangement creates a coordination challenge between the two levels of governance, with each level having unharmonised policies.

A lack of coordination between Malawi's government agencies (such as the Ministry of Education and the Ministry of Gender, Community Development and Social Welfare (MoGCDSW) as well as within departments (e.g., Planning and Education Management Information Systems [EMIS]) **impedes effective management, and sharing of data, leading to fragmented and inaccessible data systems.** The government agencies mentioned here are responsible for foundational learning and collect data on early childhood education; however, the datasets are not linked. Moreover, while development partners are key players in this landscape, the data they generate is not always integrated into government systems. As a result, potential gains and efficiencies from the division of data collection responsibilities are lost. For example, donors often generate data on learning assessments based on their programming, but these are not captured by government systems.

5. The political economy of foundational learning evidence in Cameroon, Kenya, and Malawi

5.1. Evidence ecosystem and key actors

In Cameroon, knowledge and evidence generation relies heavily on the Ministry of Basic Education and international collaborations, such as Programme for the Analysis of Education Systems (PASEC) assessments. Regulatory frameworks to guide foundational learning exist, but are not sufficiently enforced. A strong emphasis on literacy programmes overshadows numeracy and other competencies, reflecting a lack of cohesion among priorities within foundational learning systems. Additionally, stakeholders like local NGOs contribute significantly to data collection but often lack access to larger national repositories, limiting their influence on policy. **In Cameroon, collaborative efforts between government agencies and international organisations, such as UNICEF, have improved data sharing and alignment with educational priorities**.

Knowledge and evidence generation in Kenya is spearheaded by the Ministry of Education (MoE) alongside NGOs and international organisations such as UNICEF. The MoE and its agencies generate and store data and evidence on a large scale, including conducting national assessments to inform their actions and decisions. The Basic Education Act (2013) provides a legal framework for the MoE mandating data collection and dissemination. However, challenges include insufficient local capacity for evidence generation and interpretation and limited grassroots engagement. Programmes like the competency-based curriculum (CBC) emphasise learner outcomes and encourage data integration across different knowledge and evidence generators. However, implementation hurdles remain, including insufficient teacher training and resource allocation. Moreover, organisational norms do not reinforce a culture of open data, nor is the workforce equipped with the skills or infrastructure to effectively share knowledge. **The Tusome programme, which focuses on early grade literacy, demonstrates the power of integrating robust monitoring and evaluation frameworks at the school level to assess overall programme implementation.** By distributing structured learning materials and training teachers, Tusome has significantly improved reading outcomes in early grades. Its use of real-time data collection via tablets has enabled timely interventions, a model that can be replicated in other contexts (↑RTI International, 2016).

In Malawi, knowledge and evidence are predominantly generated by government agencies such as the Ministry of Education, the Ministry of Gender, Community Development and Social Welfare, and the National Statistics Office, **with the support of international donors.** However, national systems have limited capacity to manage and disseminate data. For instance, national policies need to strengthen integration between foundational learning outcomes and data systems, leading to more efficient policies and programming. The government's uncoordinated efforts also result in missed opportunities and synergies. While many development partners have pushed for and generated more data on learning outcomes, the Ministry of Education's EMIS systems do not capture this information. **Community-led initiatives in Malawi, such as participatory data collection projects, highlight the potential for grassroots engagement to address local educational challenges.** These initiatives empower local stakeholders, such as village education committees, to monitor and report on learning outcomes, enhancing accountability. Table 1 below highlights the main data generation actors and the ability to access data.

Table 1. *Data generation actors and the ability to access data*

Actor and engagement	Cameroon		Kenya		Malawi	
	Data generation	**Accessibility**	**Data generation**	**Accessibility**	**Data generation**	**Accessibility**
Government — Relevant (basic or early childhood education) ministry	High	Low	High	Low	High	Low
Government — Bureau of Statistics	Medium to high	Low to medium	High	Low	High	Low
Development partners	High	High	High	High	High	Medium to high
Local NGOs and CSOs	Medium	Medium	Medium to high	Medium	Mid	Mid
Academia	Medium to high	Low	Medium to high	Medium to high	High	Low

Table 2 maps each country's situation against key ecosystem factors for enabling effective data ecosystems.

Table 2. *Ecosystem factors matrix*

Ecosystem factors	Cameroon	Kenya	Malawi
Policy frameworks for foundational learning exist	Yes	Yes, but across multiple policies	Yes
Resources to support implementation plans	Low	Low	Low
Central repository identified	No, multiple diverse repositories	No, multiple diverse repositories	No, multiple diverse repositories
Interoperability between data systems or data sharing	Low	Low	Low, particularly between government departments
Data systems align with contextual needs	Medium to low, strong international donor influence	Medium	Medium to low, strong international donor influence
Grassroots engagement	Medium to low	Medium	Medium

The following subsections unpack challenges and barriers surrounding the development of effective data ecosystems for foundational learning.

5.2. Key influences on evidence uptake and decision-making

Shared cross-country factors

1. **Resource constraints**: All three countries need more financial support for data systems and infrastructure, such as the need for developed IT systems and trained personnel; this has implications for data collection and dissemination. Funding patterns over the last few years show that:

    a. Cameroon's investment in education as a percentage of total government expenditure has experienced fluctuations, which are likely to be reflected in the basic education sector.[2]

    b. In Kenya, there has been a modest increase in funding for basic and early childhood education in absolute terms; however, the proportion of the national education budget allocated to early childhood education remains relatively low.

    c. Malawi's budget allocation to education has been declining. While specific percentages for early childhood education within the education budget are not detailed in the available sources, the overall reduction in the education sector's share suggests potential constraints to funding for foundational learning.

Such variability in funding allocations continues to hinder substantial progress on foundational learning outcomes.

2. **Fragmented data systems**: The lack of integration between national and local systems results in duplication and misalignment of collected data, with implications for the ability of policymakers to make data-informed decisions. For example, in Kenya, ↑Munavu (2023) highlights how overlapping roles have created competition, affecting basic education management. Field relations between the Teachers Service Commission (TSC) and the Ministry of Education are hampered by poor coordination between the two centres of command, which sometimes issue contradictory directives and add to teachers' workloads.

3. **Low data literacy**: Policymakers and educators need more training to interpret and use data effectively, which could contribute to a higher impact of evidence use in decision-making. ↑Pambe et al. (2025) discuss how most stakeholders in

[2] Disaggregated data on funding for basic education is inconsistent and does not appear to be readily available in the public domain.

Cameroon rely on manual methods, which are prone to errors and inconsistencies. Over 40% of the teachers and administrators highlighted insufficient data collection and analysis training as a primary barrier to effective data use.

Distinct factors

- **Cameroon**: Political constraints and the institutional capacity to interpret and use data hinder evidence uptake, particularly at regional and community levels. ↑Pambe et al. (2025) engaged with stakeholders who indicated that political interests sometimes undermine evidence-driven decisions, with 22% of policymakers acknowledging that such interference skews priorities.
- **Kenya**: While the CBC has driven data use, local actors face challenges in aligning curricula with evidence, particularly in rural areas. Community participation in evidence-based policy, particularly the implementation of the CBC programme, remains limited. Parent and teacher associations and CSOs have been active in assessing and voicing concerns about the rollout of the CBC, ensuring that community needs inform its refinement. The incorporation of feedback loops through participatory research can offer practical, culturally sensitive, and impactful insights.
- **Malawi**: Donor-driven data initiatives dominate the sector, and this reliance on funding from development partners creates inconsistencies in reporting structure, ownership, and accessibility (↑Kadzamira et al., 2025). Limited government funds also hinder the full and timely integration of these data sets into national systems

5.3. Issue identification: Educational policies and structures

Foundational learning in Cameroon remains literacy-focused, with regional data inequity limiting comprehensive educational progress. Many programmes often do not incorporate broader competencies like numeracy or critical thinking due to limited data analysis and dissemination capacity. In addition, there is a significant skew in the data available across different regions, with greater documentation and evidence for the country's Far North and Central regions (↑Pambe et al., 2025). The invisibility of other regions risks perpetuating inequalities, leading to ineffective policymaking due to incomplete evidence and the marginalisation of underserved communities. Due to limited institutional resources, education officers have insufficient training and weak local engagement, preventing effective data use in Cameroon.

In Kenya, the introduction of the CBC has created a demand for robust data to track learner outcomes and curriculum effectiveness. However, persistent gaps exist

in involving local communities in data-driven reforms. Under-resourced schools face difficulties in adopting evidence-based interventions due to infrastructural and technological limitations, even as data systems have the potential for multi-level integration (↑Gachoki & Arisa, 2025). As a result, schools struggle to align national mandates due to local realities.

Fragmented data systems and reliance on donor funding compound to result in silos in the education data ecosystem. Most data systems are project-based, ceasing to function once donor funding ends. Moreover, limited government technical and financial capacity to manage these programmes has resulted in a lack of ownership to advance projects beyond the funding window (↑Kadzamira et al., 2025). This challenge undermines the development of localised, sustainable, context-sensitive solutions that can build other stakeholders' capacities.

5.4. Rules of the game: Flow of evidence and decision-making

Foundational learning outcomes are not just a function of policy design but are heavily influenced by the deeper, often less visible, rules that govern how education systems operate. These rules frequently determine whose interests are prioritised, leading to uneven access and perpetuating educational inequalities. Moreover, informal norms, such as stakeholder dynamics, which may be based on the disproportionate influence of some actors compared to others, conflicting and / or overlapping roles, level of community engagement or competing priorities, can either reinforce or challenge existing disparities.

In Kenya, the Basic Education Act mandates data sharing and policy alignment with evidence. However, Cameroon and Malawi do not have explicit legislative mandates for open education data. Nonetheless, both countries have policies (such as the National Education Sector Investment Plan in Malawi and the Education and Training Sector Strategy in Cameroon) that reference data transparency and how it can improve governance in this sector (↑Ministry of Education, 2020; ↑Ministry of the Economy, Planning and Regional Development, 2023).

Notably, the implementation context for these policies and mandates in all three countries does not have the supporting structures, expertise, or systems to realise aspirations to build capacity and systems, coupled with precise compliance mechanisms to improve evidence flow and evidence-informed decision-making. In practice, additional resourcing to realise these aims must be further developed so that stakeholders can adhere to mandates and policies. Moreover, for effective data sharing at the national level, guiding frameworks need to consider the interoperability of government systems (and their relationship to non-government-generated data), as well as the establishment

of standards for data collection, aggregation, indicator definitions, and data sharing protocols.

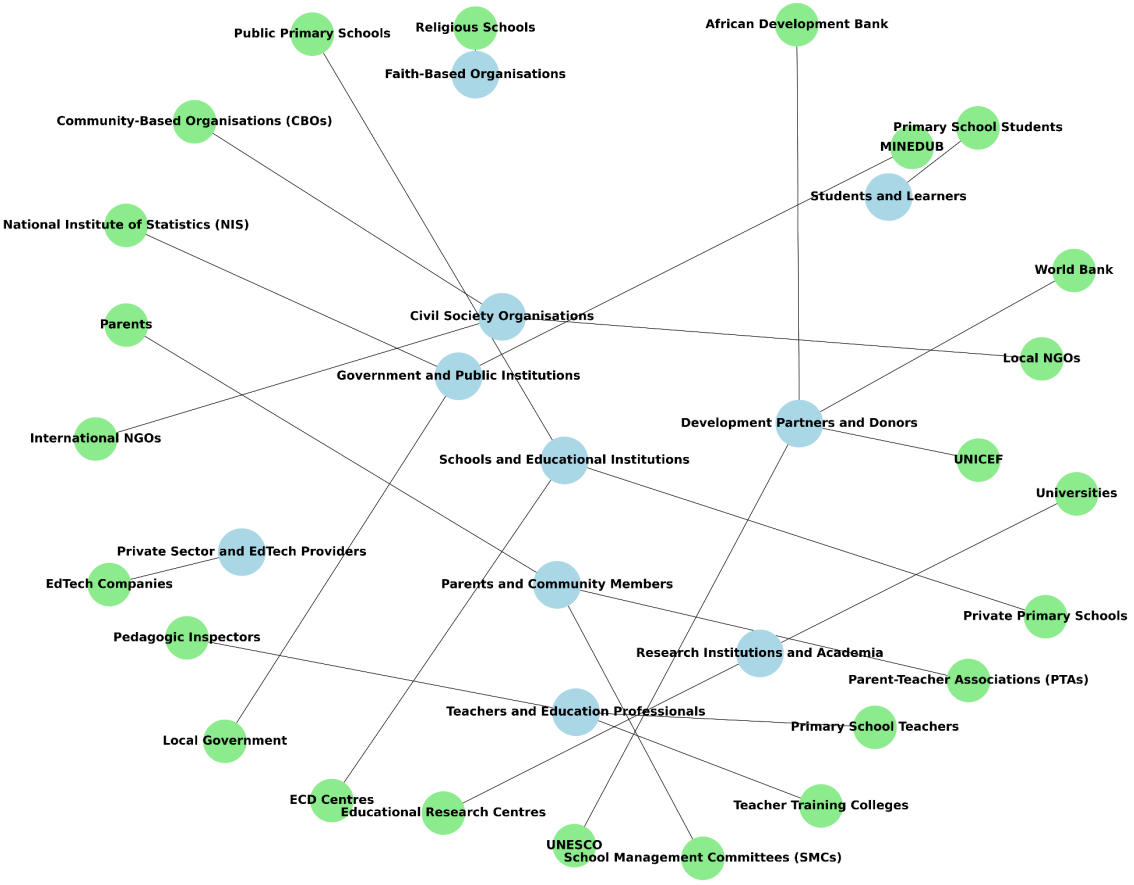
Beyond the practical requirements for data sharing, complex power imbalances and a lack of trust between stakeholders also shape perceptions and preferences on this issue. For example, government agencies in Cameroon and Kenya expressed limited confidence in and caution regarding datasets generated by CSOs (↑Gachoki & Arisa, 2025; ↑Pambe et al., 2025). Stakeholder groups in both countries shared concerns over the politicisation and misuse of data.

The findings from the three focus countries show that the formal and documented rules of data sharing do not operate within a supporting framework and may even be undermined by stakeholders' longstanding perceptions and relationships.

5.5. Stakeholders interests and power

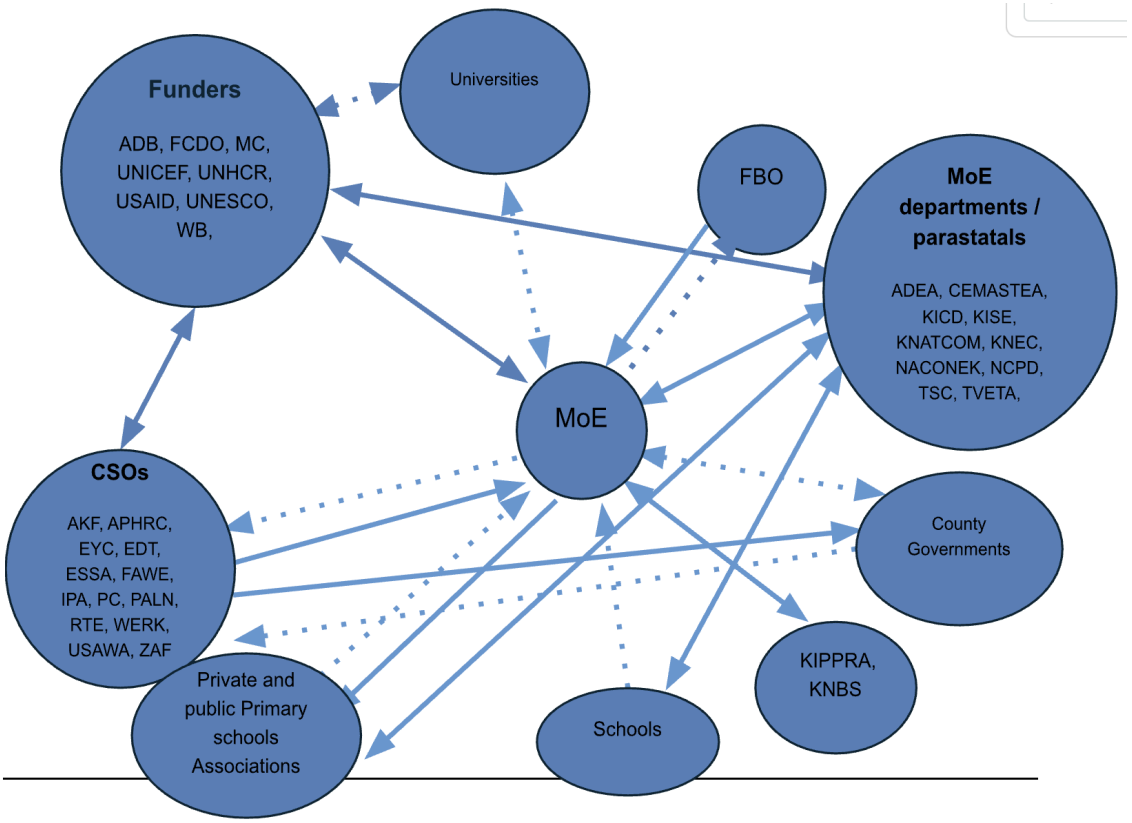
In Cameroon, government actors such as the Ministry of Basic Education (MINEDUB) maintain significant control over sources of policy decisions and priorities, often missing the inclusion of voices from CSOs and local stakeholders in decision-making processes. Data sharing typically occurs through a combination of formalised mechanisms and informal relationships. For researchers, NGOs, and CSOs seeking to access data generated by government institutions, additional bureaucratic layers (e.g., formal agreements) frequently come into play (↑Pambe et al., 2025). Approval processes are slow and delay timely access to information. In contrast, at the grassroots level, NGOs, CSOs, and community members can share data and information more quickly. However, the formalised mechanisms also have limitations, most commonly a lack of consistency and standardisation. As highlighted in Section 5.6, mistrust of information may arise when datasets lack systematic documentation or verification. Figure 1 below illustrates the foundational learning data ecosystem in Cameroon.

Figure 1. *Stakeholders in Cameroon's foundational learning data ecosystem. Source:* ↑Pambe et al. (2025, p. 27)



The Kenyan Ministry of Education collaborates most effectively with other national government agencies (such as the Kenya Institute for Public Policy Research and Analysis (KIPPRA)) and development partners. Kenya has a relatively stronger evidence flow (see Figure 2 below), with engagement between multiple stakeholders. However, reporting mechanisms at the county level, with CSOs and research institutions, and with communities require greater coordination and communication. ↑Gachoki & Arisa (2025) further highlight some underlying resistance to data sharing due to concerns about exposing underperformance or mismanagement. Instances were also reported where policymakers cherry-pick data or amplify research that supports a political agenda rather than sharing comprehensive datasets.

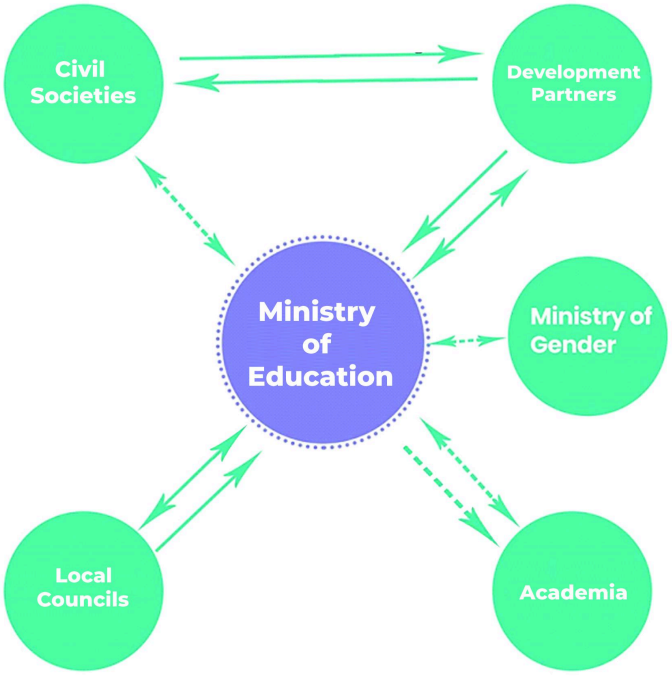
Figure 2. *Representation of active and passive flows of evidence between the Kenya Ministry of Education and other stakeholders.* Source:* ↑Gachoki & Arisa (2025)



***Note:** Acronyms and abbreviations have been used because of limited space. See 'Abbreviations and acronyms' for full forms.

In Malawi, the Ministry of Education is the central hub for most of the education data in the ecosystem. However, the flow of information to key agencies such as the Ministry of Gender, Community Development and Social Welfare (MoGCDSW) — the agency responsible for early childhood education services and foundational learning — is weak (↑Kadzamira et al., 2025). This dynamic is also reflected in CSO and academic relationships (see Figure 3 below). As a result, the generation of policy-oriented research and evidence-informed policies is limited, as most of the administrative data collected by the Ministry of Education is not analysed. Therefore, there remains a need for adequate stakeholder alignment to ensure the efficacy of data collection and uptake.

Figure 3. *Flow of evidence on foundational learning between key stakeholders in Malawi.*
Source: ↑Kadzamira et al. (2025, p. 31)



5.6. Opportunities for evidence uptake

This subsection summarises some of the key opportunities identified by the country situational analyses and proposes some strategies for the next phase of activities under the Unlocking Data Initiative.

- **Cameroon**: Geographic disparities in foundational learning research and data across the country have led to the perception that certain regions are educational priority zones. Investment in the education sector must be allocated more equitably, and creating data hubs across all regions could help facilitate decentralised access to education statistics, improving responsiveness to local needs.
- **Kenya**: Strengthening local participation through community-driven initiatives, such as involving parents and teachers in data collection for programmes like CBC. This programme also emphasises both literacy and numeracy in foundational learning, reflecting balanced priorities. Initiatives like Tusome provide valuable lessons in using data to enhance learning outcomes.

- **Malawi**: Building national capacity for data management by investing in training for local education officers, reducing dependency on external consultants.
- **Malawi and Cameroon** could look to Kenya for similarly comprehensive frameworks like the CBC, which could reflect possible opportunities for systemic improvements.

5.6.1. Cross-country lessons

1. Accessible, disaggregated data by specific criteria like gender and location supports inclusive policymaking, addressing the needs of marginalised groups. Although in some cases (i.e., Malawi and Kenya), data on gender and geography was collected, disaggregation was not always provided in publicly accessible systems. Across all countries, the bulk grouping of datasets is common and has hindered a clear understanding of evidence gaps, identification (and quantification) of disparities, and consequent resource allocation. The diversity of economic and social landscapes means that most learning outcomes are not gender or geography neutral.
2. Multi-stakeholder collaboration fosters accountability, transparency, and more effective data use. Across all countries (and particularly in Malawi, where there are norms around formal agreements for data accessibility for some stakeholders), data sharing can be built into the design process by adopting more participatory and co-creation approaches that can meet the research and policy needs of all stakeholders. Such approaches would also mitigate many of the challenges identified, including the standardisation of collection processes, indicators, definitions, and disaggregated datasets.
3. Building local capacity in data literacy enhances stakeholders' ability to engage with and use evidence effectively. Digital literacy and technical expertise among education stakeholders are necessary baselines for the education sector's development, management, and subsequent administration. All country situational analyses have emphasised the need for analytical skills in government agencies.

6. Recommendations for enhancing and unlocking data in foundational learning

This section presents significant recommendations for the next phase of the Unlocking Data Initiative. It is organised by categories of policy, stakeholder engagement, collaboration opportunities, and capacity building.

Recommendations for improving policy and data systems

1. **Transparent data-sharing frameworks**: To improve transparency, establish secure online repositories accessible to diverse stakeholders and mandate regular data updates. Based on data management requirements, cost, and organisational policies, options for cloud or local hosting can be explored (↑UNESCO, 2024). Many stakeholders highlighted a lack of trust regarding data generated by other actors (↑Gachoki & Arisa, 2025; ↑Pambe et al., 2025). Open education data with background information on process and sampling strategies can help build trust.

2. **Interoperability between systems**: Using scalable digital solutions, develop standardised data-sharing protocols across national, subnational, and international platforms. Effective stakeholder collaboration will be based on complementary approaches and consistent data management practices. As highlighted by ↑Gachoki & Arisa (2025), ↑Kadzamira et al. (2025), and ↑Pambe et al. (2025), many stakeholder groups work independently, and only some grant open access to institutional datasets.

3. **Capacity building in data literacy**: Partner with academic institutions to deliver specialised training for policymakers and educators, enhancing their ability to interpret and utilise data. As has been highlighted by many stakeholder groups in all countries, digital and data literacy is a critical necessity that is currently lacking. Financial constraints have also created dependencies on dated and manual record-keeping and filing techniques (mostly paper-based), which hamper the development of data management skills in government agencies (↑Pambe et al., 2025) and academia (↑Kadzamira et al., 2025).

4. **Adopting contextually responsive technologies:** In light of technological challenges in the focus countries, features such as offline synchronisation can be integrated into data collection tools across all administrative levels to circumvent common accessibility constraints.

Recommendations for strategic stakeholder engagement

1. **Multi-stakeholder platforms**: Facilitate inclusive forums for dialogue on data challenges and opportunities, ensuring representation from education stakeholders at all levels. Such dialogue will likely improve working relations and trust across different groups. Many actors face challenges in accessing relevant and timely data. Forums for dialogue can create the space for all stakeholders to interact, identify individual and / or collective gaps, and co-create strategies and solutions to address issues (↑Gachoki & Arisa, 2025; ↑Kadzamira et al., 2025).
2. **Increase local research funding**: Allocate dedicated budgets to foundational learning research, fostering national ownership and reducing reliance on external funding (↑Kadzamira et al., 2025). Such investments will also yield multiplier effects as the quality of data and knowledge on foundational learning improves, providing a valuable basis for informed decision-making.

Opportunities for cross-country collaboration

1. **Shared data repositories**: Create a regional hub for cross-country data sharing, enabling comparative analyses and collective problem-solving.
2. **Knowledge exchanges**: Organise learning visits and joint workshops to disseminate best practices across borders, drawing from successful programmes like Tusome in Kenya. The challenges and education priorities identified in each country resonate across all three. Knowledge exchanges offer opportunities to share lessons and insights while building and opening up networks of researchers, practitioners, and policymakers.

Opportunities for capacity building

1. **Targeted training programmes**: Design modular courses that address specific data collection and analysis gaps tailored to each country's context. The reports on all three countries emphasise broader digital skills, the different elements of the research, and monitoring and evaluation processes (↑Gachoki & Arisa, 2025; ↑Kadzamira et al., 2025; ↑Pambe et al., 2025). These skills can be developed and applied over time by providing structured and ongoing training (to the government workforce, in particular, who are often central actors for data sharing).
2. **Partnerships with academic institutions**: Foster collaborations with universities to conduct applied research and provide technical support for data initiatives. Through such strategic partnerships, research expertise can be aligned with policy priorities to understand issues and local needs better. A successful

example that can be further built includes the partnerships in Kenya for competency-based curriculum (CBC) research.

7. Conclusion

This report underscores the pivotal role of political and institutional factors in shaping evidence generation, accessibility, analysis, and usage in education policymaking for foundational learning. Governments and decision-makers must prioritise transparent and coordinated policies around data accessibility and usage and invest in data infrastructure. Additionally, the findings in this report put an emphasis on funders to focus on sustainable local initiatives and involve grassroots efforts in data collection, interpretation and usage. This report calls on education stakeholders to collaborate to ensure inclusive and effective data use. This call to action highlights the collective responsibility of all actors to align their efforts with SDG 4 and transform foundational learning through robust, evidence-based strategies.

Central to this effort is the need for robust, disaggregated, and actionable data. Data systems in all three countries show potential but remain underutilised due to gaps in collection, capacity, and integration with policymaking. For example, the limited visibility of rural and marginalised communities in Malawi's education data and regional disparities in Cameroon's evidence documentation highlight the urgent need to expand the reach and equity of data systems. Similarly, while comprehensive, Kenya's NEMIS faces challenges in accessibility and effective use for decision-making. Addressing these data limitations is fundamental to identifying learning gaps, allocating resources effectively, and measuring progress toward national and global education goals.

Capacity constraints further exacerbate these challenges, with insufficient technical expertise in data analysis and use hampering the ability of government agencies to translate evidence into action. Building the capacity of policymakers, educators, and administrators is crucial for fostering a culture of evidence-based decision-making. As demonstrated by Malawi's collaboration with UNICEF to enhance data quality, partnerships with academia, civil society, and international organisations offer promising avenues to bridge these capacity gaps.

This report also underscores the importance of balancing foundational learning efforts across all learning domains. While literacy programmes have received significant attention, numeracy and critical thinking competencies often remain neglected. Expanding the scope of foundational learning programmes, as exemplified by Kenya's potential to integrate numeracy into the Tusome initiative, will ensure that children acquire a well-rounded education that prepares them for the complexities of the 21st century.

Finally, the persistence of inequities in education — whether by region, gender, or socio-economic status — demands a commitment to equity as a guiding principle.

Governments must prioritise investment in underserved areas and ensure that data and resources reach those most in need.

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